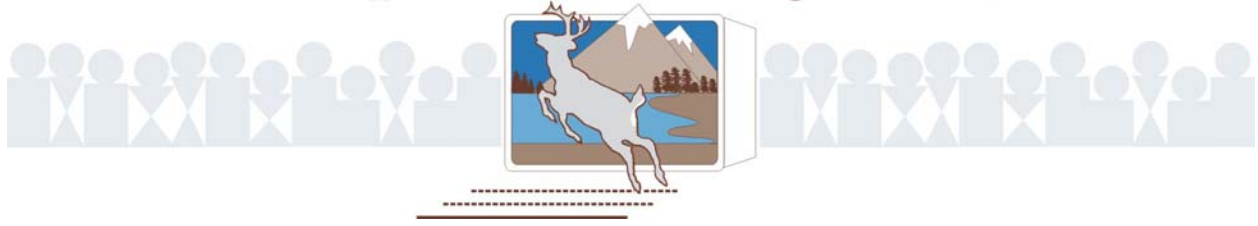


Responsive Management



SPORT SHOOTERS' AND ARCHERS' ATTITUDES ON SHOOTING AND APPROPRIATE BEHAVIOR ON PUBLIC LANDS AND THE MESSAGES TO WHICH THEY WILL RESPOND

**Conducted for the Federal Lands Hunting, Fishing
and Shooting Sports Roundtable**

by Responsive Management

2008

**SPORT SHOOTERS' AND ARCHERS' ATTITUDES ON
SHOOTING AND APPROPRIATE BEHAVIOR ON
PUBLIC LANDS AND THE MESSAGES TO WHICH
THEY WILL RESPOND**

2008

Responsive Management National Office

Mark Damian Duda, Executive Director
Tom Bepler, Research Associate
Steven J. Bissell, Ph.D., Qualitative Research Associate
Andrea Criscione, Research Associate
James B. Herrick, Ph.D., Research Associate
Martin Jones, Senior Research Associate
Joanne Nobile, Research Associate
Amanda Ritchie, Research Associate
Carol L. Schilli, Research Associate
Tim Winegord, Survey Center Manager
Alison Lanier, Business Manager

130 Franklin Street
Harrisonburg, VA 22801
Phone: 540/432-1888 Fax: 540/432-1892
E-mail: mark@responsivemanagement.com
www.responsivemanagement.com

Acknowledgments

Responsive Management would like to thank Susan Recce of the National Rifle Association, Jay Clark and Scott Kovarovics of the Izaak Walton League of America, Jay McAninch of the Archery Trade Association, Nelson Freeman of SCI, Mark Goldbach of the Bureau of Land Management, Jamie Schwartz of the U.S. Forest Service, and the members of the Federal Lands Hunting, Fishing and Shooting Sports Roundtable for their input, support, and guidance on this project.

Funding for the research was provided by the following:

The Izaak Walton League of America; the National Shooting Sports Foundation; the Archery Trade Association; the National Rifle Association; SCI; the Bureau of Land Management; and the U.S. Forest Service.

Finally, Responsive Management would like to thank all the organizations making up the Federal Lands Hunting, Fishing and Shooting Sports Roundtable:

The American Sportfishing Association; the Archery Trade Association; the Association of Fish and Wildlife Agencies; Bear Trust International; the Boone and Crockett Club of America; the Bowhunting Preservation Alliance; the Campfire Club of America; the Congressional Sportsman's Foundation; the Conservation Force; the Dallas Safari Club; the Delta Waterfowl Foundation; Ducks Unlimited; the Foundation for North American Wild Sheep; the Houston Safari Club; the Izaak Walton League of America; the National Assembly of Sportsman's Caucuses; the National Rifle Association; the National Shooting Sports Foundation; the National Trapper's Association; the National Wild Turkey Federation, Inc.; the North American Bear Foundation; the North American Grouse Partnership; Orion the Hunters Institute; Pheasants Forever; the Pope and Young Club; the Public Lands Foundation; Quail Unlimited; the Quality Deer Management Association; the Recreational Boating and Fishing Foundation; the Rocky Mountain Elk Foundation; the Ruffed Grouse Society; the Sand County Foundation; SCI; the Sporting Arms and Ammunition Manufacturers Institute; the Texas Wildlife Association; the Theodore Roosevelt Conservation Partnership; the U.S. Sportsmen's Alliance; Whitetails Unlimited; Wildlife Forever; and the Wildlife Management Institute.

EXECUTIVE SUMMARY

INTRODUCTION AND METHODOLOGY

This study was conducted for the Federal Lands Hunting, Fishing and Shooting Sports Roundtable (the Roundtable) to determine sport shooters' and archers' attitudes on shooting and their perceptions of appropriate behavior on public lands. The study also examined sport shooters' and archers' opinions of and reactions to various messages designed to curb problematic and irresponsible behavior by recreationists on public lands. (Note that hereinafter, the terms "sport shooter" and "recreational shooter" are used to include those who shot pistols/handguns, rifles, shotguns, muzzleloader handguns and rifles, and archery equipment.) The study entailed two focus groups of sport shooters in Phoenix, Arizona, and Denver, Colorado, and a telephone survey of sport shooters in California, Arizona, Virginia, Oregon, and Colorado.

The focus groups were conducted using a discussion guide, which ensured consistency in data collection. The focus groups were recorded for further analysis. The most important use of the focus groups was in the testing of findings from the survey.

For the survey, telephones were selected as the preferred sampling medium because of the universality of telephone ownership. The telephone survey questionnaire was developed cooperatively by Responsive Management and the Roundtable. Responsive Management conducted a pre-test of the questionnaire and made any necessary revisions to the questionnaire based on the pre-test. Interviews were conducted Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. The software used for data collection was Questionnaire Programming Language 4.1 (QPL).

SURVEY RESULTS

PARTICIPATION IN RECREATIONAL SHOOTING ON FEDERAL LANDS

- The survey asked recreational shooters if they had hunted in the past 2 years, and a large majority from each of the states responded that they had, with a general range of 90-98% of shooters in each state saying they had hunted in the past 2 years.
 - The exception was California, where shooters were somewhat less likely to say they had hunted in the past 2 years (just 79% of them said that they had).

- Slight majorities of recreational shooters in California (53%), Oregon (55%), and Colorado (56%) who said they had hunted in the past 2 years indicated that they consider themselves to be both shooters and hunters.
 - While substantial percentages, though not majorities, of recreational shooters in California, Arizona, Oregon, and Colorado consider themselves to be primarily hunters (ranging from 38-48%), just over half of Virginia sport shooters (55%) consider themselves to be primarily hunters.
 - California had the highest percentage of respondents (9%) considering themselves to be primarily recreational shooters.

- Most commonly, recreational shooters from the five states named national forests and grasslands and Forest Service lands as the types of federal public lands on which they had shot (73-89% of all recreational shooters). (Note that respondents could name more than one type of federal land.)
 - Though substantial percentages (55-71%) of recreational shooters from California, Arizona, Oregon, and Colorado said they shot on Bureau of Land Management lands, just 7% of Virginia recreational shooters indicated the same. (Note that Virginia has little Bureau of Land Management land relative to the other states.)

- The survey asked how many years respondents had been shooting on federal lands, and the results generally follow a bell curve, with the peak in the 21-40 years category.
 - On average, California recreational shooters appear to have shot on federal lands longer than shooters in the other four states, with a mean of 36.36 years.
 - At the low end, Virginia recreational shooters have a mean of 25.30 years of recreational shooting on federal lands.

- The survey asked about the number of days respondents spend per year shooting on federal lands, with the median ranging from 10 to 15 days.
 - At the upper end, Arizona recreational shooters had a median of 15 days annually shooting on federal lands, while, at the low end, recreational shooters in Virginia and Colorado had a median of 10 days.

- When asked whether the number of days spent shooting on federal lands had increased, decreased, or stayed about the same over the past 2 years, majorities of recreational shooters from the five states (ranging from 54-63%) responded that the number had stayed the same. Otherwise, greater percentages answered decreased than answered increased.
 - Oregon recreational shooters were most likely to say the number had decreased (38% of them gave this answer).

- Most recreational shooters surveyed (74-86%) said that recreational shooting areas and ranges on federal lands are *very* important to their shooting participation.

- With the exception of Virginia, at least four-fifths of residents from each state (ranging from 80-83%) participate in target shooting or plinking on federal lands (compared to just 61% of Virginia recreational shooters). Sighting a firearm is the

other top-ranked activity, with 69-82% of recreational shooters from each state participating in it on federal lands.

- When shooting on federal lands, recreational shooters most commonly use rifles (87-98%) and shotguns (68-79%).
 - Arizona recreational shooters are by far more likely than shooters from other states to use a pistol/handgun (81%, compared to 46-68% of shooters from the other states).
 - Virginia shooters are by far more likely than shooters from other states to use a muzzleloader rifle (69%, compared to 20-41% of shooters from the other states), as well as being the least likely to use a pistol/handgun (46%, compared to 68-81% of shooters from the other states).

- Recreational shooters from the five states do not exhibit clear patterns in their *usage* of designated shooting areas and ranges versus areas not designated for shooting.
 - Virginia recreational shooters appear *more* likely to shoot at designated shooting ranges (29%, compared to 8-18% of shooters from other states), and somewhat *less* likely to shoot at areas typically used by recreational shooters but not designated as official shooting areas (17%, compared to 29-43% of shooters from other states).

- Recreational shooters from the five states do not exhibit clear patterns in their *preferences* for designated shooting areas and ranges versus areas not designated for shooting. (Note that the previous question asked about the sites shooters actually *use*, whereas this question addresses shooters' *preferred* sites for shooting.)
 - Virginia recreational shooters are again somewhat *more* likely than shooters from other states to prefer designated shooting ranges, and somewhat *less* likely to prefer areas typically used by shooters but not designated as official shooting areas.

- The majority of recreational shooters from each state typically shoot with friends (52-70%), with California shooters appearing the most likely to do so.
 - Between 22-34% of recreational shooters typically shoot with family members.
 - Virginia recreational shooters appear somewhat *less* likely to shoot with family members (22%, compared to 26-34% of shooters from the other states), and somewhat *more* likely to shoot alone (21%, compared to 3-15% of shooters from the other states).

- Recreational shooters most commonly shoot in a party of three when shooting with family members on federal lands. California and Oregon shooters appear somewhat more likely to shoot in larger parties (mean of 3.79 and 3.78 family members, respectively), while Colorado shooters appear more likely to shoot with fewer family members (mean of 3.12 family members).

- Most commonly, recreational shooters in the five states shoot on federal lands with family members under 18 years old.

- In general, one-way travel time to shooting areas on federal lands is 40-45 minutes for shooters in Arizona, Virginia, Oregon, and Colorado.
 - By comparison, California recreational shooters have a notably longer one-way travel time, with a median of 70 minutes.

- Most recreational shooters visit federal lands for shooting for the primary purpose of recreational shooting (59-65% of all recreational shooters), while at least a quarter of them go as part of another activity (26-33% of all recreational shooters).

- Hunting is the predominant activity in which recreational shooters participate when shooting on federal lands (71-94% of all those who shoot on federal lands as part of another activity).

SATISFACTION WITH FEDERAL LANDS AND PREFERENCES FOR VARIOUS AMENITIES

- Virtually all recreational shooters (88-93%) are satisfied with their shooting experiences on federal lands, and substantial percentages are *very* satisfied: (50-67% of all shooters).
- A majority of recreational shooters in each state (ranging from 53-63%) agree with the statement: “Unsafe shooting behavior, irresponsible behavior, environmental damage, property damage, shooting debris, and litter are currently affecting the quality of your shooting experiences on federal lands.” At the same time, however, notable percentages (35-43% of all recreational shooters) disagree that the aforementioned factors currently affect the quality of their shooting experiences on federal lands.
- Throughout the five states, there is substantial agreement (71-80% of all recreational shooters, with most *strongly* agreeing) with the statement: “Shooting debris and other litter at recreational shooting areas and ranges on federal lands leads to additional irresponsible and unsafe behavior.”
- Likewise, substantial majorities in the states (76-86% of all recreational shooters) are in agreement with the statement: “Unsafe shooting behavior, irresponsible behavior, environmental damage, property damage, shooting debris, and litter lead to the closure of areas and ranges to recreational shooting on federal lands.” Again, most of those who agree with the statement agree *strongly*.
- The five states exhibit some notable variation in their responses to the statement: “It is the responsibility of the federal agencies that own the land to provide law enforcement at the recreational shooting areas and ranges.” Majorities of recreational shooters in California (51%), Arizona (66%), and Virginia (72%) agree

that federal agencies should provide law enforcement at shooting areas and ranges, although more shooters in these states agree *moderately* with the statement than do *strongly*.

- The survey listed eight amenities or features of shooting areas, asking respondents to indicate if each was very important, somewhat important, or not at all important as an amenity or change he/she would like to see at sites on federal lands. This examination first looks at all amenities or features relative to each other in each state, then the report discusses each amenity/feature in turn. The amenities/features asked about are as follows:
 - Backstops/target holders
 - Bathrooms
 - Trash cans
 - Organized clean-up days
 - Supervision by federal agency staff
 - Supervision by shooter and hunter volunteers
 - More law enforcement
 - Better access

- This first examination looks at all amenities/features relative to each other in each state. Overall, trash cans, organized clean-up days, backstops and target holders, and better access appear to be the most desired amenities and changes at shooting areas and sites on federal lands.
 - In California, three amenities/changes stand out relative to the rest as being *very* important: better access (57% say this is a *very* important), trash cans (50%), and organized clean-up days (46%).
 - In Arizona, four amenities/changes markedly stand out above the others as being *very* important: organized clean-up days (57%), trash cans (53%), backstops/target holders (52%), and better access (48%).

- In Virginia, three amenities/changes stand out relative to the rest as being *very* important: trash cans (66%), backstops/target holders (61%), and organized clean-up days (61%).
 - In Oregon, three amenities/changes stand out as being very important: better access (46%) and organized clean-up days (44%), and trash cans (39%).
 - In Colorado, four amenities/changes stand out as markedly higher as being *very* important: better access (50%) organized clean-up days (43%), trash cans (40%), and backstops/target holders (39%).
- This examination looks at marked differences among states in the survey (California, Arizona, Virginia, Oregon, and Colorado) regarding the relative importance of each amenity/change.
- Backstops/target holders: This amenity is more likely to be considered very important in Arizona and Virginia; there is less demand, relative to other states, in Oregon.
 - Bathrooms: Recreational shooters in Virginia are the most likely to consider this very important, while majorities of shooters in Arizona, Oregon, and Colorado consider bathrooms not at all important.
 - Trash cans: Though this amenity is considered important in all states, Oregon and Colorado recreational shooters appear the most likely to consider trash cans as not at all important.
 - Organized clean-up days: Large majorities in all five states indicate that organized clean-up days are important (with substantial percentages considering them *very* important).
 - Supervision by federal agency staff: Large majorities in all five states indicate that supervision by federal agency staff is *not* at all important (69-78%); the exception is Virginia, with only 54% who say this amenity/change is not at all important.

- Supervision by shooter and hunter volunteers: Shooters in Virginia are the most likely to consider this important.
- More law enforcement: A majority of shooters in each state except Virginia consider this to be not at all important.
- Better access: A majority of shooters in each state say this is important, with most of those describing it as *very* important.

EXPERIENCES WITH CLOSURES OF SHOOTING AREAS AND RANGES ON FEDERAL LANDS AND REASONS FOR CLOSURES

- The majority of recreational shooters surveyed (61-84% of all shooters) have not experienced closures of the recreational shooting areas and ranges on federal lands they have used in the past 2 years.
 - California shooters are the most likely to have experienced a closure of a shooting area or range they have used, whereas Virginia shooters appear the least likely to have experienced such closures.
 - Those who have had a recreational shooting area or range closed were asked about the reasons for the closure. With some exceptions, the most commonly cited reasons were conflicts with other shooters, litter and trash being left behind by shooters, property damage, and conflicts with other recreationists in the area.

EXPOSURE TO UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR ON FEDERAL LANDS

- The survey examined nine potential problems, asking respondents to indicate if each was a major or minor problem or not at all a problem. This examination first looks at all potential problems relative to each other in each state, then the report discusses each potential problem in turn. The potential problems asked about are as follows:
 - Unsafe shooting practices, such as target shooting with no backstop or using inappropriate targets
 - Property damage, such as shooting at signs, trash cans, or structures?
 - Environmental damage, such as shooting at trees

- Litter and trash being left behind by shooters, such as shells, clay pigeon fragments, or food wrappers
 - Illegal dumping of household waste or trash, such as furniture or appliances
 - Irresponsible, rude, or rowdy behavior, such as drinking alcohol, fighting, or reckless driving
 - Conflicts with other shooters
 - Conflicts with other recreationists in the area, such as hikers
 - Conflicts with or complaints from home or land owners adjacent to the federal land
- This first examination looks at all potential problems relative to each other in each state. Overall, litter/trash and illegal dumping are the worst problems.
- In California, three problems stand out relative to the rest as *major* problems: illegal dumping (*not necessarily by the shooters*) (53% say this is a *major* problem), litter and trash left behind by shooters (44%), and property damage from shooting (37%). On the other hand, the three potential problems related to conflicts – with other recreationists, with other shooters, and with adjacent landowners – are *not* substantial problems in California.
 - In Arizona, Two potential problems markedly stand out above the others as *major* problems: litter and trash left behind by shooters (70%) and illegal dumping (*not necessarily by the shooters*) (64%). As with California, the three potential problems related to conflicts – with other recreationists, with other shooters, and with adjacent landowners – are *not* substantial problems in Arizona.
 - In Virginia, three problems stand out relative to the rest as *major* problems: litter and trash left behind by shooters (32%), illegal dumping (*not necessarily by the shooters*) (27%), and property damage from shooting (26%). Similar to other states in this survey, the three potential problems related to conflicts – with other recreationists, with other shooters, and with adjacent landowners – are *not* substantial problems in Virginia.
 - In Oregon, two potential problems stand out as markedly higher as a *major* problem: illegal dumping (*not necessarily by the shooters*) (64%) and litter and

trash left behind by shooters (50%), with property damage from shooting (32%) also fairly prominent as a *major* problem. On the other hand, the three potential problems related to conflicts – with other recreationists, with other shooters, and with adjacent landowners – are *not* substantial problems in Oregon.

- In Colorado, two potential problems stand out as markedly higher as a *major* problem: litter and trash left behind by shooters (40%) and illegal dumping (*not* necessarily by the shooters) (40%). Three items are *not* substantial problems in Colorado: conflicts or complaints from homeowners or landowners, conflicts with other shooters, and irresponsible/rude/rowdy behavior.
- This examination looks at marked differences among states in the survey (California, Arizona, Virginia, Oregon, and Colorado) regarding the rating of the severity of each potential problem.
- Unsafe shooting practices: This problem is markedly worse in California and Arizona; this is less of a problem, relative to other states, in Virginia.
 - Property damage: This is markedly less of a problem in Virginia and Colorado.
 - Environmental damage: In the sum of those saying it is a problem (major or minor), the states are not markedly different; Virginia respondents are less likely, relative to other states' respondents, to say this is a *major* problem.
 - Litter and trash left by shooters: Arizona residents are much more likely, relative to other states' respondents, to say this is a *major* problem. Large majorities in all five states indicate that this is a problem.
 - Illegal dumping: Colorado and Virginia respondents are the least likely to find this to be a problem.
 - Irresponsible, rude, or rowdy behavior: The states are not markedly different on this question.
 - Conflicts with other shooters: The states are not markedly different on this question. Large majorities in each state consider this *not* to be a problem.

- Conflicts with other recreationists: Very low percentage think of this as a *major* problem (no more than 12% in any state). Colorado respondents are the most likely to consider this a *major* or *minor* problem).
 - Conflicts with homeowners or landowners adjacent to federal land: The states are not markedly different on this question. Large majorities in all five states indicate that this is *not* a problem.
- The survey also asked respondents to indicate if they had personally witnessed or otherwise experienced each of those same nine potential problems while shooting on federal lands in their state, using a scale from “always” witnessing or experiencing the problem to through “often,” “sometimes,” and “rarely” to “never.” This examination first looks at all potential problems relative to each other in each state, then the report discusses each potential problem in turn.
- In California, litter and trash left behind by shooters (69% witnessed/ experienced this at least some of the time while shooting on federal lands) and illegal dumping (*not* necessarily by the shooters) (55%) are the major problems witnessed or experienced, markedly more common than other problems.
 - In Arizona, litter and trash left behind by shooters (73%) and illegal dumping (*not* necessarily by the shooters) (56%) are the major problems witnessed or experienced. These are followed by two other problems moderately common: unsafe shooting (47%) and environmental damage (46%).
 - In Virginia, litter and trash left behind by shooters (66%) is the major problem, far exceeding other problems.
 - In Oregon, litter and trash left behind by shooters (68%) and illegal dumping (*not* necessarily by the shooters) (53%) are the major problems witnessed or experienced. These are fairly closely followed by property damage (49%) and unsafe shooting (45%).
 - In Colorado, litter and trash left behind by shooters (66%) is the major problem, far exceeding other problems.

- This examination looks at marked differences among states in the survey (California, Arizona, Virginia, Oregon, and Colorado) regarding personally witnessing or experiencing each potential problem. For most of the potential problems, follow-up questions asked respondents to indicate if shooters, hunters, or non-hunters/non-shooters had been the party responsible for the problem, and then the survey asked for a further description. These results are also discussed.
- Unsafe shooting practices: The states are not markedly different on this question. Young males predominate as those responsible for this problem.
 - Property damage: Oregon respondents are slightly more likely to have witnessed or experienced this problem, relative to respondents from other states. Shooters and non-hunters/non-shooters are most commonly named as being responsible. Young males are also prominent as causing this problem (although many witnesses saw only the damage itself, not the damage being done, and could not determine who had caused the damage).
 - Environmental damage: Arizona respondents are slightly more likely to have witnessed or experienced this problem, relative to respondents from other states. On the other hand, Virginia respondents are the most likely to indicate that they have never witnessed or experienced this problem, which may be a function of its climate—the more humid climate in Virginia (in general) may allow for plant growth to more readily repair or otherwise hide environmental damage, while the more arid climates of the other states (again, in general—realizing that parts of Oregon, for instance, have great amounts of precipitation) may make for more fragile habitat. Oregon and Colorado shooters are more likely than are the other states to attribute this problem to other shooters. Again, young males are prominent as causing this problem.
 - Litter and trash left by shooters: The states are not markedly different on this question. Large majorities of shooters in all states in the survey report that they have witnessed or experienced this problem. Again, young males are prominent as causing this problem.

- **Illegal dumping:** This is more of a problem in California, Arizona, and Oregon; less of a problem in Virginia and Colorado. This problem is seen as most commonly being caused by non-hunters/non-shooters. Most commonly, respondents could not determine who had caused the problem, having seen only the result, not the action. Nonetheless, males are prominent in the blame.
- **Irresponsible, rude, or rowdy behavior:** The states are not markedly different on this question. Large majorities have *never* witnessed or experienced this problem. This problem is seen as being commonly caused by shooters in California, Virginia, and Colorado and by non-hunters/non-shooters in Arizona and Oregon. Young males predominate.
- **Conflicts with other shooters:** The states are not markedly different on this question. Large majorities have *never* witnessed or experienced this problem. Young males predominate.
- **Conflicts with other recreationists:** This is slightly more of a problem in California, Arizona, and Colorado than it is in Oregon or Virginia. In addition to young males, other common descriptions of the people causing these problems include hikers/campers and ATV users.
- **Conflicts with homeowners or landowners adjacent to federal land:** The states are not markedly different on this question. Large majorities have *never* witnessed or experienced this problem.

POTENTIAL REASONS FOR UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR AND OPINIONS ON DETERRENCE

- When asked for their opinion regarding why people participate in unsafe shooting practices, the most commonly given reason in each state is that such people were not raised the right way (and other prominent reasons given include that such people do not care that they are being unsafe and that they are rude). Ignorance is also to blame, as the second and third most common answers are that people do *not* know that the behavior in question is unsafe and that people do not learn shooting safety.

- Similar to the above question, the survey asked respondents to indicate why they think that people leave shooting debris in an area after recreational shooting. The most common reason by far is that such people are lazy. Lack of caring and not being raised the right way are also common reasons. Ignorance is *not* a commonly given reason (unlike the above question in which ignorance is a commonly attributed cause). The survey also asked about litter in general (as opposed to specifically shooting debris), with similar results: laziness is the most commonly given reason why respondents think people litter.
 - The survey asked respondents what would encourage them to pick up all their shooting debris after using federal recreational land. Responses are well distributed into three categories of answers: having trash and recycling receptacles around, having reminder signs posted, and stepped up law enforcement.

- Most commonly, respondents indicate that having another shooter approach somebody practicing unsafe shooting would be *somewhat* effective at stopping the unsafe behavior (ranging from 43% to 50%). Another 18% to 31% say it would be *very* effective at stopping the unsafe behavior. Nonetheless, about a quarter (18% to 29%) say it would be not at all effective. The same question was asked about approaching another shooter who is leaving shooting debris or litter in an area, with similar results. (These questions, however, do not address how comfortable the respondent would be approaching another armed person about unsafe or unethical behavior.)

- Self-policing is the role that respondents overwhelmingly thought that hunters and shooters should have in keeping recreational shooting lands and ranges clean on federal lands. Large percentages also indicated that hunters and shooters should participate in volunteer clean-up days. Almost none abdicated any role in keeping

the shooting areas on federal lands clean (i.e., almost none said that hunters and shooters should have *no* role).

- The survey asked a series of six questions regarding the likelihood that respondents would do certain things if they knew doing so would help prevent some areas from being closed to recreational shooting. Of the six things, one stands out with an overwhelming majority (ranging from 69% to 79%) of each state saying that they would be *very* likely to do it: reporting unsafe or irresponsible behavior to authorities. Just about half (ranging from 49% to 59%) would directly approach those practicing unsafe or irresponsible behavior. On the other hand, the item at the bottom of each state's ranking of these six things is paying a user-fee to shoot on federal public lands, with the fee being used to maintain those areas (ranging from only 20% to 35%). The six things about which the survey asked were as follows:
- Saying something to the people you see participating in unsafe behavior, irresponsible behavior, or littering at the shooting area or range?
 - Reporting unsafe behavior, irresponsible behavior, littering, and other problems to authorities?
 - Organized volunteer clean-up events?
 - Volunteer presence to discourage problems?
 - Meetings with the land manager about problems and solutions?
 - Paying a user fee to shoot on federal lands, which would be used to clean and maintain the areas and ranges as well as to repair property damage?

OPINIONS ON MESSAGES TO CURB UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR ON FEDERAL LANDS

- The survey asked respondents about the effectiveness of twelve possible messages in stopping people from participating in unsafe and irresponsible behavior. The report will first discuss the rankings of the messages for each state and then discuss each message individually. The messages tested in the survey are as follows:
- Irresponsible behavior gives shooters a bad reputation
 - Irresponsible behavior hurts the shooting heritage
 - Irresponsible behavior causes shooting areas/ranges on federal lands to shut down

- Irresponsible behavior jeopardizes your safety
- Irresponsible behavior jeopardizes the safety of others
- Irresponsible behavior is a threat to the future of the shooting sports
- Irresponsible behavior robs you and your children of a place to shoot
- Irresponsible behavior threatens our right to shoot
- Irresponsible behavior provides ammunition for anti-hunting/shooting groups
- You can be fined for irresponsible behavior
- Good behavior results in great shooting
- Keep it Safe, Keep it Open

➤ This first examination looks at all messages relative to each other in each state.

Overall, most messages had a majority in each state saying the message would be *very* effective. One message that was at or near the top of each ranking (ranked by the percentage saying the message would be *very* effective) in the states was “Irresponsible behavior provides ammunition for anti-hunting and anti-shooting groups.” At the bottom of each state’s ranking was “Good behavior results in great shooting.” Otherwise, there was little consistency in the rankings from state to state.

- In California, all messages except for one (“Good behavior results in great shooting”) had a majority saying the message would be *very* effective. Four messages had more than 60% saying they would be *very* effective: “Irresponsible behavior provides ammunition for anti-hunting/shooting groups,” “Irresponsible behavior causes shooting areas/ranges to shut down,” “Irresponsible behavior robs you and your children of a place to shoot,” and “Irresponsible behavior is a threat to the future of the shooting sports.”
- In Arizona, all messages except for one (Good behavior results in great shooting) had a majority saying the message would be *very* effective. Two messages had 60% or more saying they would be *very* effective: “Irresponsible behavior provides ammunition for anti-hunting/shooting groups” and “You can be fined for irresponsible behavior.”
- In Virginia, all messages had a majority (57% or more) saying that they would be *very* effective. Four messages had 70% or more saying they would be *very* effective: “Irresponsible behavior robs you and your children of a place to

shoot," "Irresponsible behavior threatens our right to shoot," "Irresponsible behavior is a threat to the future of the shooting sports," and "Irresponsible behavior provides ammunition for anti-hunting/shooting groups."

- In Oregon, nine of the twelve messages had a majority saying that they would be *very* effective. Two stand out markedly from the rest, with 73% and 69%, respectively, saying that they would be *very* effective: "Keep it Safe, Keep it Open" and "Irresponsible behavior provides ammunition for anti-hunting/shooting groups."
 - In Colorado, all messages had 50% or more saying that they would be *very* effective. Four messages had more than 60% saying they would be *very* effective: "Irresponsible behavior is a threat to the future of the shooting sports," "Irresponsible behavior provides ammunition for anti-hunting/shooting groups," "Irresponsible behavior gives shooters a bad reputation," and "Keep it Safe, Keep it Open."
 - Because no messages, in general, stood out markedly from the rest in each state (i.e., there was no large gaps from one to the next in the percentage thinking the message would be *very* effective), and because no messages were universally highly or lowly rated (with the two exceptions discussed in the main bullet above), the reader should examine the graphs of the results for each state to see the messages that did particularly well in that state.
- This examination looks at each message individually.
- Irresponsible behavior gives shooters a bad reputation: There were no marked differences among the states in the perceived effectiveness of this message. Ratings of *very* effective ranged from 54% to 62%.
 - Irresponsible behavior hurts the shooting heritage: Oregon had a slightly higher percentage of shooters than the other states saying this message would be *not* at all effective. Ratings of *very* effective ranged from 51% to 61%.

- Irresponsible behavior causes shooting areas/ranges on federal lands to shut down: There were no marked differences among the states in the perceived effectiveness of this message. Ratings of *very* effective ranged from 57% to 64%.
- Irresponsible behavior jeopardizes your safety: This message played slightly better in Virginia and California than in other states. Ratings of *very* effective ranged from 49% to 63%.
- Irresponsible behavior jeopardizes the safety of others: This message was received markedly better in Virginia and California; on the other hand, Oregon shooters were the least enthusiastic about this message. Ratings of *very* effective ranged from 46% to 64%.
- Irresponsible behavior is a threat to the future of the shooting sports: This message played better in Virginia, Colorado, and California than it did in Oregon and Arizona. Ratings of *very* effective ranged from 52% to 71%.
- Irresponsible behavior robs you and your children of a place to shoot: This message was well received in Virginia and California (relative to the other states); it was not as well received (again, relative to the other states) in Arizona. Ratings of *very* effective ranged from 51% to 72%.
- Irresponsible behavior threatens our right to shoot: Virginia shooters responded to this much more favorably than did shooters from any other state. Ratings of *very* effective ranged from 52% to 72%.
- Irresponsible behavior provides ammunition for anti-hunting/shooting groups: There were no marked differences among the states in the perceived effectiveness of this message. Ratings of *very* effective ranged from 65% to 70%.
- You can be fined for irresponsible behavior: Two states had markedly lower percentages, relative to the other states, saying that this message would be *very* effective – California and Colorado. Ratings of *very* effective ranged from 52% to 66%.
- Good behavior results in great shooting: Only in Virginia did this message have less than 14% saying it was *not* at all effective. Otherwise, from 14% to 20% of

- shooters in the other states say this would *not* be at all effective. Ratings of *very* effective ranged from only 44% to 57%.
- Keep it Safe, Keep it Open: This played markedly better in Oregon and Virginia than in the other states. Ratings of *very* effective ranged from 58% to 73%.
- After discussing the series of messages above, the survey asked respondents if they could think of any other messages or statements that might be effective in stopping people from misbehaving on federal shooting lands. Many respondents provided a suggested message or statement (although some respondents indicated an action rather than a message, such as “Additional law enforcement”), which varied too greatly to be readily categorized. Most actions concerned punitive measures (more fines, etc.).
- The survey tested the perceived effectiveness of eight messages aimed at stopping shooters from littering and leaving shooting debris behind. In general, the shorter messages (“Keep it Clean, Keep it Open” and “Keep it Clean, Keep it Safe”) resonated well, as did the message discussing fines that could result or the bad reputation that could result. The longer messages that used the terms “unhealthy,” “hurts the environment,” and “eyesore” did not resonate well, relative to the other messages. The messages tested are as follows:
- Leaving behind shooting debris/litter makes the shooting site an eyesore
 - Leaving behind shooting debris/litter gives shooters a bad reputation
 - Leaving shooting debris/litter at the shooting sites makes them unhealthy
 - Leaving shooting debris/litter at the shooting sites hurts the environment
 - Leaving your shooting debris at the shooting areas and ranges IS littering
 - You can be fined for not cleaning up your shooting debris and litter
 - Keep it Clean, Keep it Safe
 - Keep it Clean, Keep it Open

- This examination looks at all potential messages relative to each other in each state.
 - In California, “Keep it Clean, Keep it Open” resonated markedly better than the other messages. Three other messages were in a middle grouping in being *very* effective: “You can be fined for not cleaning up your shooting debris and litter,” “Leaving behind shooting debris/litter gives shooters a bad reputation,” and “Keep it Clean, Keep it Safe.”
 - In Arizona, three messages resonated well: “Keep it Clean, Keep it Open,” “You can be fined for not cleaning up your shooting debris and litter,” and “Leaving behind shooting debris/litter gives shooters a bad reputation.”
 - In Virginia, three messages resonated well: “You can be fined for not cleaning up your shooting debris and litter,” “Keep it Clean, Keep it Open,” and “Keep it Clean, Keep it Safe.”
 - In Oregon, two messages resonated well: “Keep it Clean, Keep it Open” and “You can be fined for not cleaning up your shooting debris and litter.”
 - In Colorado, two messages resonated well: “You can be fined for not cleaning up your shooting debris and litter” and “Keep it Clean, Keep it Open.”

- This examination looks at each message individually.
 - Leaving behind shooting debris/litter makes the shooting site an eyesore: This resonated better in Virginia than in the other states.
 - Leaving behind shooting debris/litter gives shooters a bad reputation: There were no marked differences among the states in the perceived effectiveness of this message.
 - Leaving shooting debris/litter at the shooting sites makes them unhealthy: This resonated better in Virginia than in the other states.
 - Leaving shooting debris/litter at the shooting sites hurts the environment: Oregon had a higher percentage of shooters saying this would *not* be at all effective, relative to the other states.

- Leaving your shooting debris at the shooting areas and ranges IS littering: Oregon had a higher percentage of shooters saying this would *not* be at all effective, relative to the other states.
- You can be fined for not cleaning up your shooting debris and litter: Oregon had a higher percentage of shooters saying this would *not* be at all effective, relative to the other states.
- Keep it Clean, Keep it Safe: This resonated better in Virginia than in the other states.
- Keep it Clean, Keep it Open: There were no marked differences among the states in the perceived effectiveness of this message.

SOURCES OF INFORMATION ON RECREATIONAL SHOOTING

- When asked where they get information about recreational shooting in general, notable percentages of shooters from each state indicated that they do not seek information on recreational shooting (9-19% of all shooters). Otherwise, the top sources of information on recreational shooting in general include the following:
 - Family and friends (21-29% of all shooters);
 - The media (15-21%);
 - The National Rifle Association (9-24%);
 - State fish and wildlife or natural resource agencies (8-22%);
 - The Internet (7-17%);
 - Magazines (9-17%).
- Those who said they get information about recreational shooting from magazines were asked about the specific publications, and the most commonly named ones included miscellaneous hunting and shooting magazines (50-56% of those who get information about shooting from magazines), American Hunter/American Rifleman (13-31%, with Oregon shooters at the high end), various other publications from the

National Rifle Association (12-24%), Guns and Ammo (4-13%), and Field and Stream (6-17%, with the exception of Oregon).

- The survey also asked respondents about where they get information about recreational shooting *specifically on federal lands*; notable percentages indicated they do not seek such information (14-29% of all shooters). The other top sources of information on recreational shooting on federal lands included the following:
 - Friends and family (19-24% of all shooters);
 - The Internet (7-20%);
 - State fish and wildlife or natural resource agencies (8-21%);
 - The media (5-12%);
 - The National Rifle Association (4-11%);
 - Newsletters/pamphlets/brochures (4-8%).

- Those who said they get information about recreational shooting on federal lands from magazines were asked about the specific publications, and the most commonly named ones included miscellaneous magazines (40-83% of those who get information about shooting on federal lands from magazines), Guns and Ammo (8-22%), various publications from the National Rifle Association (9-33%, with the exception of Virginia shooters), and Field and Stream (8-20%, with the exception of Arizona shooters).

CREDIBILITY RATINGS OF INFORMATION SOURCES ON SHOOTING

- The survey examined ten potential sources of information on shooting and shooting issues, asking respondents to indicate if each was a very credible, somewhat credible, or not at all credible source of information. This examination first looks at all sources of information relative to each other in each state, then the report discusses each source of information in turn. The sources of information asked about are as follows:

- The Bureau of Land Management
 - The Forest Service
 - A professor of natural resources at a university in the respondent's state
 - The National Rifle Association
 - The Izaak Walton League of America
 - SCI (formerly Safari Club International)
 - The National Shooting Sports Foundation
 - A local sportsman's organization
 - A local conservation organization
 - Other shooters
- This first examination looks at all sources of information relative to each other in each state. Overall, the National Rifle Association, local sportsman's organizations, the National Shooting Sports Foundation, and the Forest Service were consistently rated as the most credible sources of information.
- In California, a majority of shooters rated the National Rifle Association (79%) and local sportsman's organizations (67%) as being very credible.
 - In Arizona, a majority of shooters rated the National Rifle Association (77%), local sportsman's organizations (68%), and the Forest Service (52%) as being very credible.
 - In Virginia, shooters had similar perceptions of sources of information that could be considered very credible: a majority of shooters rated the National Rifle Association (76%), the Forest Service (63%), and local sportsman's organizations (56%) as being very credible.
 - In Oregon, responses were similar: a majority of shooters rated the National Rifle Association (66%), local sportsman's organizations (66%), and the Forest Service (52%) as very credible sources of information on shooting and shooting issues.
 - In Colorado, a majority of shooters rated the National Rifle Association (75%) and local sportsman's organizations (53%) as being very credible sources of information.

- Note that some sources, such as the Izaak Walton League and SCI, had relatively high “don’t know” responses, which would lower their rank on the “very credible” and overall credible ratings. Therefore, it should be noted that a low rank on the “credible” graphs does not necessarily mean an information source is high on the “not at all credible” graphs.
- This examination looks at marked differences among states in the survey (California, Arizona, Virginia, Oregon, and Colorado) regarding the ratings of credibility for each source of information on shooting and shooting issues.
- The Bureau of Land Management: This was considered credible by the overwhelming majority of respondents, though shooters in the five states were about evenly split in considering the BLM *very* credible (37-50% of all shooters) or *somewhat* credible (33-39%).
 - The Forest Service: Again, the overwhelming majority of respondents from the five states described the Forest Service as credible, with most calling it *very* credible (43-63%).
 - A professor of natural resources at a university in the respondent’s state: Recreational shooters in California, Arizona, Oregon, and Colorado are all more likely to describe this source as being not at all credible; Virginia respondents are less likely, relative to other states’ respondents, to say this is a not at all credible source of information (61% of Virginia recreational shooters said the source was credible).
 - The National Rifle Association: Large majorities of recreational shooters in each of the five states (66-79%) describe this source as *very* credible.
 - The Izaak Walton League of America: Recreational shooters in each of the five states appear unfamiliar with this organization, as 56-71% of them were unsure of how to assess the credibility of the Izaak Walton League. Virginia recreational shooters are the exception, as 45% of them say the League is *very* credible (though 33% of them also answered “don’t know”).

- SCI (formerly Safari Club International): Similarly, there appears to be a substantial lack of familiarity with SCI, as 25-45% of recreational shooters were unsure of how to assess SCI's credibility on shooting and shooting issues. However, notable percentages described the organization as being credible (43-67% of all recreational shooters).
- The National Shooting Sports Foundation: The states are not markedly different on this question, with most shooters describing the NSSF as being credible (among them, 58-70% call it *very* credible).
- A local sportsman's organization: An overwhelming majority of respondents from each of the states described this source of information as being credible, with most calling it *very* credible (53-68%).
- A local conservation organization: Across the five states, Virginia recreational shooters appear the most likely to consider a local conservation organization as being *very* credible; meanwhile, other shooters appear most likely to consider such an organization *somewhat* credible.
- Other shooters: There are no marked differences between the states on this question, as substantial majorities consider other shooters to be credible (42-47% think other shooters are *very* credible, while 45-50% of those surveyed think other shooters are *somewhat* credible).

FOCUS GROUP RESULTS

EXPERIENCES WITH CLOSURES OF SHOOTING AREAS AND RANGES ON FEDERAL LANDS

- Several participants said they recalled ranges or facilities they had previously used being closed; in some cases, these individuals said they were unsure of the reasons for the closures. One participant said that he thought an undesignated shooting area had been closed because of hazardous waste, while another participant said that urbanization and growth were leading to ranges and shooting areas being shut down.

- One participant mentioned that greater restrictions on shooting areas generally made access more difficult, and another participant mentioned a private range whose shooting range underwent lead abatement issues.
 - In general, Phoenix shooters did not report difficulties with access, as it was mentioned that Arizona shooting areas are fairly easy to reach in most instances.

- During the discussion about possible trends in shooting areas and ranges being shut down, several shooters in each group remarked about the need to share land and recreational areas with other recreationists (i.e., not recreational shooters). Some participants in the groups speculated that such a need could probably lead to shooting being forbidden in certain areas in order to accommodate all recreationists.

- A majority of participants recognized the issue of people littering and leaving behind trash at shooting sites and designated/non-designated shooting areas. A number of shooters in the groups mentioned ethical standards and/or the proper or expected decorum of recreationists (shooters and non-shooters alike) while on public lands. On this point, several participants remarked that it was unfortunate that litter and environmental damage happened to be a product of “people holding guns.”

- Some participants mentioned to the moderator the need to distinguish recreational or sports shooters from casual visitors to public lands who happen to shoot firearms. It should be noted that one of the major themes in this early discussion was the need to separate “true sportsmen” from other, careless recreationists who litter or cause property or environmental damage. Equally important is the fact that many shooters from the group mentioned instances in which they themselves picked up trash or litter after other recreationists, which some related to the idea of “true sportsmen” being stewards of the land and their natural resources.

- In general, shooters in the groups appeared to prefer non-designated shooting areas over designated or formal ranges. This was primarily for reasons for convenience (e.g., time issues), as well as the fact that non-designated areas tended to be what most shooters in the groups were accustomed to.

EXPOSURE TO UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR ON FEDERAL LANDS

- Nearly all the participants in the focus groups identified the major issues associated with irresponsible behavior on public lands without prompting (with much of these mentions occurring in the earlier discussion on range/shooting area closures). Shooters in the two groups mentioned trash and litter, the dumping of large items such as appliances and televisions, and environmental damage.
- Throughout the discussion, the groups reiterated the difference between responsible recreational shooters and careless or ignorant visitors to public lands who routinely behave irresponsibly.
- In general, trash, litter (particularly the dumping of appliances and televisions, which was cited several times throughout the groups), and environmental damage were more often mentioned by the group participants than reports of unsafe behavior, such as reckless shooting. Though some participants did mention accounts of unsafe behavior by other shooters or recreationists, the majority of the discussion was devoted to trash, litter, and environmental damage.

OPINIONS ON DETERRENCE OF UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR ON FEDERAL LANDS

- Several participants in each group were largely supportive of increased enforcement and/or supervision at shooting ranges and sites. These participants indicated that enforcement and the assessment of fines were likely to be the most effective ways to eliminate irresponsible behavior.

- At the same time, other participants in the groups emphasized the need to bolster public awareness of environmental damage in the form of education, effective messaging campaigns (some cited the “Don’t mess with Texas” campaign as a successful example of anti-littering efforts in that state), and agency outreach. It should be noted that such suggestions did not appear to be in conflict with those advocating increased enforcement; rather, participants emphasizing the need for education and awareness of the effects of litter spoke of complementing enforcement efforts with communication.
- When asked about the probable willingness of recreational shooters to report those they observed causing property damage or behaving irresponsibly, nearly all focus group participants responded that they would be willing to report others if the circumstances called for it. Several shooters in the groups mentioned that the prevalence of cellular phones ought to make it easier for sportsmen to quickly report instances of property damage, irresponsible behavior, etc.
- In general, though participants in the groups appeared supportive of voluntary clean-up days (with several shooters saying they had participated in such events in the past), they also remained somewhat pessimistic about the tendency for litter to return rather quickly to ranges and shooting areas relatively soon after such clean-up events taking place. Still, it should be said that most shooters in the groups remained in support of such events.
- The moderator brought up the issuing of fines through enforcement as a means of curbing irresponsible behavior, and many participants in the groups were again strongly supportive of such a measure. It was noted by some that a heavy fine tends to be the only thing that gets across to those breaking the law (“sure and certain punishment,” as one participant put it). Several shooters in the focus groups said

that the threat of heavy fines should be spelled out on signage in shooting areas and designated and non-designated sites.

- Throughout this discussion, a few participants reiterated the need for proper firearms training and increased education. One participant suggested that manufacturers place anti-littering or responsible shooting messages on ammunition boxes, similar to warnings on cigarettes packages. A hotline was also suggested as a way for members of the public to quickly report instances of property damage, irresponsible behavior, etc.
- One aspect of the discussion concerned the manner in which shooters would be likely to respond to public service announcements and messages. As an example, the moderator asked for opinions of the word “lazy” being used in anti-litter messages or messages designed to curb irresponsible behavior. In general, participants were not enthusiastic about this term, with several suggesting that messages go in the opposite direction, such as using the word “responsible” and/or emphasizing the concept of responsibility. Several participants also noted the likely tendency for shooters to instantly brush off messages (e.g., “It doesn’t apply to me”), and that the word “lazy” would therefore be unlikely to help bring about the intended effect of decreased litter and irresponsible behavior.

OPINIONS ON MESSAGES TO CURB UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR ON FEDERAL LANDS

- In general, most focus group participants reacted positively to the shorter messages, whereas most of the longer messages received less enthusiastic responses (though there were some exceptions). Several participants said that longer messages left open the possibility of misinterpretation, or simply ran the risk of being too lengthy to effectively resonate with shooters and other recreationists.

- The focus groups indicate that shooters value positive messages over messages emphasizing negative outcomes or consequences. However, it should also be noted that a majority of participants supported language on signs and in public service announcements referencing fines and other punitive steps. The consensus for effective messaging seemed to be a concise, positive message in bold print/large font, accompanied (underneath or elsewhere) by descriptions of fines and enforcement actions that would be taken against those littering, causing property damage, behaving irresponsibly, etc.

- Though anti-gun and anti-shooting interests were addressed as threats to sport shooting and the availability of shooting ranges and areas, shooters in the groups appeared reluctant to endorse some of the messages that pitted the two sides against one another (i.e., recreational shooters versus anti-shooters). This relates back to most of the shooters' preference for positive messages over negative ones.

- The following bullets address responses to each individual message:
 - “Keep it clean. Keep it open”: This message was favorably received; it was seen as short, to the point, and clear. There was the suggestion that this message be accompanied with a visual, such as the outline of a firearm or cartridge cases.
 - “You can be fined for not cleaning up your shooting debris and litter”: This message was favorably received, though several participants suggested changing the word “can” to “will” (i.e., “You *will* be fined...”).
 - “Leaving behind shooting debris and other litter gives shooters a bad reputation”: This message was not very well received, with some shooters in the groups describing it as needlessly complicated and straying from the intended point. Also, several participants noted that those littering and behaving irresponsibly were unlikely to care much about the reputation of shooters.

- “Don’t trash it. Don’t help anti-hunters and anti-shooters close down shooting on public lands”: This message was generally viewed as being too long, and there was some doubt about whether or not the message would have any impact.
- “Why help anti-hunters and anti-shooters win? Clean up your shooting area or range”: Most participants agreed with the message, although several emphasized the importance of choosing a proper medium for it. For example, one participant said such a message would probably work better in a shooting magazine rather than a sign or other public announcement.
- “Irresponsible behavior provides ammunition to anti-hunting and anti-shooting groups”: This message was somewhat well received, though it was suggested that the statement be changed to, “Irresponsible behavior by hunters and shooters causes anti-hunting and anti-shooting attitudes.” Also, one participant in the Denver group suggested, “Responsible shooters clean up their litter and shoot safely.”
- “Anti-hunters and anti-shooters want you to practice unethical and unsafe shooting and not pick up your shells. It gives them ammunition to close down public shooting areas”: This message received the highest number of negative remarks, with participants criticizing its length as well as its veracity.
- “Irresponsible behavior causes shooting areas and ranges on federal lands to be shut down”: This message was better received in the Phoenix group than in the Denver group, with some participants in the latter commenting about the abstract nature of irresponsible behavior.
- “Irresponsible behavior robs you and your children of a place to shoot”: This message was fairly poorly received, primarily due to the perception that it places blame on the shooters.
- “Protect your freedom to shoot on federal lands. Shoot responsibly”: This message was relatively well received, although some participants still questioned the ability of messages to appeal to non-sportsmen and occasional recreationists.

- “Protect public sport shooting. Respect the land. Respect the sport”: This message was very well received in both groups, with several participants commenting that it emphasized everything it needed to.
- “Irresponsible behavior is a threat to the future of shooting sports”: This message received mixed reactions, with some commenting on its perceived negative tone.
- “Keep it safe. Keep it open”: This message was very well received.

CONCLUSIONS AND COMMUNICATIONS IMPLICATIONS

UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR ON FEDERAL LANDS

Shooter Exposure and Experiences

- Though a majority of recreational shooters have not had direct experience with a range or shooting area they use being shut down, it is clear that litter and irresponsible behavior are persistent and fairly widespread problems at ranges and shooting areas in California, Arizona, Virginia, Oregon, and Colorado. A majority of recreational shooters from each state in the survey and numerous participants in the focus groups indicated that unsafe shooting behavior, irresponsible behavior, environmental damage, property damage, shooting debris, and litter are currently affecting the quality of their shooting experiences. Among those who have experienced a shooting area or range they have used on federal land being closed, litter and trash and property damage were among the top perceived reasons for such closures.
- At the same time, participation in shooting activities on federal public lands is high, and recreational shooters in the five states overwhelmingly consider shooting areas and ranges on federal lands to be very important to their shooting participation (74-86% of shooters from the survey gave this answer, a finding reflected in the comments of numerous focus group participants). As such, it appears that many

recreational shooters are aware of and concerned about the deteriorating situation in many shooting areas and ranges on federal lands across the country. Convincing recreational shooters of the need for action should therefore be a matter of simply reinforcing what many are already observing for themselves at ranges and shooting areas.

Shooter Awareness and Self-Policing

- The overwhelming majority of recreational shooters (87-94% of all shooters from the survey) say that self-policing should be the role hunters and shooters have in keeping recreational shooting areas and ranges clean on federal lands. This sentiment was echoed in the focus groups, as numerous participants spoke about the need for sportsmen to reinforce responsible behavior and act as stewards of the land. It should also be noted that substantial percentages of recreational shooters would be likely to say something to people they observe participating in unsafe or irresponsible behavior or littering; recreational shooters are also very likely to take it upon themselves to report unsafe or irresponsible behavior or littering at shooting areas and ranges (the latter finding confirmed by the focus groups). These findings should be taken into account when developing messages and communications campaigns aimed at shooters, particularly as the concept of the “true sportsmen” and/or “steward of the land” appeared to resonate strongly with focus group participants (note the recurrence of the words “responsible” and “responsibility” in the various focus group comments throughout).

Clean-up Days and Events

- Substantial percentages of recreational shooters from the survey said they would be likely to participate in an organized volunteer clean-up day, and such events would be valuable in furthering the image of the “true sportsmen” as discussed above. Coordinated, well-organized events would also be useful in raising awareness of anti-littering and “responsible behavior” messages, particularly since adult

recreational shooters may be likely to bring their children with them. In the larger sense, such events may help to further a valuable sense of contribution in shooters who feel empowered to maintain the well-being of their preferred shooting areas and ranges.

MESSAGE TESTING

General Themes

- The survey found – and the focus groups confirmed – that recreational shooters value simple, positive messages that resonate clearly. Many of the longer messages were noted for being open to misinterpretation, and most of the shooters in the focus groups lacked enthusiasm for messages they perceived as focusing solely on negative outcomes. Among the messages that tested best in the survey and received high marks in the focus groups were, “Keep it safe, keep it open,” “Keep it clean, keep it open,” “You can be fined for not cleaning up your shooting debris and litter,” (with the suggestion that “can” be replaced with “will” in the latter message) and “Protect public sport shooting. Respect the land. Respect the sport.” This last message was popular for its inclusion of the word “respect” and its appeal to responsibility, ethical behavior, and values. Numerous participants in the focus groups spoke of the importance of responsibility and the need for sportsmen to educate the less experienced on proper decorum while using public lands. Successful messages will incorporate this theme into the larger goal of curbing irresponsible and unsafe behavior on federal public lands. It should be noted that some messages will invariably prove more effective in certain states than in others, and this report provides baseline information on the similarities and differences in preferences for messages in the five states that made up the study.

- The following list outlines some of the major reasons why some communications and outreach campaigns are unsuccessful:

- Appropriate and adequate financial and personnel resources are not allocated to efforts – many programs and efforts are woefully underfunded from the start.
- Specific outreach goals and program objectives are not specified or committed to writing.
- Target audiences are not identified; programs attempt to “educate” the “general public.” Programs attempt to be all things to all people.
- Target audience knowledge levels, opinions, and attitudes toward the specific outreach topic are not adequately researched; programs begin with little scientific understanding of the target audience.
- Messages are not carefully identified and crafted. Messages are not field-tested on the audience.
- There are too many messages and these messages tend to be too complex.
- Appropriate media are not selected with the specific target audience in mind.
- There is too much emphasis on program outputs as opposed to program outcomes.
- Efforts and initiatives are not implemented long enough. Efforts need time to work and sometimes personnel get bored of the implementation phase of repeating the same messages over and over. There is too much emphasis on product and program development and not enough on implementation.
- Efforts are not evaluated quantitatively in terms of outcomes and specified goals and objectives.

Enforcement and Fines

- Despite the fact that survey respondents ranked “more law enforcement” fairly low on lists of preferred additions or changes to shooting areas and ranges, numerous focus group participants stressed the importance of emphasizing fines and other punitive steps on signage and in messaging. Focus group participants also stressed the fact that although an enforcement presence might be viewed as unnecessary supervision by some, deterrence of unsafe and irresponsible behavior would

unlikely be successful without an adequate enforcement presence at problematic sites and areas. In general, one of the major overarching suggestions from the focus groups was for a combination of increased enforcement accompanied by positive messages that would include in fine print a mention of fines and/or punitive action.

Education and Communication

- Numerous comments from the survey responses and focus group discussions reflected the need for recreational shooters to have proper training and education. A widespread view among many recreational shooters is that people misbehave and act irresponsibly on public lands because they lack proper education and training, specifically firearms training. As such, agencies may wish to consider advertising firearms training and education in conjunction with messaging campaigns designed to curb littering and irresponsible behavior, as many recreational shooters believe these areas to be interrelated.

Communication from the Local Level

- In conjunction with the above, those involved in the development of messaging campaigns may wish to consider the importance of targeting audiences from the local level (i.e., from within recreational shooting communities in each state). Though federal agencies are necessary in implementing and refining the direction of communications campaigns, communication from the local level would reinforce key messages with trust and familiarity, both of which are invaluable to the effectiveness of communications. In addition, local input may be especially useful in a positive feedback loop providing evidence of improvements or progress or the restoration of opportunities. In this way, regulatory agencies would likely experience substantial support for anti-littering campaigns and management steps designed to eliminate problematic and irresponsible behavior on federal public lands.

TABLE OF CONTENTS

Introduction and Methodology	1
Survey Results	4
Participation in Recreational Shooting on Federal Lands	4
Satisfaction with Federal Lands and Preferences for Various Amenities	26
Experiences with Closures of Shooting Areas and Ranges on Federal Lands and Reasons for Closures	59
Exposure to Unsafe Shooting Practices and Irresponsible Behavior on Federal Lands	68
Potential Reasons for Unsafe Shooting Practices and Irresponsible Behavior and Opinions on Deterrence	136
Opinions on Messages to Curb Unsafe Shooting Practices and Irresponsible Behavior on Federal Lands	168
Sources of Information on Recreational Shooting	229
Credibility Ratings of Information Sources on Shooting	239
Demographic Data	269
Focus Group Results	277
Experiences with Closures of Shooting Areas and Ranges on Federal Lands	277
Exposure to Unsafe Shooting Practices and Irresponsible Behavior on Federal Lands	283
Opinions on Deterrence of Unsafe Shooting Practices and Irresponsible Behavior on Federal Lands	286
Opinions on Messages to Curb Unsafe Shooting Practices and Irresponsible Behavior on Federal Lands	293
Conclusions and Communications Implications	301
Unsafe Shooting Practices and Irresponsible Behavior on Federal Lands	301
Shooter Exposure and Experiences	301
Shooter Awareness and Self-Policing	302
Clean-Up Days and Events	302
Message Testing	303
General Themes	303
Enforcement and Fines	304
Education and Communication	305
Communication from the Local Level	305
Appendix: Focus Group Discussion Guide	306
About Responsive Management	310

INTRODUCTION AND METHODOLOGY

This study was conducted for the Federal Lands Hunting, Fishing and Shooting Sports Roundtable (the Roundtable) to determine sport shooters' and archers' attitudes on shooting and their perceptions of appropriate behavior on public lands. The study also examined sport shooters' and archers' opinions of and reactions to various messages designed to curb problematic and irresponsible behavior by recreationists on public lands. (Note that hereinafter, the terms "sport shooter" and "recreational shooter" are used to include those who shot pistols/handguns, rifles, shotguns, muzzleloader handguns and rifles, and archery equipment.) The study entailed two focus groups of sport shooters in Phoenix, Arizona, and Denver, Colorado, and a telephone survey of sport shooters in California, Arizona, Virginia, Oregon, and Colorado. Specific aspects of the research methodology are discussed below.

The focus groups entailed an in-depth, structured discussion with a small group of sport shooters about behavior on public lands as well as various messages addressing littering and unsafe behavior. The focus groups provided a qualitative exploration of attitudes, opinions, perceptions, motivations, constraints, participation, and behaviors. An experienced, trained moderator led the focus groups, as unobtrusively as possible, through a discussion outline and looked for new insights into why individuals felt the way they did about particular issues. The moderator kept the discussion within design parameters without exerting a strong influence on the discussion content. The focus groups were conducted using a discussion guide, which ensured consistency in data collection. The focus groups were recorded for further analysis. The most important use of the focus groups was in the testing of findings from the survey.

For the survey, telephones were selected as the preferred sampling medium because of the universality of telephone ownership. In addition, a central polling site at the Responsive Management office allowed for rigorous quality control over the interviews and data collection. Responsive Management maintains its own in-house telephone

interviewing facilities. These facilities are staffed by interviewers with experience conducting computer-assisted telephone interviews on the subjects of natural resources and outdoor recreation. The telephone survey questionnaire was developed cooperatively by Responsive Management and the Roundtable. Responsive Management conducted a pre-test of the questionnaire and made any necessary revisions to the questionnaire based on the pre-test.

To ensure the integrity of the telephone survey data, Responsive Management has interviewers who have been trained according to the standards established by the Council of American Survey Research Organizations. Methods of instruction included lecture and role-playing. The Survey Center Managers and other professional staff conducted project briefings with the interviewers prior to the administration of this survey. Interviewers were instructed on type of study, study goals and objectives, handling of survey questions, interview length, termination points and qualifiers for participation, interviewer instructions within the survey instrument, reading of the survey instrument, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey instrument. The Survey Center Managers and statisticians monitored the data collection, including monitoring of the actual telephone interviews without the interviewers' knowledge, to evaluate the performance of each interviewer and ensure the integrity of the data. After the surveys were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness.

Interviews were conducted Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. A five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day. The

survey was conducted in June 2008. Responsive Management obtained a total of 1,026 completed interviews of sport shooters aged 16 years and older.

The software used for data collection was Questionnaire Programming Language 4.1 (QPL). The survey data were entered into the computer as each interview was being conducted, eliminating manual data entry after the completion of the survey and the concomitant data entry errors that may occur with manual data entry. The survey instrument was programmed so that QPL branched, coded, and substituted phrases in the survey based on previous responses to ensure the integrity and consistency of the data collection. The analysis of data was performed using Statistical Package for the Social Sciences software as well as proprietary software developed by Responsive Management.

The sample for the telephone survey was obtained from three primary sources:

- Individuals identified as shooters from the Responsive Management study, "The Future of Hunting and the Shooting Sports";
- A sample provided by the National Shooting Sports Foundation of known firearms purchasers;
- A supplemental sample of hunting licenses.

Potential respondents from the above samples were then screened to determine whether they had recreationally shot on federal public lands in the past 2 years.

Note that some results on the graphs may not sum to exactly 100% because of rounding. Additionally, rounding on the graphs may cause apparent discrepancies of 1 percentage point between the graphs and the reported results of combined responses (e.g., when "strongly support" and "moderately support" are summed to determine the total percentage in support).

SURVEY RESULTS

PARTICIPATION IN RECREATIONAL SHOOTING ON FEDERAL LANDS

- The survey asked recreational shooters if they had hunted in the past 2 years, and a large majority from each of the states responded that they had, with a general range of 90-98% of shooters in each state saying they had hunted in the past 2 years.
 - The exception was California, where shooters were somewhat less likely to say they had hunted in the past 2 years (just 79% of them said that they had).

- Slight majorities of recreational shooters in California (53%), Oregon (55%), and Colorado (56%) who said they had hunted in the past 2 years indicated that they consider themselves to be both shooters and hunters.
 - While substantial percentages, though not majorities, of recreational shooters in California, Arizona, Oregon, and Colorado consider themselves to be primarily hunters (ranging from 38-48%), just over half of Virginia sport shooters (55%) consider themselves to be primarily hunters.
 - California had the highest percentage of respondents (9%) considering themselves to be primarily recreational shooters.

- Most commonly, recreational shooters from the five states named national forests and grasslands and Forest Service lands as the types of federal public lands on which they had shot (73-89% of all recreational shooters). (Note that respondents could name more than one type of federal land.)
 - Though substantial percentages (55-71%) of recreational shooters from California, Arizona, Oregon, and Colorado said they shot on Bureau of Land Management lands, just 7% of Virginia recreational shooters indicated the same. (Note that Virginia has little Bureau of Land Management land relative to the other states.)

- The survey asked how many years respondents had been shooting on federal lands, and the results generally follow a bell curve, with the peak in the 21-40 years category.
 - On average, California recreational shooters appear to have shot on federal lands longer than shooters in the other four states, with a mean of 36.36 years.
 - At the low end, Virginia recreational shooters have a mean of 25.30 years of recreational shooting on federal lands.

- The survey asked about the number of days respondents spend per year shooting on federal lands, with the median ranging from 10 to 15 days.
 - At the upper end, Arizona recreational shooters had a median of 15 days annually shooting on federal lands, while, at the low end, recreational shooters in Virginia and Colorado had a median of 10 days.

- When asked whether the number of days spent shooting on federal lands had increased, decreased, or stayed about the same over the past 2 years, majorities of recreational shooters from the five states (ranging from 54-63%) responded that the number had stayed the same. Otherwise, greater percentages answered decreased than answered increased.
 - Oregon recreational shooters were most likely to say the number had decreased (38% of them gave this answer).

- Most recreational shooters surveyed (74-86%) said that recreational shooting areas and ranges on federal lands are *very* important to their shooting participation.

- With the exception of Virginia, at least four-fifths of residents from each state (ranging from 80-83%) participate in target shooting or plinking on federal lands (compared to just 61% of Virginia recreational shooters). Sighting a firearm is the

other top-ranked activity, with 69-82% of recreational shooters from each state participating in it on federal lands.

- When shooting on federal lands, recreational shooters most commonly use rifles (87-98%) and shotguns (68-79%).
 - Arizona recreational shooters are by far more likely than shooters from other states to use a pistol/handgun (81%, compared to 46-68% of shooters from the other states).
 - Virginia shooters are by far more likely than shooters from other states to use a muzzleloader rifle (69%, compared to 20-41% of shooters from the other states), as well as being the least likely to use a pistol/handgun (46%, compared to 68-81% of shooters from the other states).
- Recreational shooters from the five states do not exhibit clear patterns in their *usage* of designated shooting areas and ranges versus areas not designated for shooting.
 - Virginia recreational shooters appear *more* likely to shoot at designated shooting ranges (29%, compared to 8-18% of shooters from other states), and somewhat *less* likely to shoot at areas typically used by recreational shooters but not designated as official shooting areas (17%, compared to 29-43% of shooters from other states).
- As before, recreational shooters from the five states do not exhibit clear patterns in their *preferences* for designated shooting areas and ranges versus areas not designated for shooting. (Note that the previous question asked about the sites shooters actually *use*, whereas this question addresses shooters' *preferred* sites for shooting.)
 - Virginia recreational shooters are again somewhat *more* likely than shooters from other states to prefer designated shooting ranges, and somewhat *less* likely to

prefer areas typically used by shooters but not designated as official shooting areas.

- The majority of recreational shooters from each state typically shoot with friends (52-70%), with California shooters appearing the most likely to do so.
 - Between 22-34% of recreational shooters typically shoot with family members.
 - Virginia recreational shooters appear somewhat *less* likely to shoot with family members (22%, compared to 26-34% of shooters from the other states), and somewhat *more* likely to shoot alone (21%, compared to 3-15% of shooters from the other states).

- Recreational shooters most commonly shoot in a party of three when shooting with family members on federal lands. California and Oregon shooters appear somewhat more likely to shoot in larger parties (mean of 3.79 and 3.78 family members, respectively), while Colorado shooters appear more likely to shoot with fewer family members (mean of 3.12 family members).

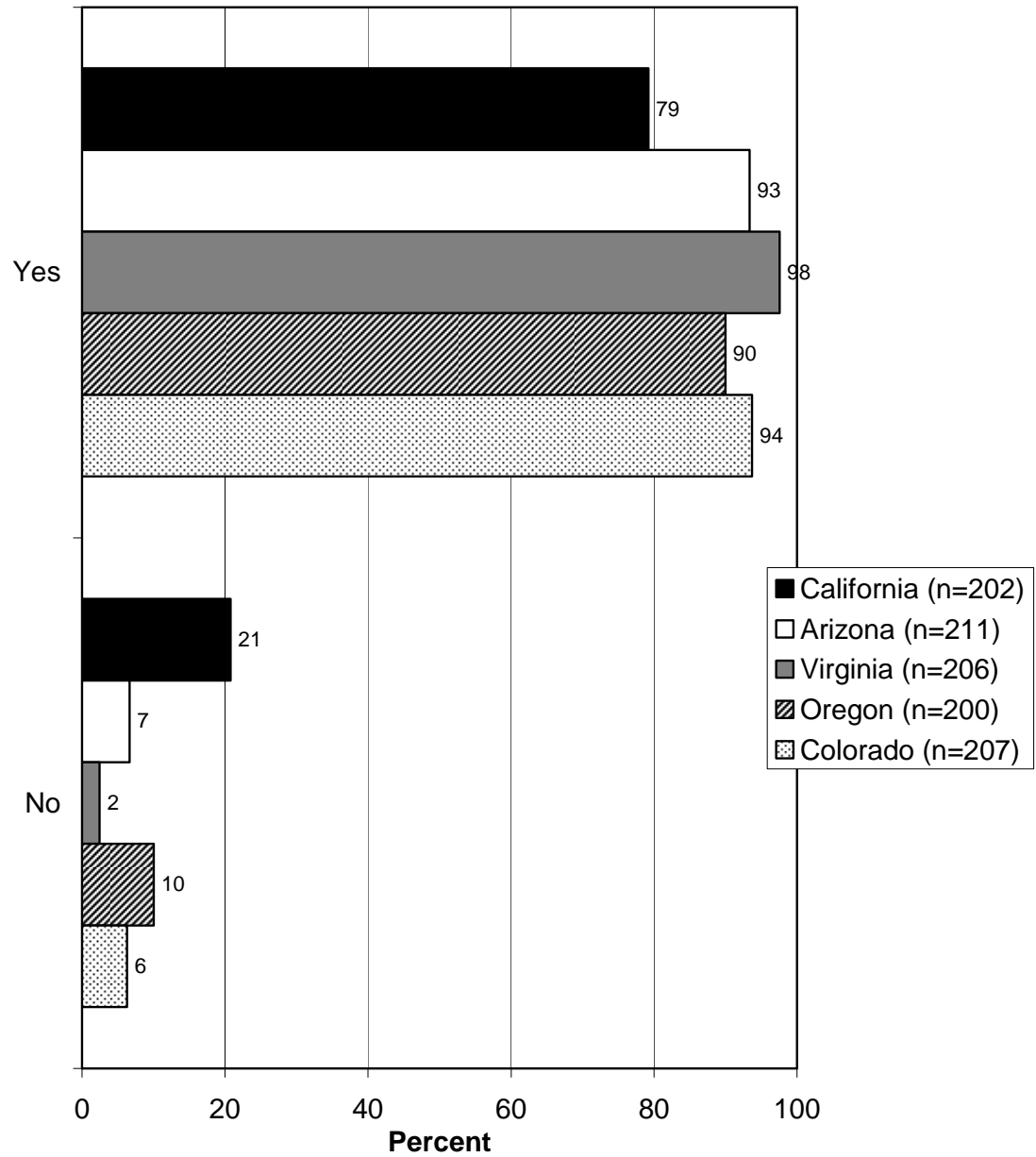
- Most commonly, recreational shooters in the five states shoot on federal lands with family members under 18 years old.

- In general, one-way travel time to shooting areas on federal lands is 40-45 minutes for shooters in Arizona, Virginia, Oregon, and Colorado.
 - By comparison, California recreational shooters have a notably longer one-way travel time, with a median of 70 minutes.

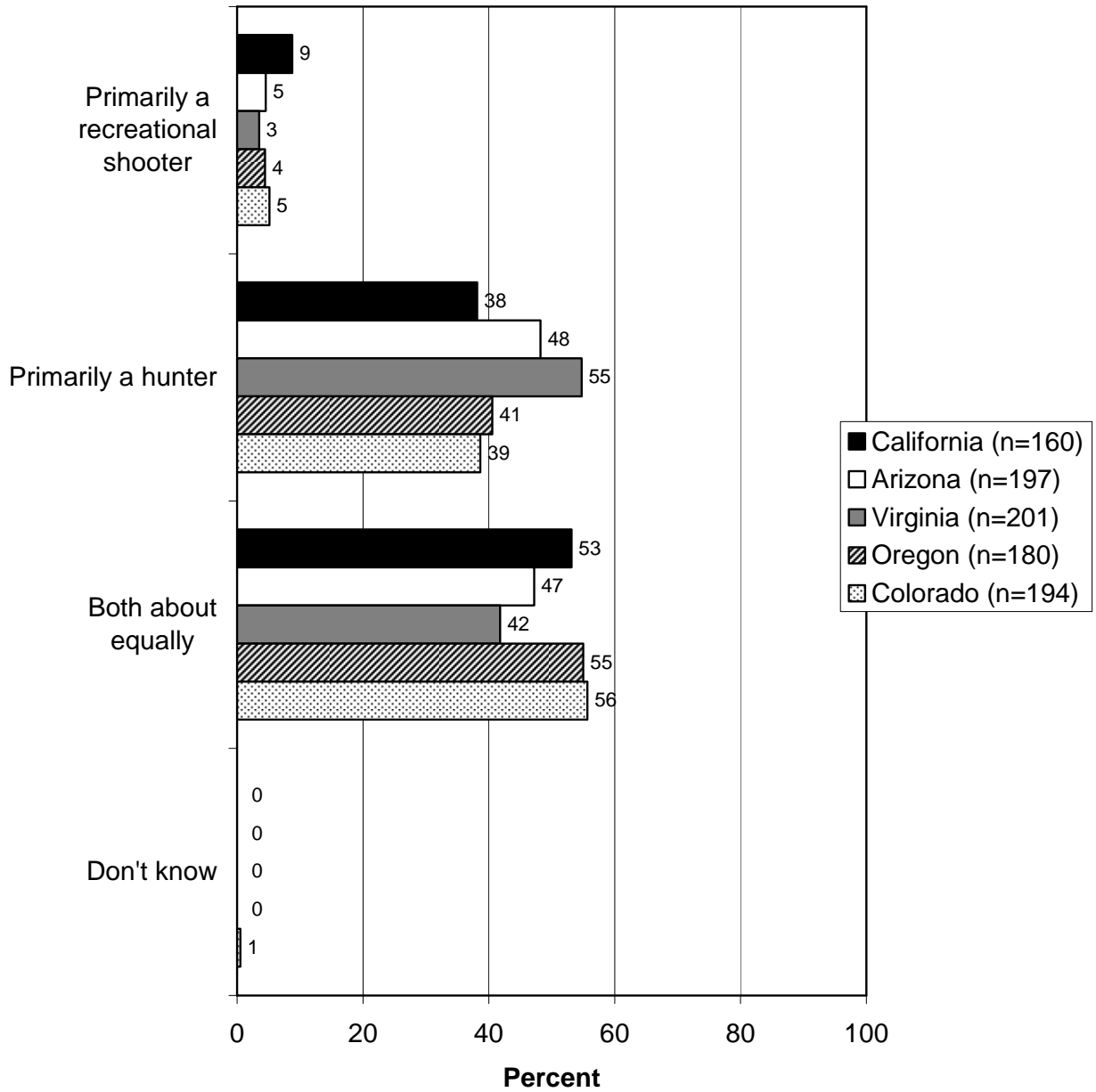
- Most recreational shooters visit federal lands for shooting for the primary purpose of recreational shooting (59-65% of all recreational shooters), while at least a quarter of them go as part of another activity (26-33% of all recreational shooters).

- Hunting is the predominant activity in which recreational shooters participate when shooting on federal lands (71-94% of all those who shoot on federal lands as part of another activity).

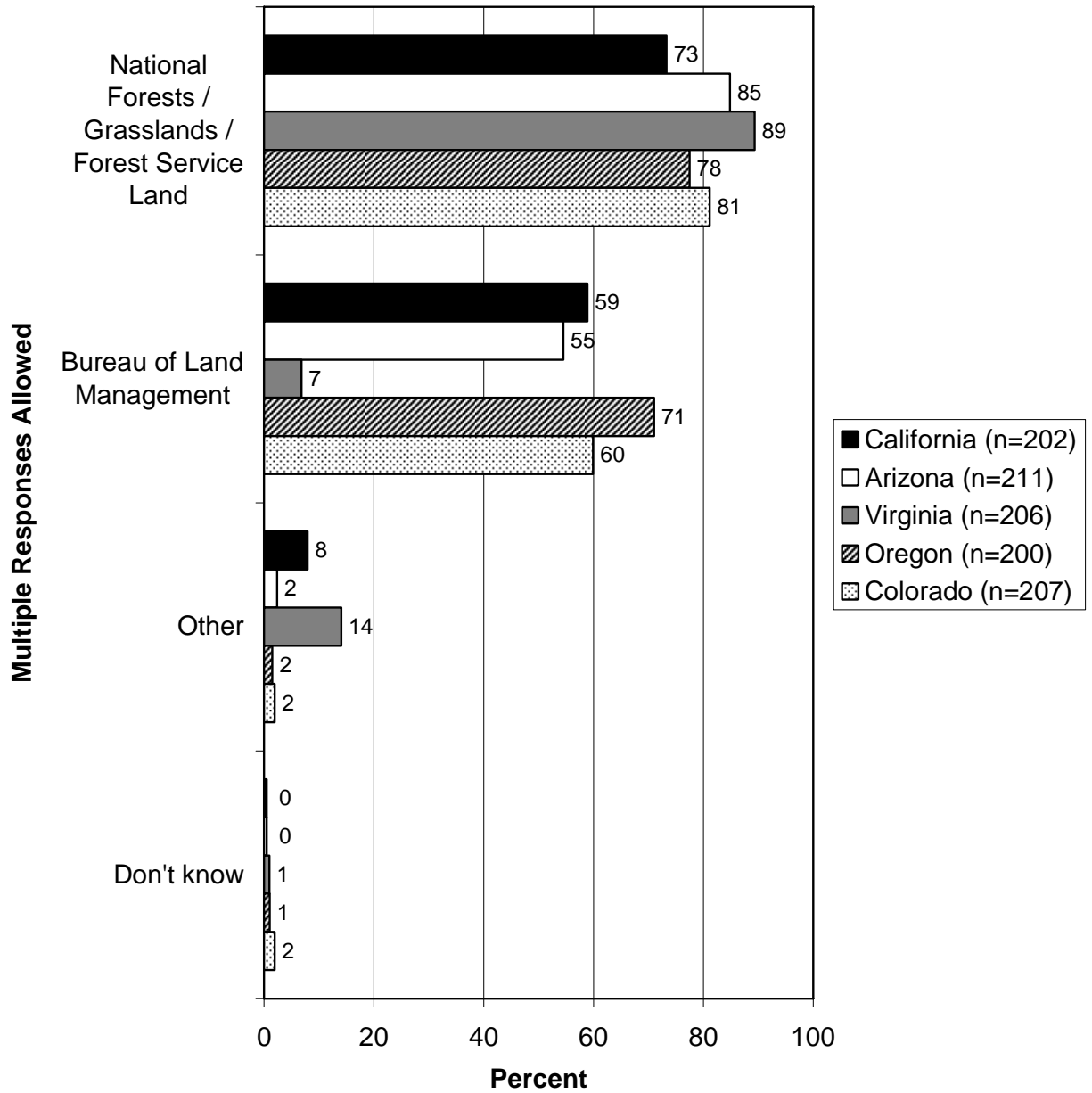
Q9. Have you been hunting in the past 2 years?



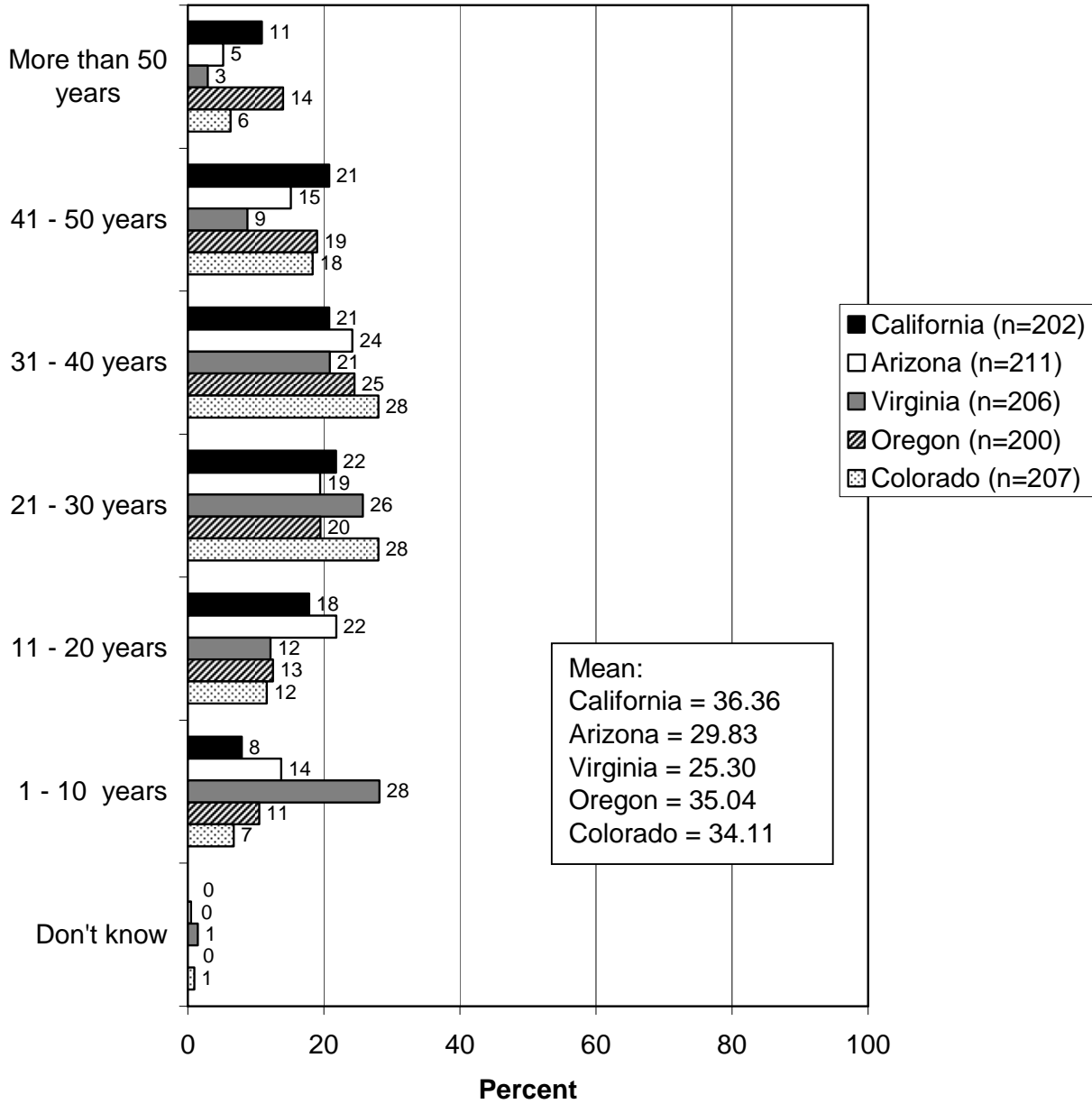
Q11. Do you consider yourself primarily a recreational shooter, primarily a hunter, or both about equally? (Asked of those who have hunted in the past 2 years.)



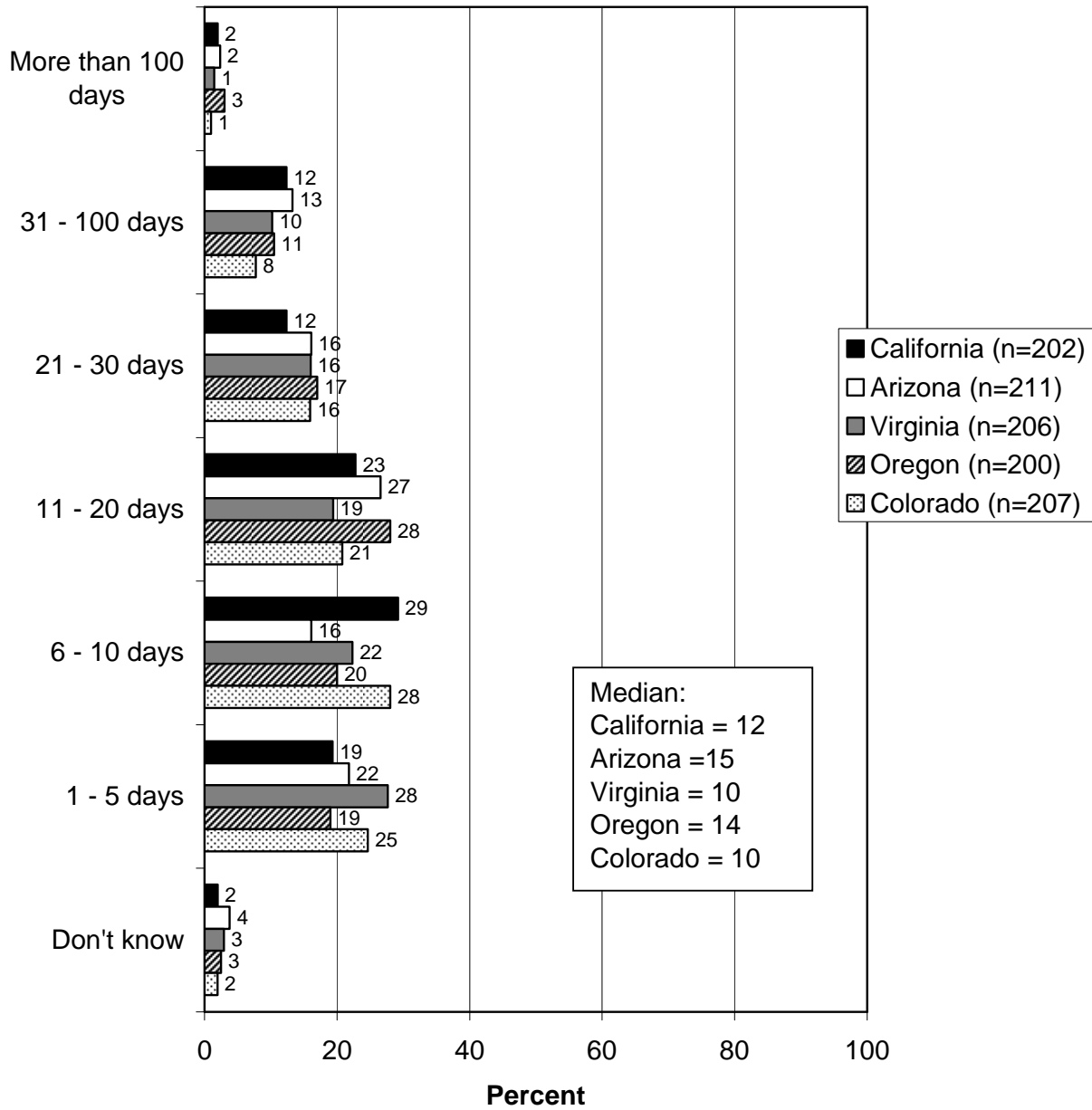
Q15. What types of federal public lands have you been shooting on?



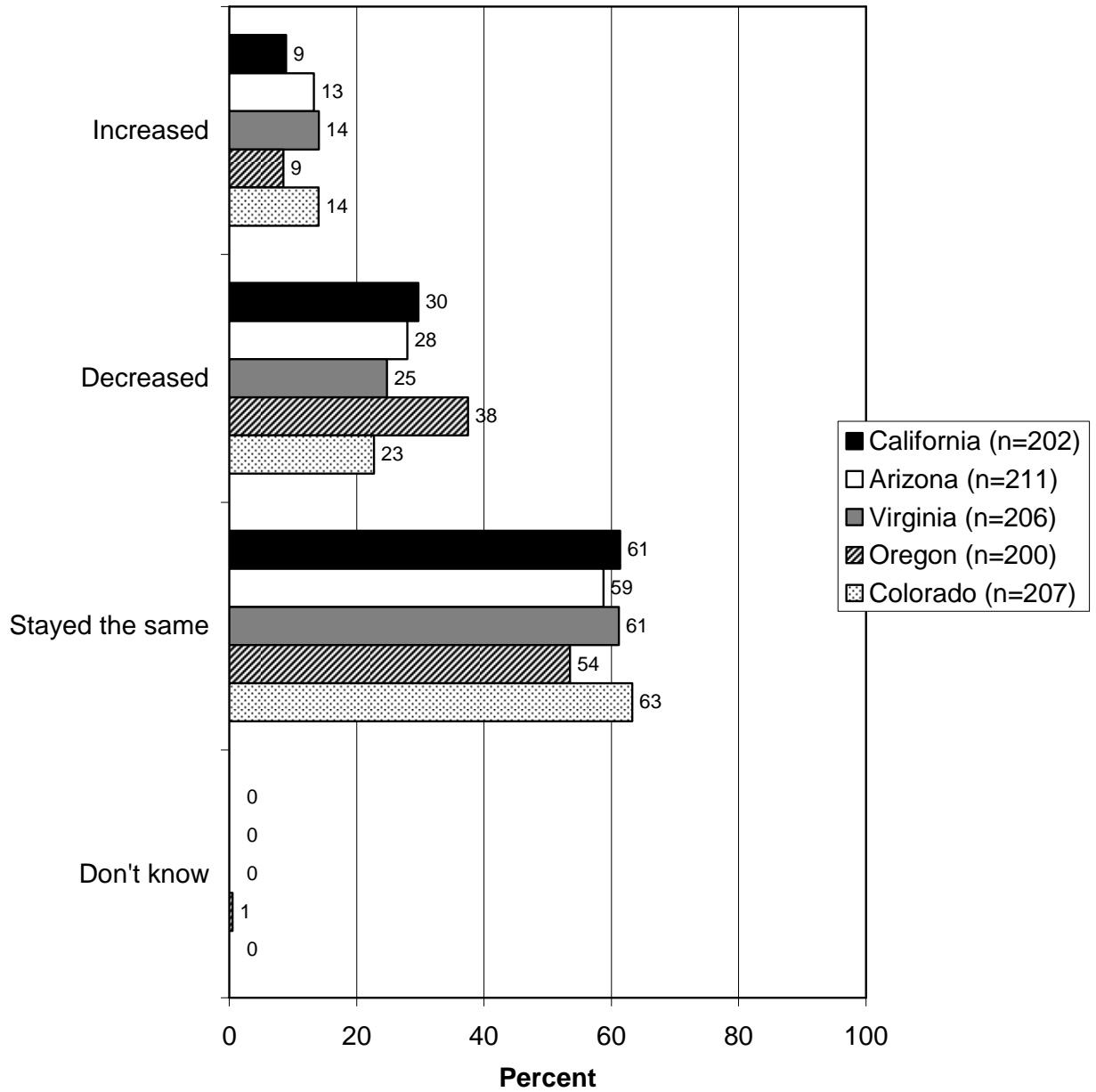
Q18. How many years total have you been shooting on federal lands?



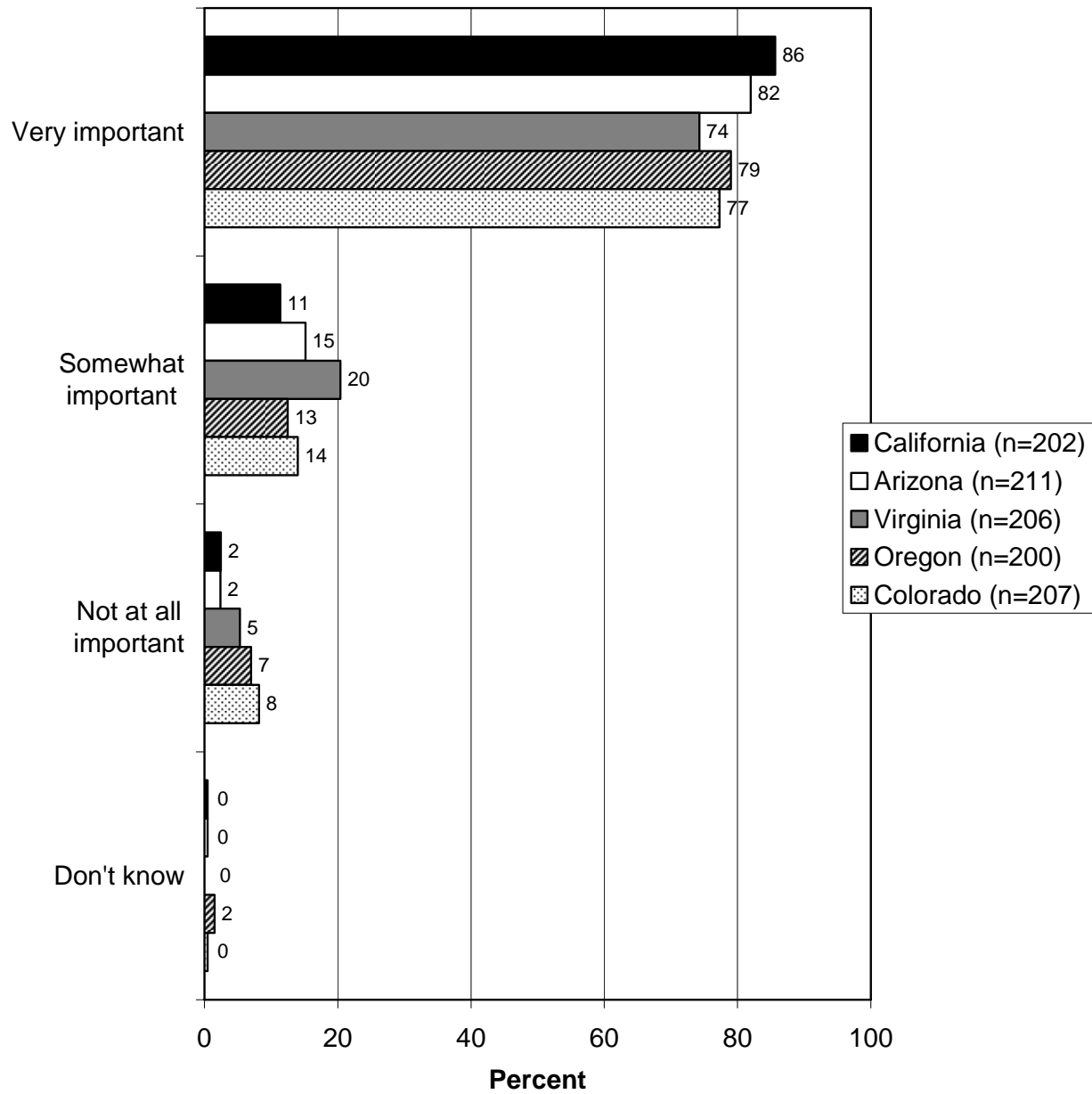
Q20. About how many days per year do you shoot on federal lands?



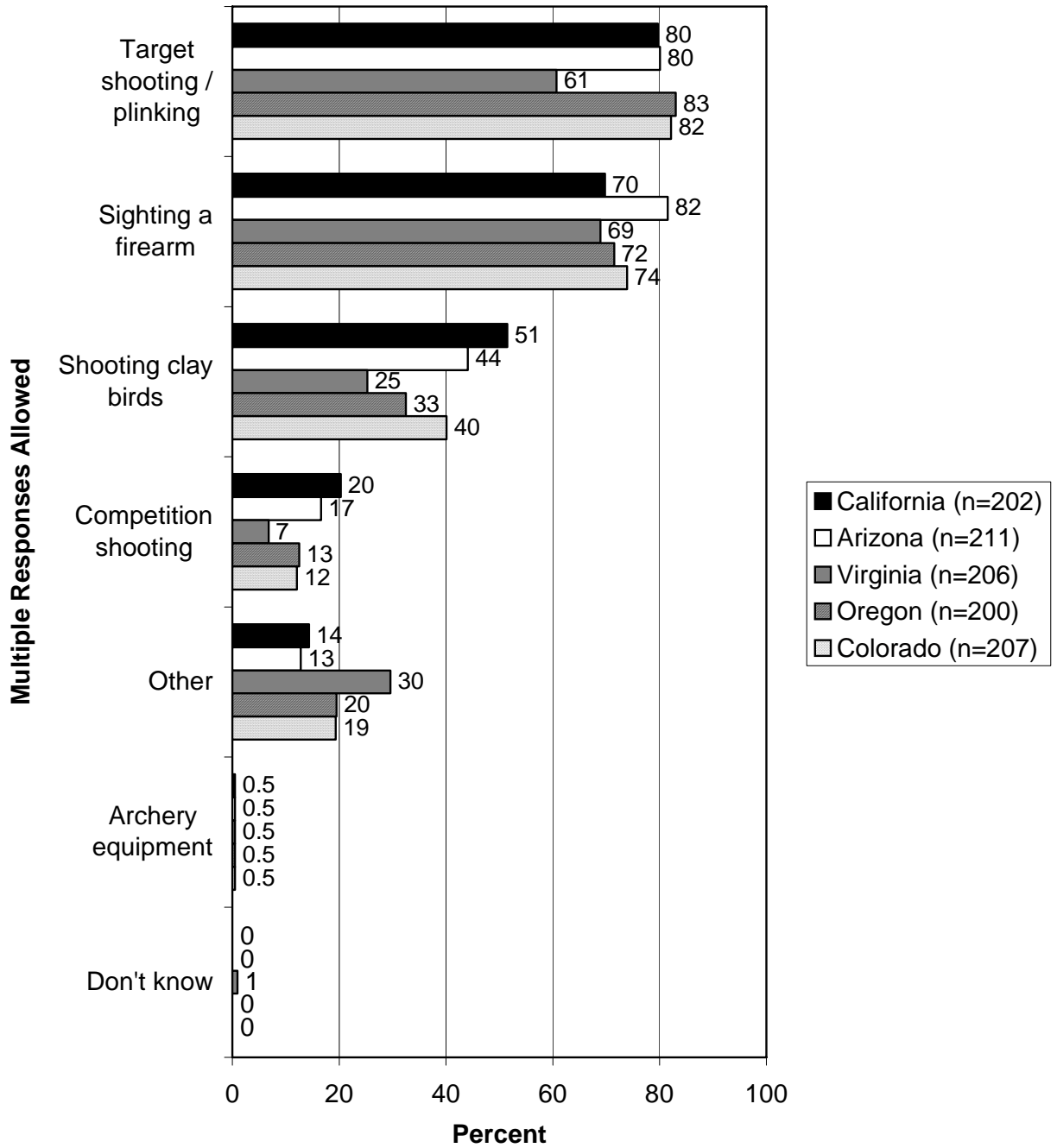
Q22. Over the past 2 years, would you say the number of days you have gone shooting on federal lands has increased, decreased, or stayed about the same?



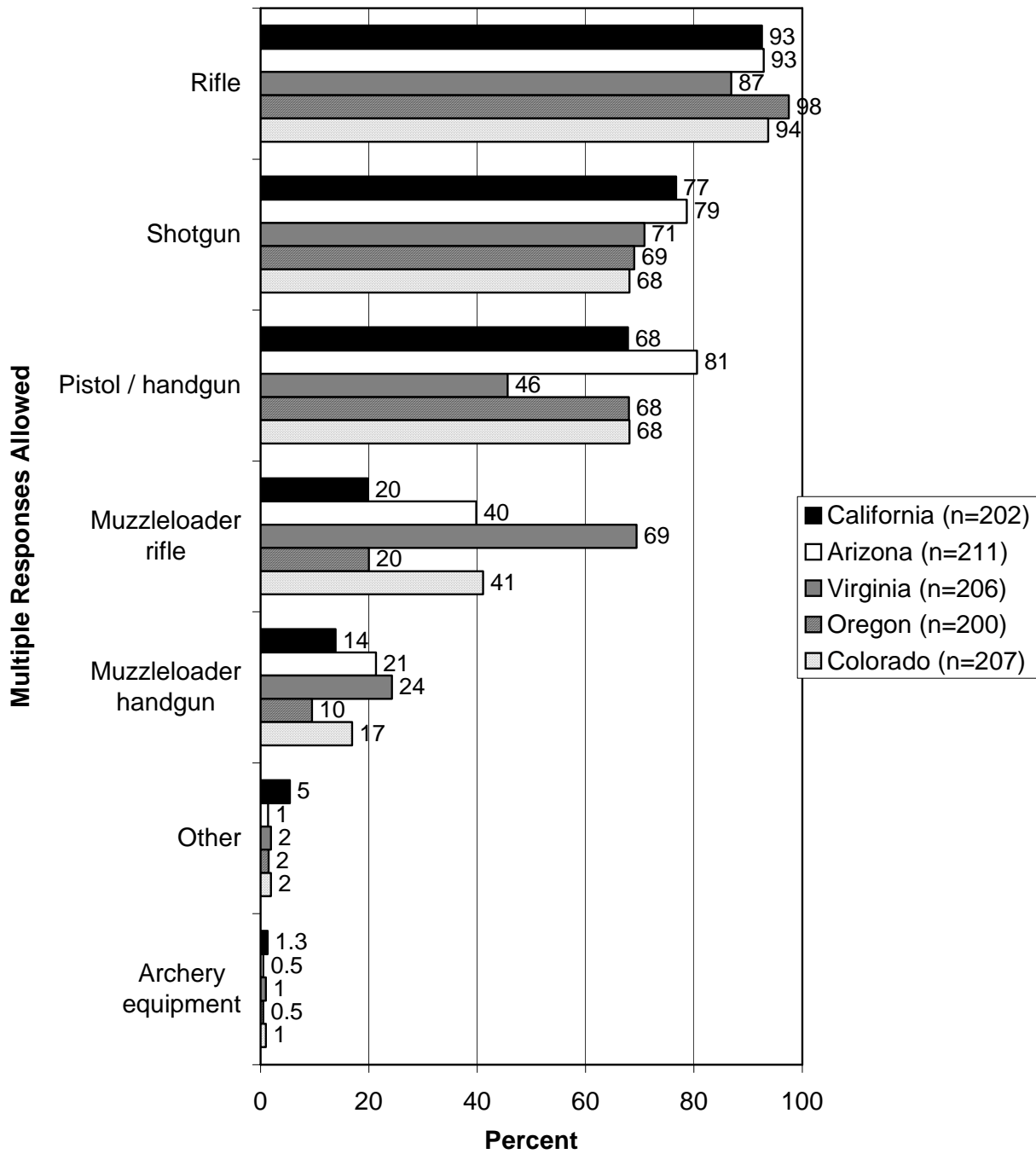
Q23. How important are recreational shooting areas and ranges on federal lands to your shooting participation? Would you say they are very important, somewhat important, or not at all important?



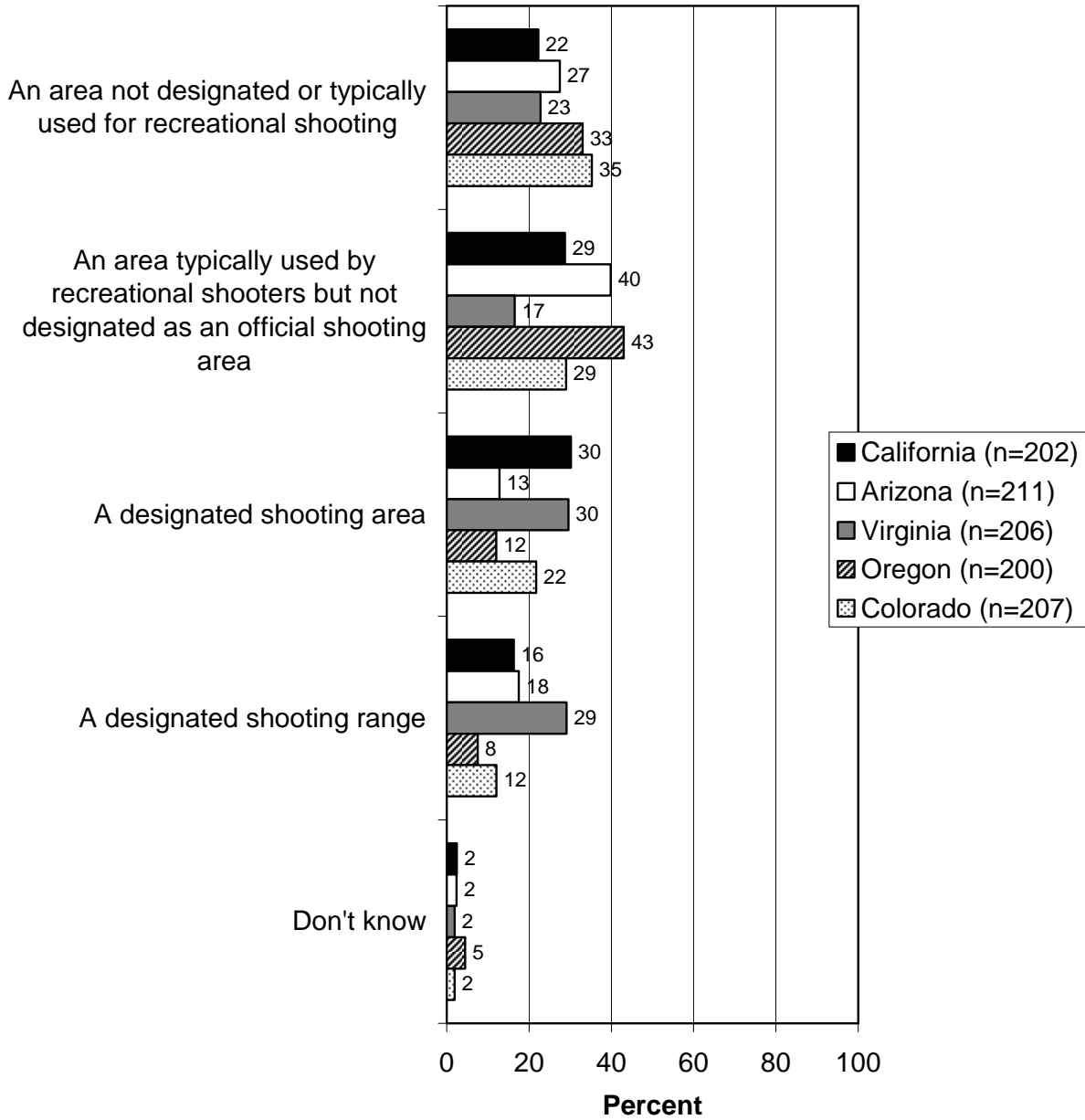
Q26. Which of the following types of shooting activities do you participate in on federal lands?



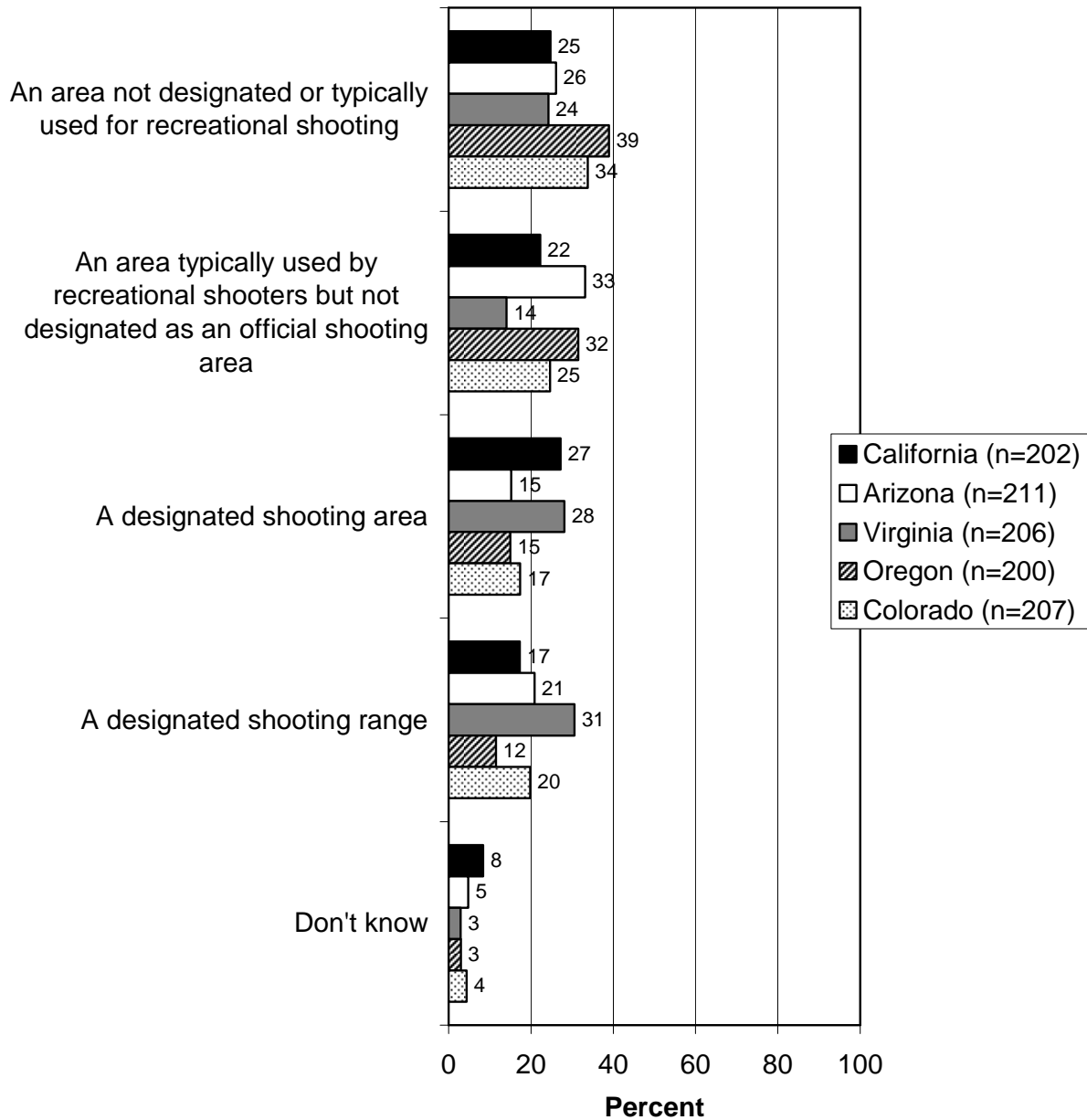
Q30. Which of the following types of firearms do you use when shooting on federal lands?



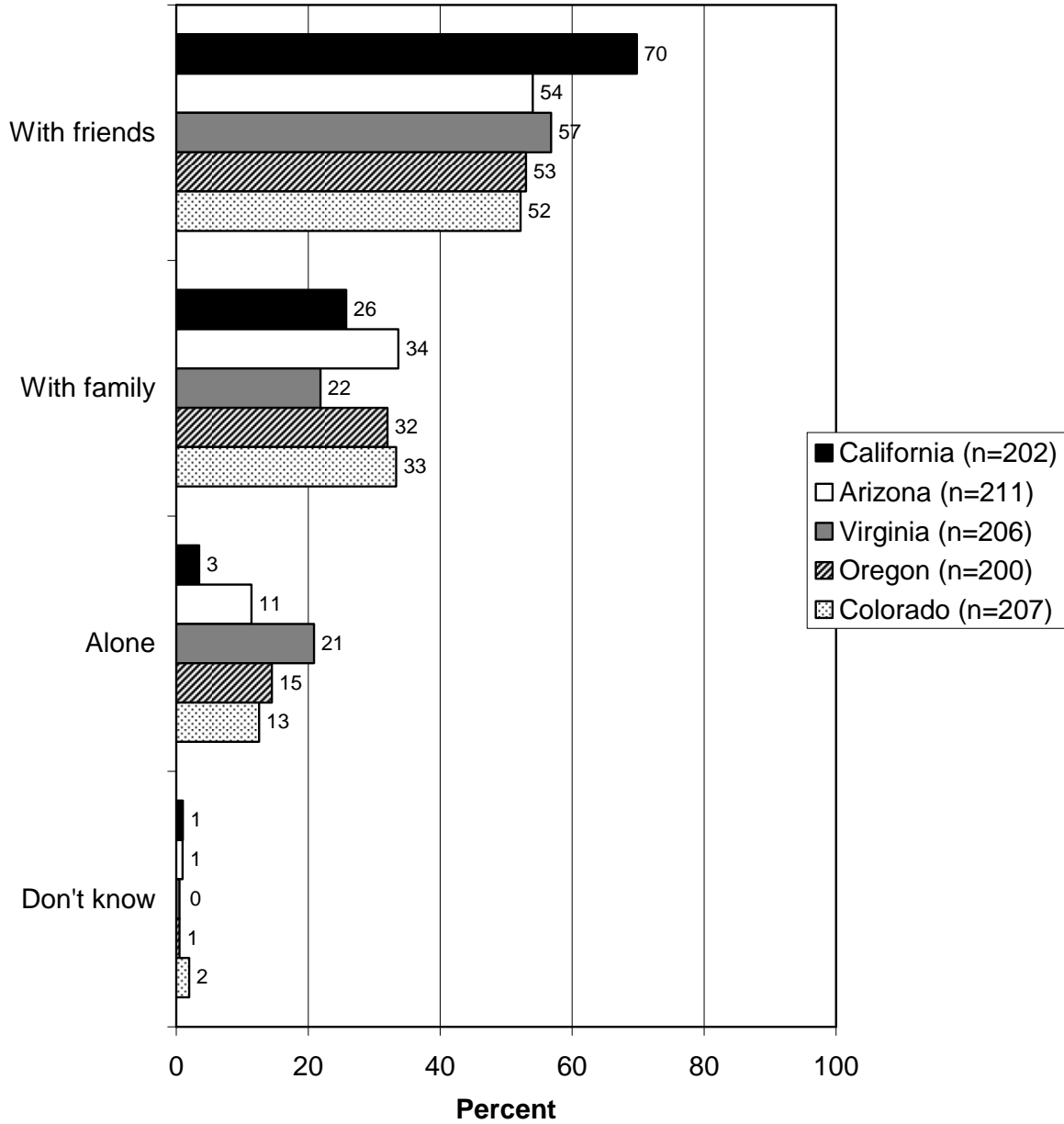
Q32. When shooting on federal lands, do you mostly shoot in an area not designated or typically used for recreational shooting, in an area typically used by recreational shooters but not designated as an official shooting area, in a designated shooting area, or at a designated shooting range?



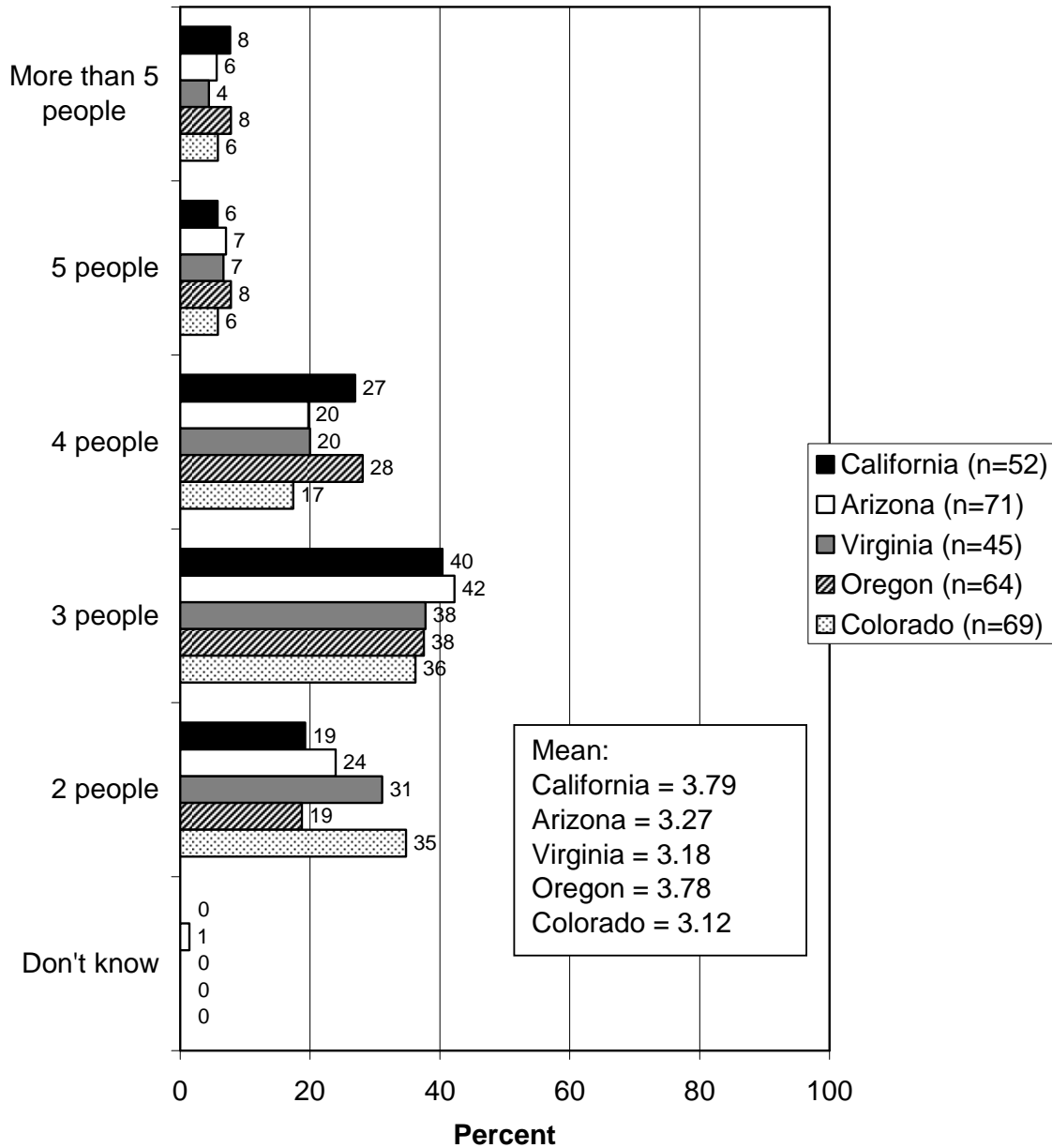
Q33. When shooting on federal lands, do you prefer to shoot in an area not designated or typically used for recreational shooting, in an area typically used by recreational shooters but not designated as an official shooting area, in a designated shooting area, or at a designated shooting range?



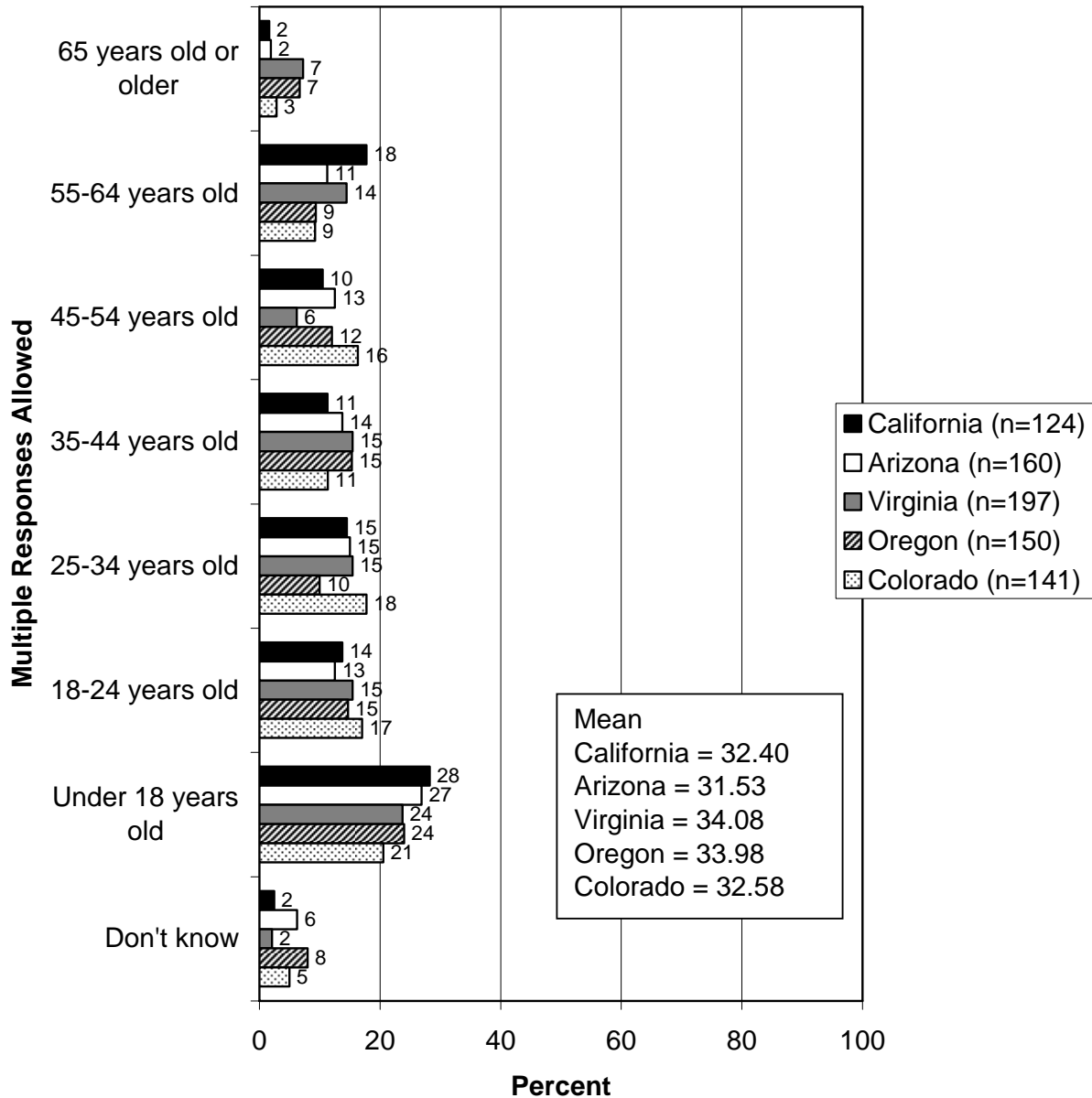
Q34. When shooting on federal lands, do you typically shoot alone, shoot with friends, or shoot with family?



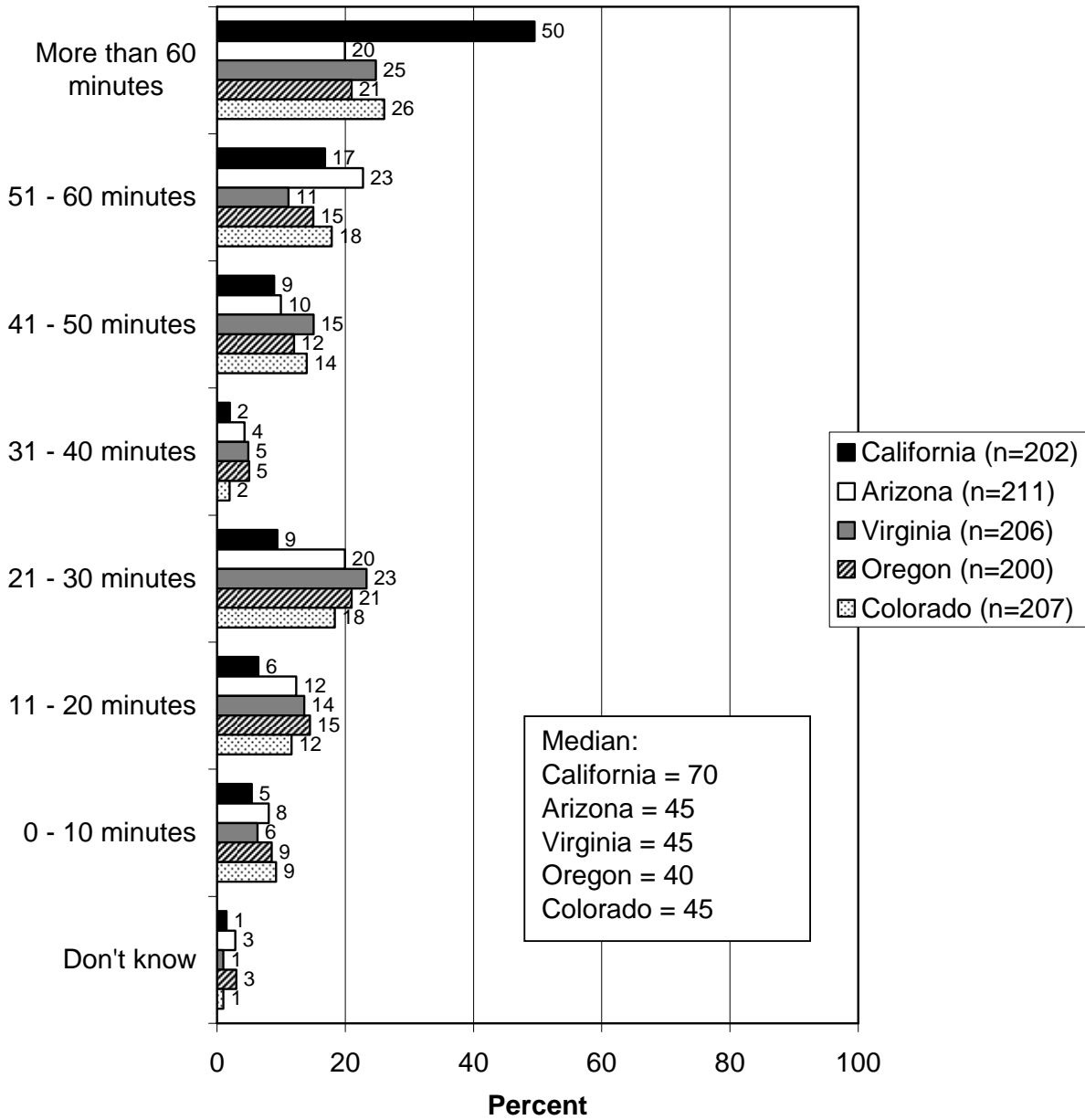
Q35. Including yourself, how many are typically in your party when you shoot with family on federal lands? (Asked of those who typically shoot with family when shooting on federal lands.)



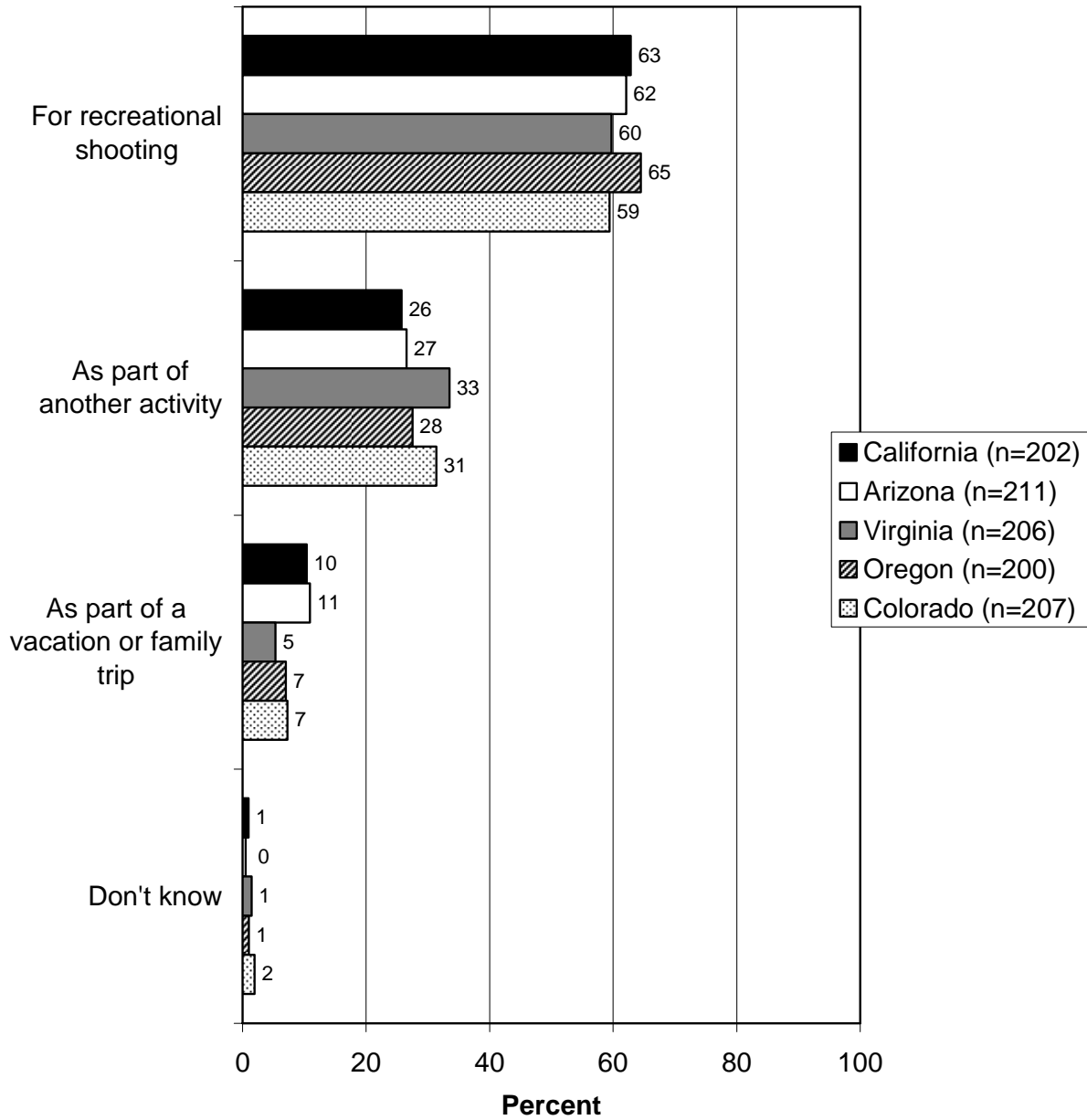
Q36-40. What are the ages of the family members who shoot on federal lands with you? (Asked of those who typically shoot with family when shooting on federal lands.)



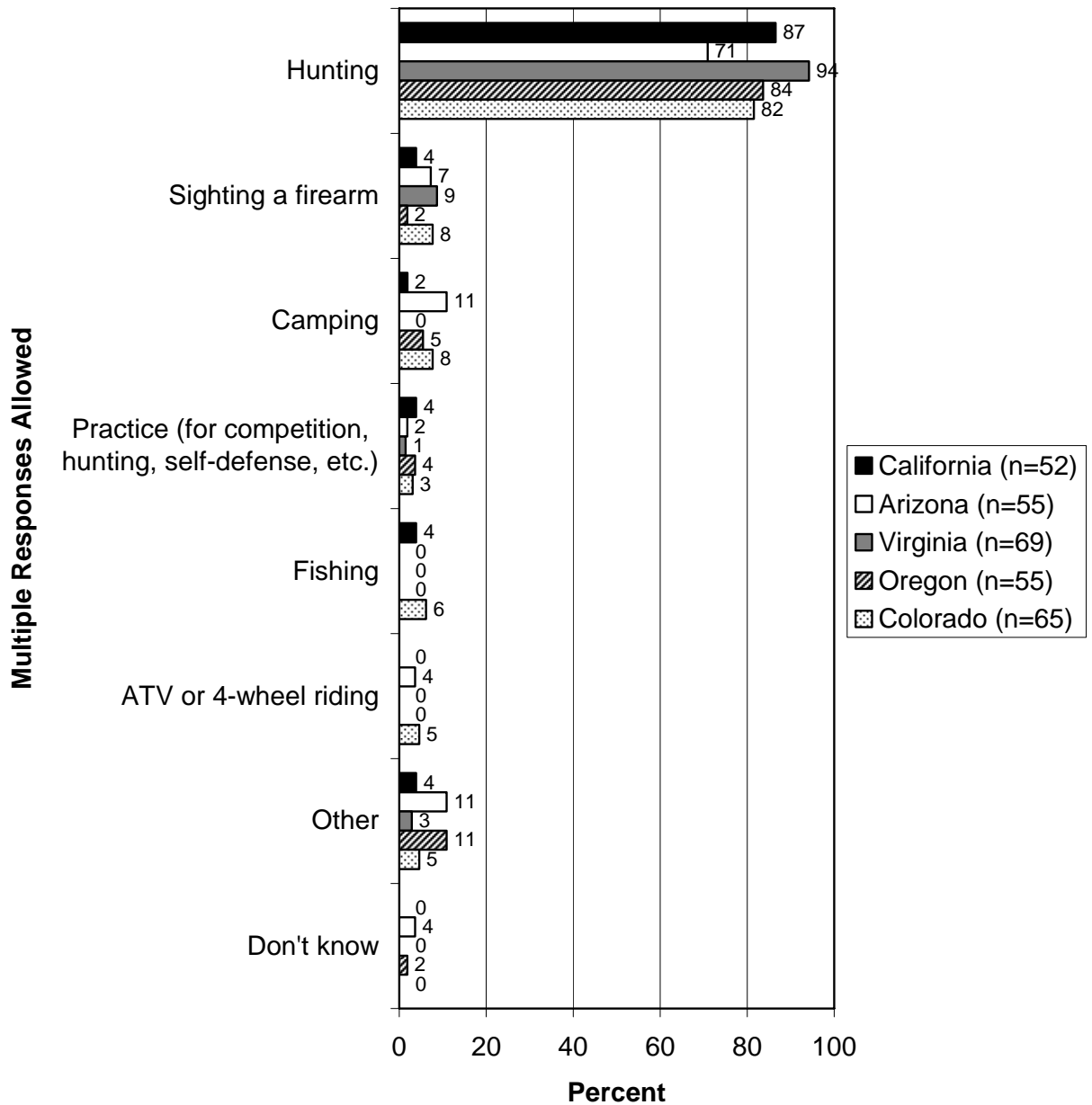
Q41. How long, in terms of minutes, do you usually travel one-way on the road to shoot on federal lands?



Q44. When you shoot on federal lands, do you usually do so for the primary purpose of recreational shooting, as part of another activity, or as part of a vacation or family trip?



Q45. What activity are you usually participating in when you shoot on federal lands?



SATISFACTION WITH FEDERAL LANDS AND PREFERENCES FOR VARIOUS AMENITIES

- Virtually all recreational shooters (88-93%) are satisfied with their shooting experiences on federal lands, and substantial percentages are *very* satisfied: (50-67% of all shooters).
- A majority of recreational shooters in each state (ranging from 53-63%) agree with the statement: “Unsafe shooting behavior, irresponsible behavior, environmental damage, property damage, shooting debris, and litter are currently affecting the quality of your shooting experiences on federal lands.” At the same time, however, notable percentages (35-43% of all recreational shooters) disagree that the aforementioned factors currently affect the quality of their shooting experiences on federal lands.
- Throughout the five states, there is substantial agreement (71-80% of all recreational shooters, with most *strongly* agreeing) with the statement: “Shooting debris and other litter at recreational shooting areas and ranges on federal lands leads to additional irresponsible and unsafe behavior.”
- Likewise, substantial majorities in the states (76-86% of all recreational shooters) are in agreement with the statement: “Unsafe shooting behavior, irresponsible behavior, environmental damage, property damage, shooting debris, and litter lead to the closure of areas and ranges to recreational shooting on federal lands.” Again, most of those who agree with the statement agree *strongly*.
- The five states exhibit some notable variation in their responses to the statement: “It is the responsibility of the federal agencies that own the land to provide law enforcement at the recreational shooting areas and ranges.” Majorities of recreational shooters in California (51%), Arizona (66%), and Virginia (72%) agree

that federal agencies should provide law enforcement at shooting areas and ranges, although more shooters in these states agree *moderately* with the statement than do *strongly*.

- The survey listed eight amenities or features of shooting areas, asking respondents to indicate if each was very important, somewhat important, or not at all important as an amenity or change he/she would like to see at sites on federal lands. This examination first looks at all amenities or features relative to each other in each state, then the report discusses each amenity/feature in turn. The amenities/features asked about are as follows:
 - Backstops/target holders
 - Bathrooms
 - Trash cans
 - Organized clean-up days
 - Supervision by federal agency staff
 - Supervision by shooter and hunter volunteers
 - More law enforcement
 - Better access

- This first examination looks at all amenities/features relative to each other in each state. Overall, trash cans, organized clean-up days, backstops and target holders, and better access appear to be the most desired amenities and changes at shooting areas and sites on federal lands.
 - In California, three amenities/changes stand out relative to the rest as being *very* important: better access (57% say this is a *very* important), trash cans (50%), and organized clean-up days (46%).
 - In Arizona, four amenities/changes markedly stand out above the others as being *very* important: organized clean-up days (57%), trash cans (53%), backstops/target holders (52%), and better access (48%).

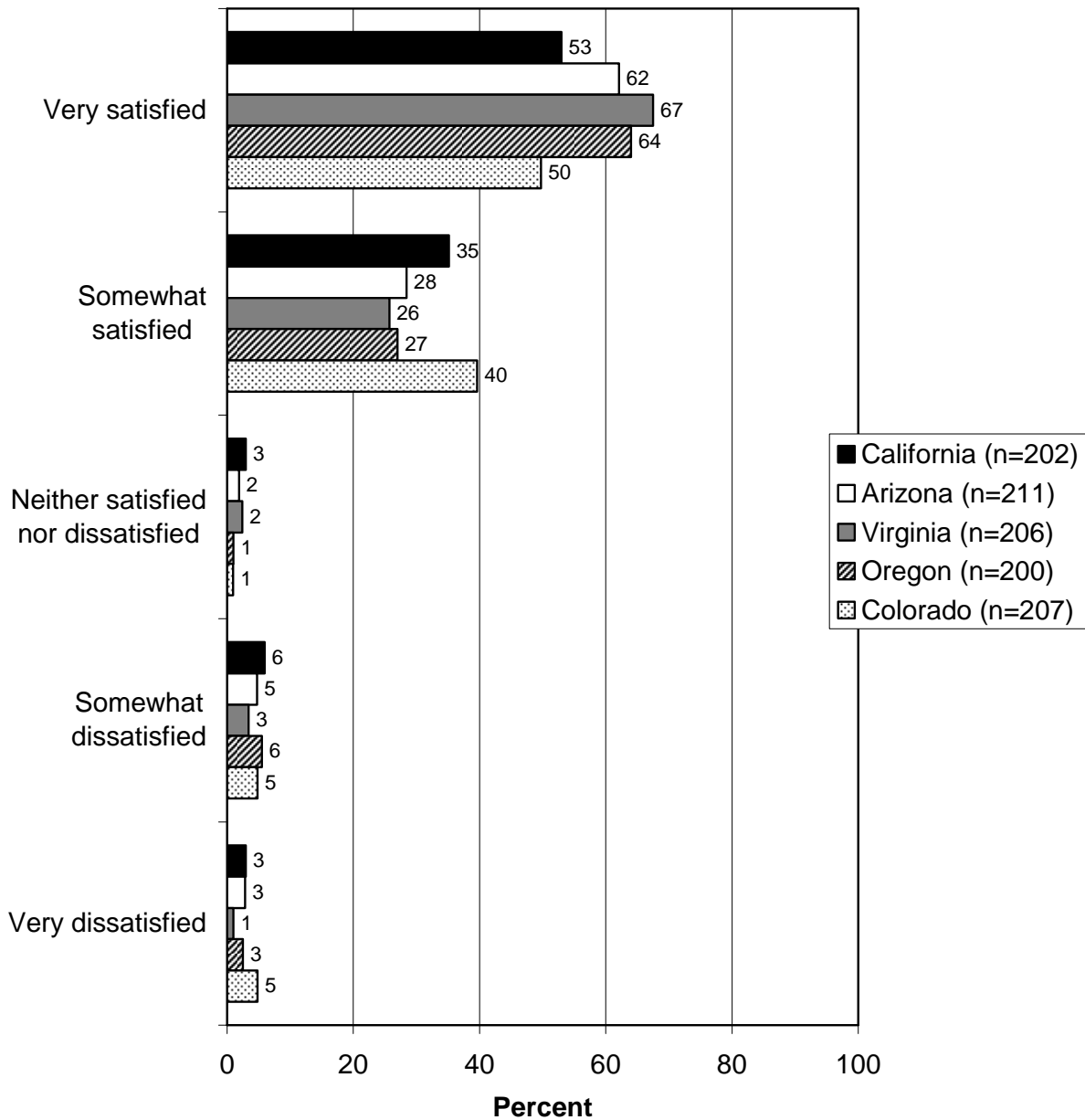
- In Virginia, three amenities/changes stand out relative to the rest as being *very* important: trash cans (66%), backstops/target holders (61%), and organized clean-up days (61%).
- In Oregon, three amenities/changes stand out as being very important: better access (46%) and organized clean-up days (44%), and trash cans (39%).
- In Colorado, four amenities/changes stand out as markedly higher as being *very* important: better access (50%) organized clean-up days (43%), trash cans (40%), and backstops/target holders (39%).
- These results are shown in graphs that follow; they are also tabulated below for the reader's convenience. This tabulation allows a quick comparison among states.

Comparison Among States of Importance Ratings of Amenities/Changes

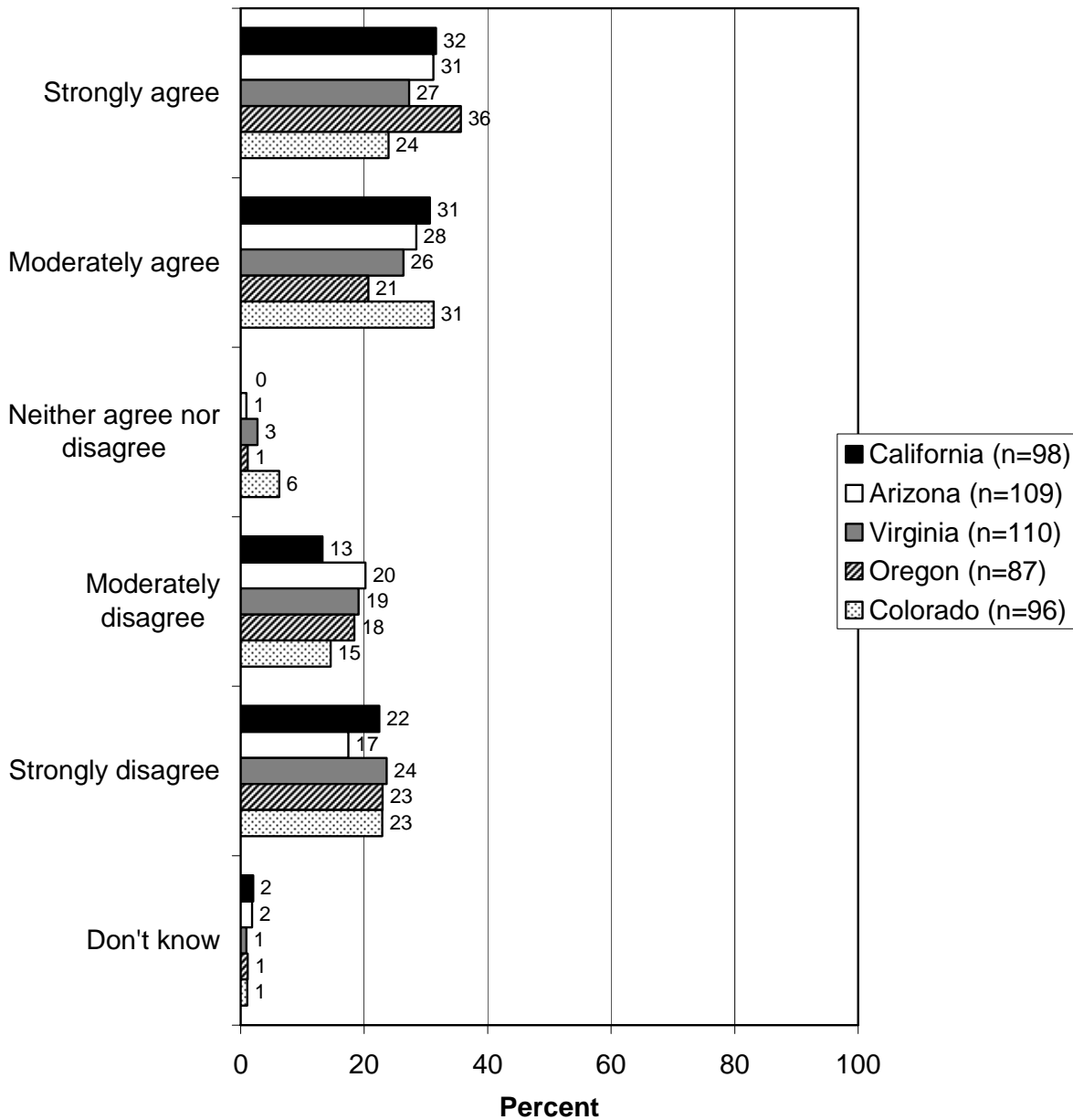
Percent saying each is a <i>very</i> important amenity or change	CA	AZ	VA	OR	CO
50% or more	- Better access - Trash cans	- Organized clean-up days - Trash cans - Backstops / target holders	- Trash cans - Backstops / target holders - Organized clean-up days	NONE	- Better access
40% to 49%	- Organized clean-up days	- Better access	- Better access	- Better access - Organized clean-up days	- Organized clean-up days - Trash cans
30% to 39%	- Backstops / target holders	NONE	- Bathrooms	- Backstops / target holders	- Backstops / target holders
20% to 29%	- Bathrooms	- Bathrooms - Supervision by shooter and hunter volunteers	- Supervision by shooter / hunter volunteers - More law enforcement	NONE	NONE
10% to 19%	- Supervision by shooter and hunter volunteers - More law enforcement - Supervision by federal agency staff	- More law enforcement - Supervision by federal agency staff	- Supervision by federal agency staff	- More law enforcement - Bathrooms - Supervision by shooter and hunter volunteers	- Bathrooms - Supervision by shooter and hunter volunteers - More law enforcement
Less than 10%	NONE	NONE	NONE	- Supervision by federal agency staff	- Supervision by federal agency staff

- This examination looks at marked differences among states in the survey (California, Arizona, Virginia, Oregon, and Colorado) regarding the relative importance of each amenity/change.
- Backstops/target holders: This amenity is more likely to be considered very important in Arizona and Virginia; there is less demand, relative to other states, in Oregon.
 - Bathrooms: Recreational shooters in Virginia are the most likely to consider this very important, while majorities of shooters in Arizona, Oregon, and Colorado consider bathrooms not at all important.
 - Trash cans: Though this amenity is considered important in all states, Oregon and Colorado recreational shooters appear the most likely to consider trash cans as not at all important.
 - Organized clean-up days: Large majorities in all five states indicate that organized clean-up days are important (with substantial percentages considering them *very* important).
 - Supervision by federal agency staff: Large majorities in all five states indicate that supervision by federal agency staff is *not* at all important (69-78%); the exception is Virginia, with only 54% who say this amenity/change is not at all important.
 - Supervision by shooter and hunter volunteers: Shooters in Virginia are the most likely to consider this important.
 - More law enforcement: A majority of shooters in each state except Virginia consider this to be not at all important.
 - Better access: A majority of shooters in each state say this is important, with most of those describing it as *very* important.

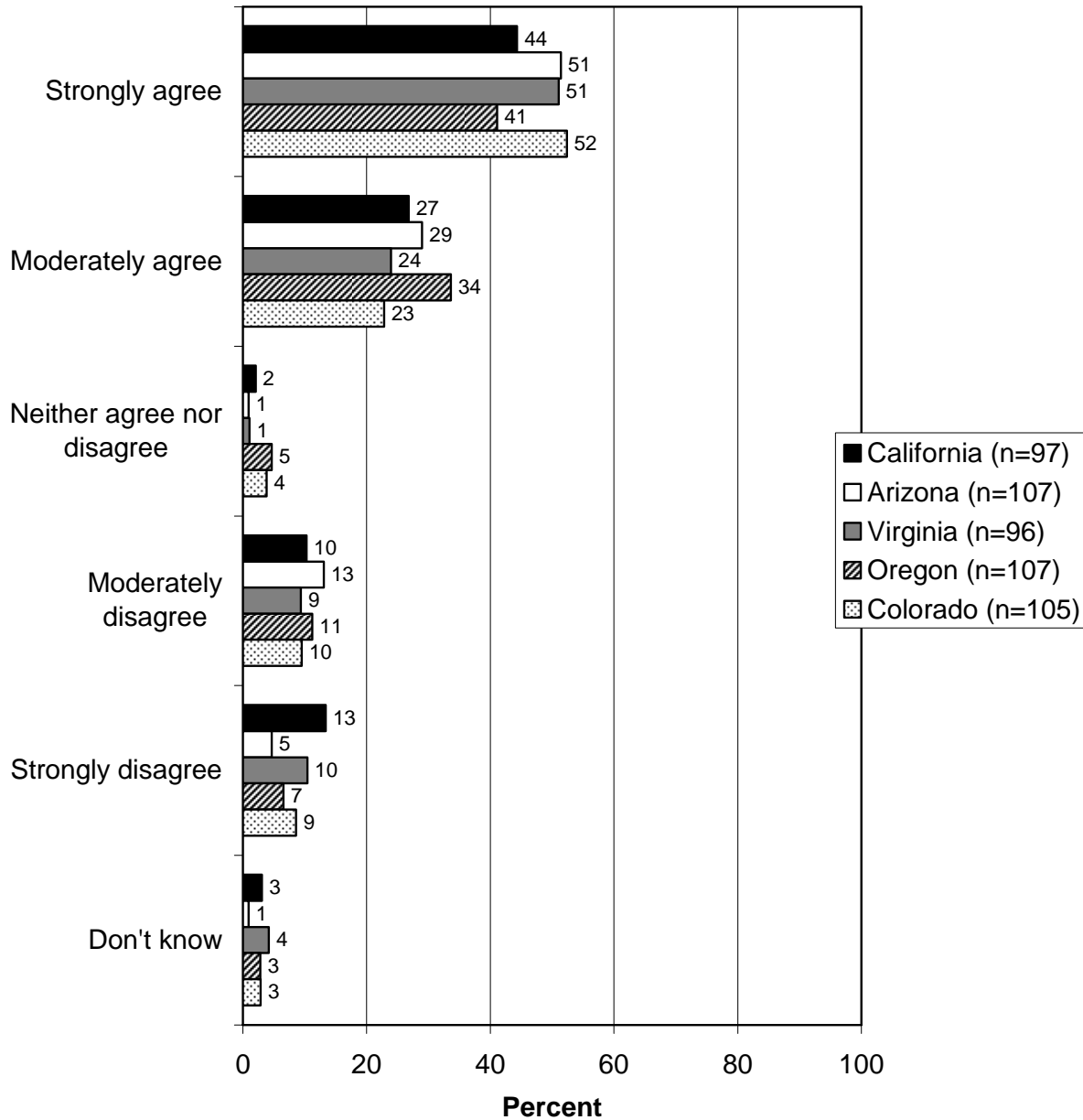
Q56. In general, how satisfied have you been with your shooting experiences on federal lands in the past 2 years?



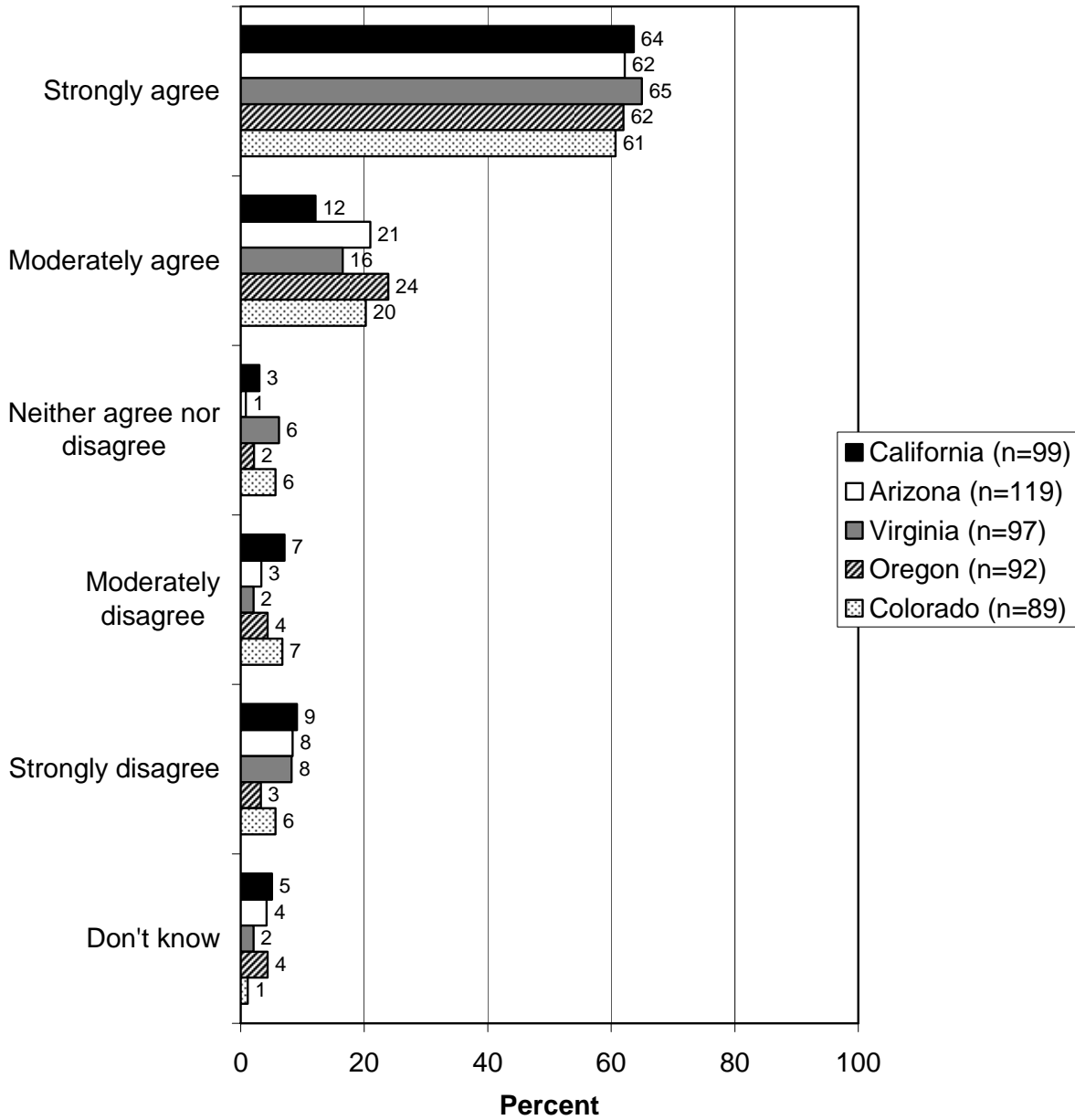
Q159. Unsafe shooting behavior, irresponsible behavior, environmental damage, property damage, shooting debris, and litter are currently affecting the quality of your shooting experience on federal lands.



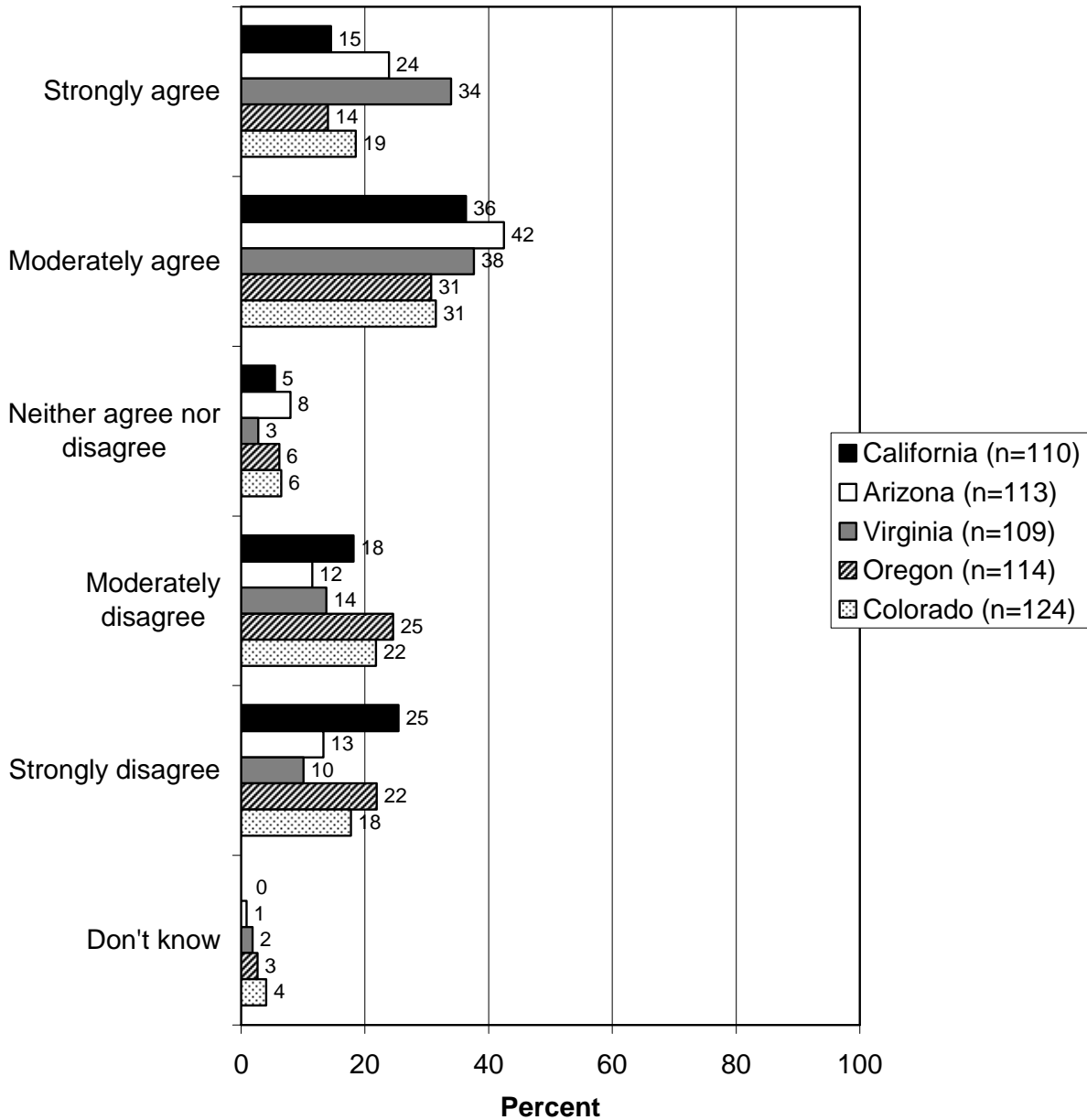
Q160. Shooting debris and other litter at recreational shooting areas and ranges on federal lands leads to additional irresponsible and unsafe behavior.



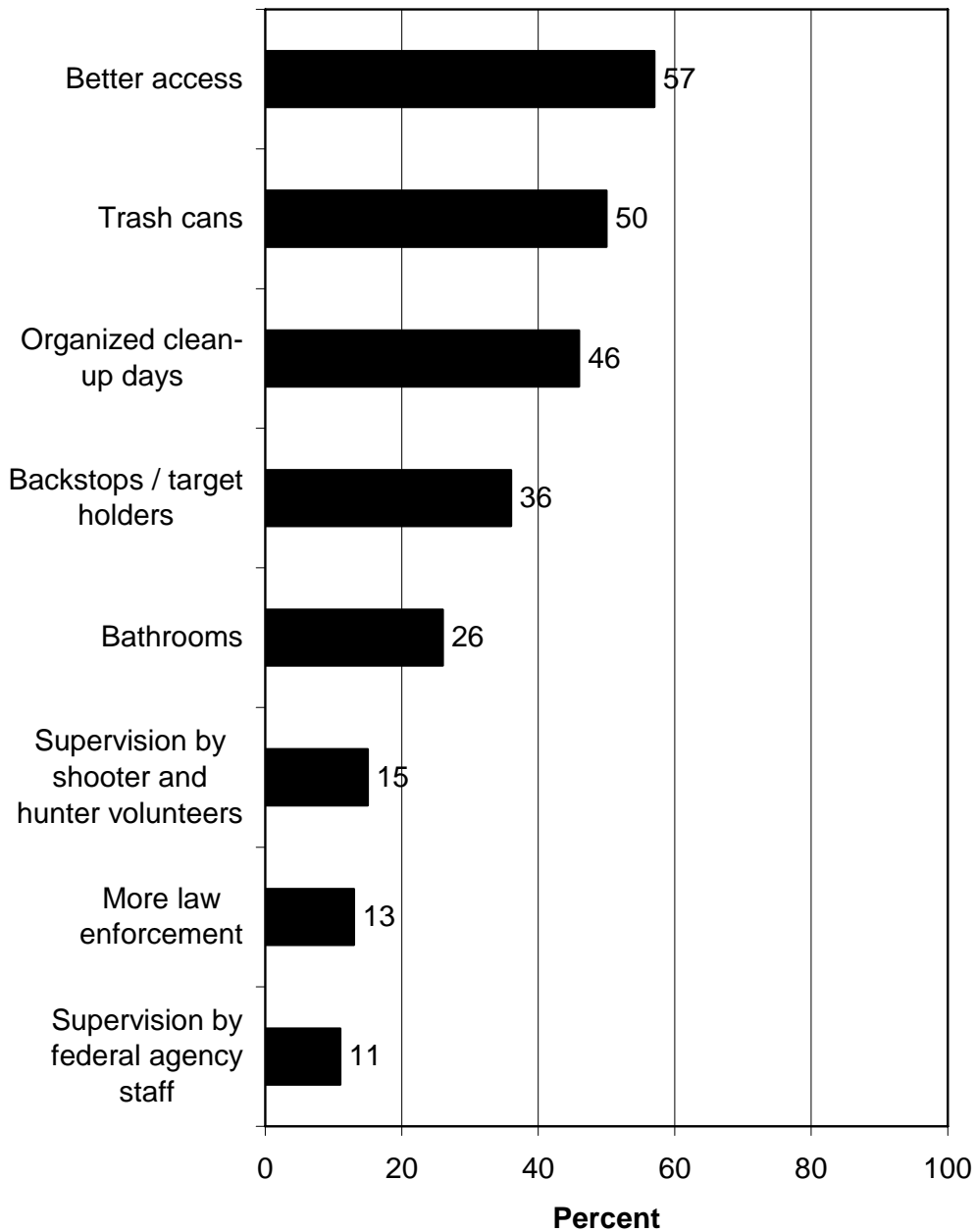
Q161. Unsafe shooting behavior, irresponsible behavior, environmental damage, property damage, shooting debris, and litter lead to the closure of areas and ranges to recreational shooting on federal lands.



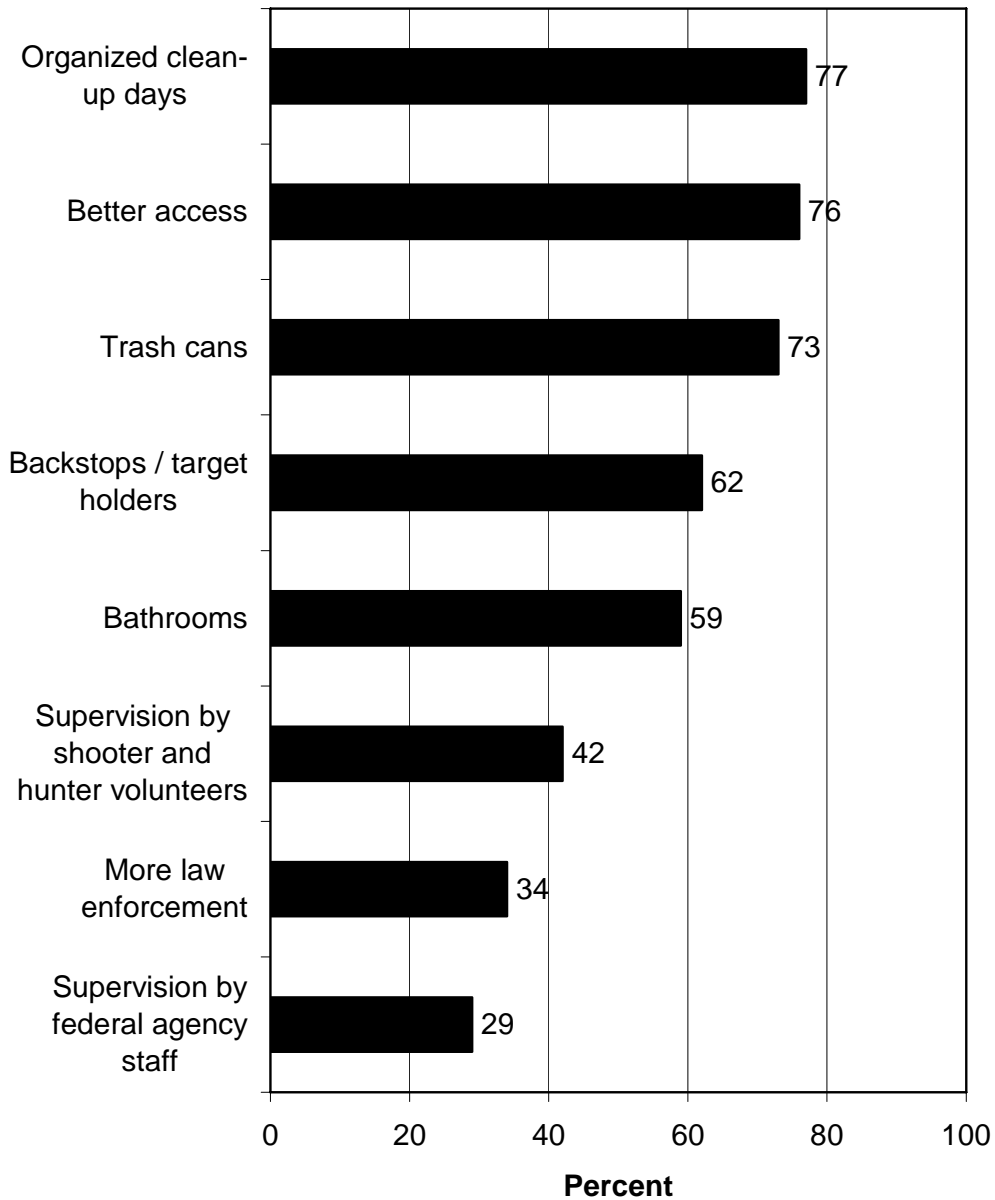
Q162. It is the responsibility of the federal agencies that own the land to provide law enforcement at the recreational shooting areas and ranges.



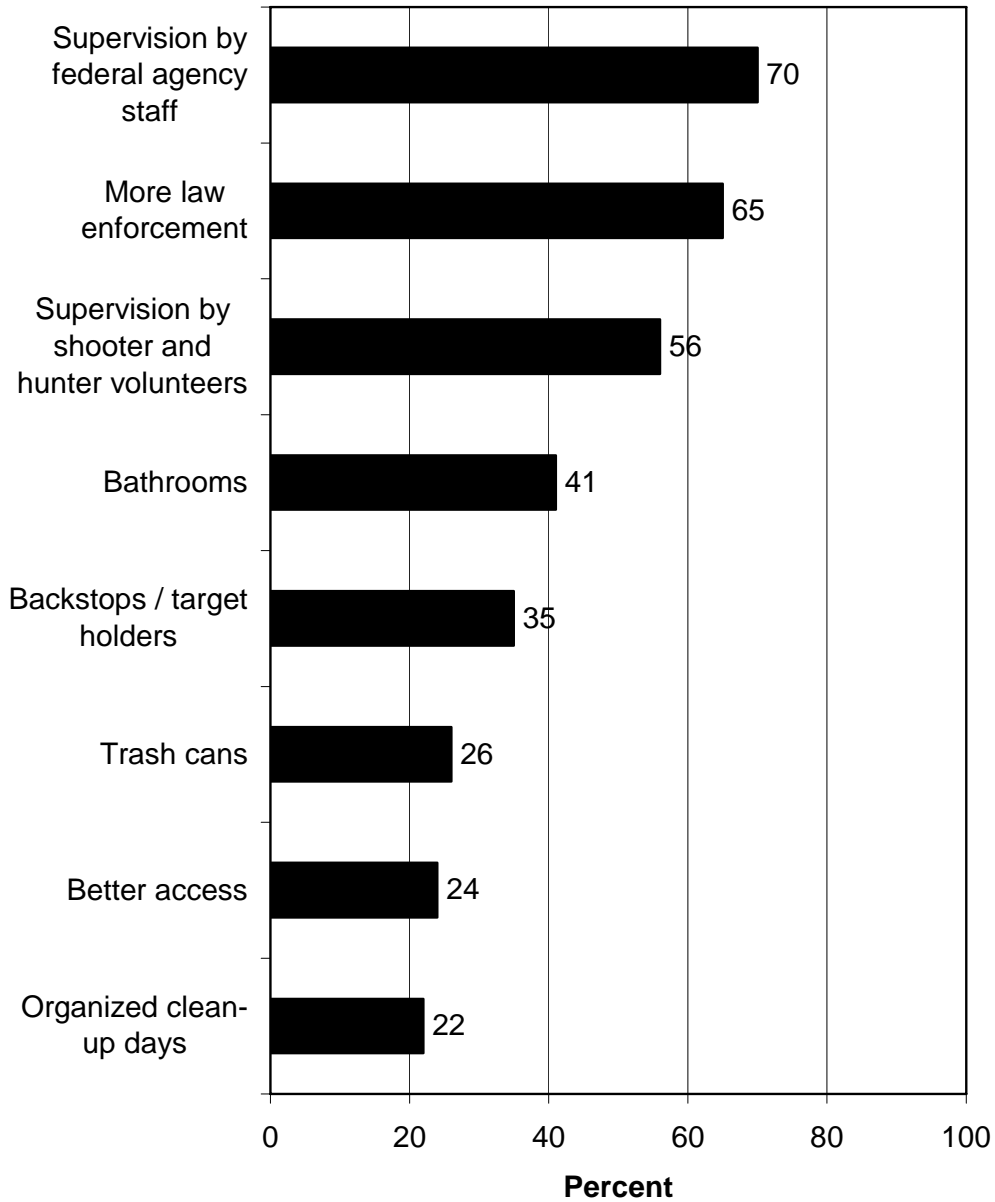
**Percent who indicated that the following items are very important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(California)**



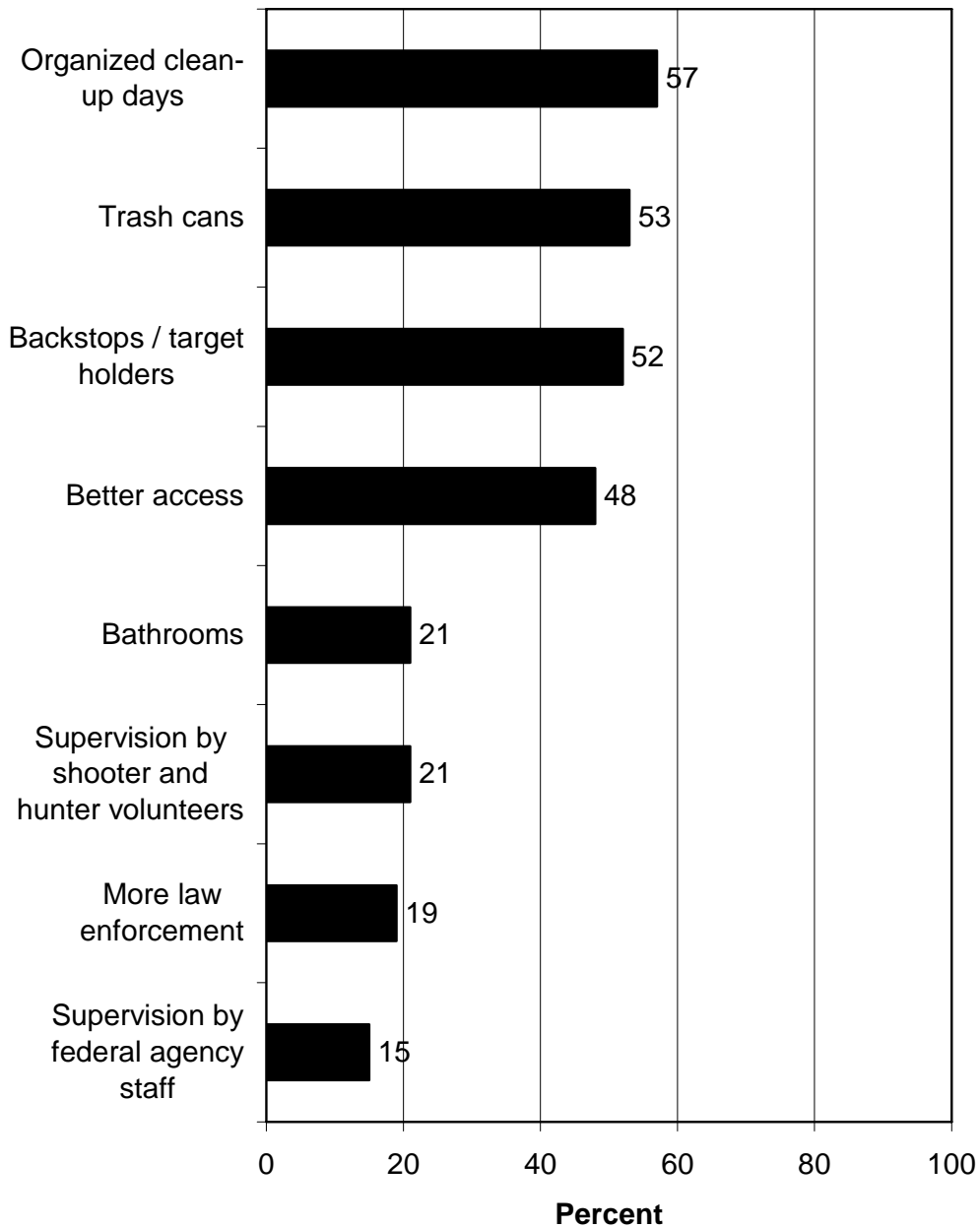
**Percent who indicated that the following items are very or somewhat important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(California)**



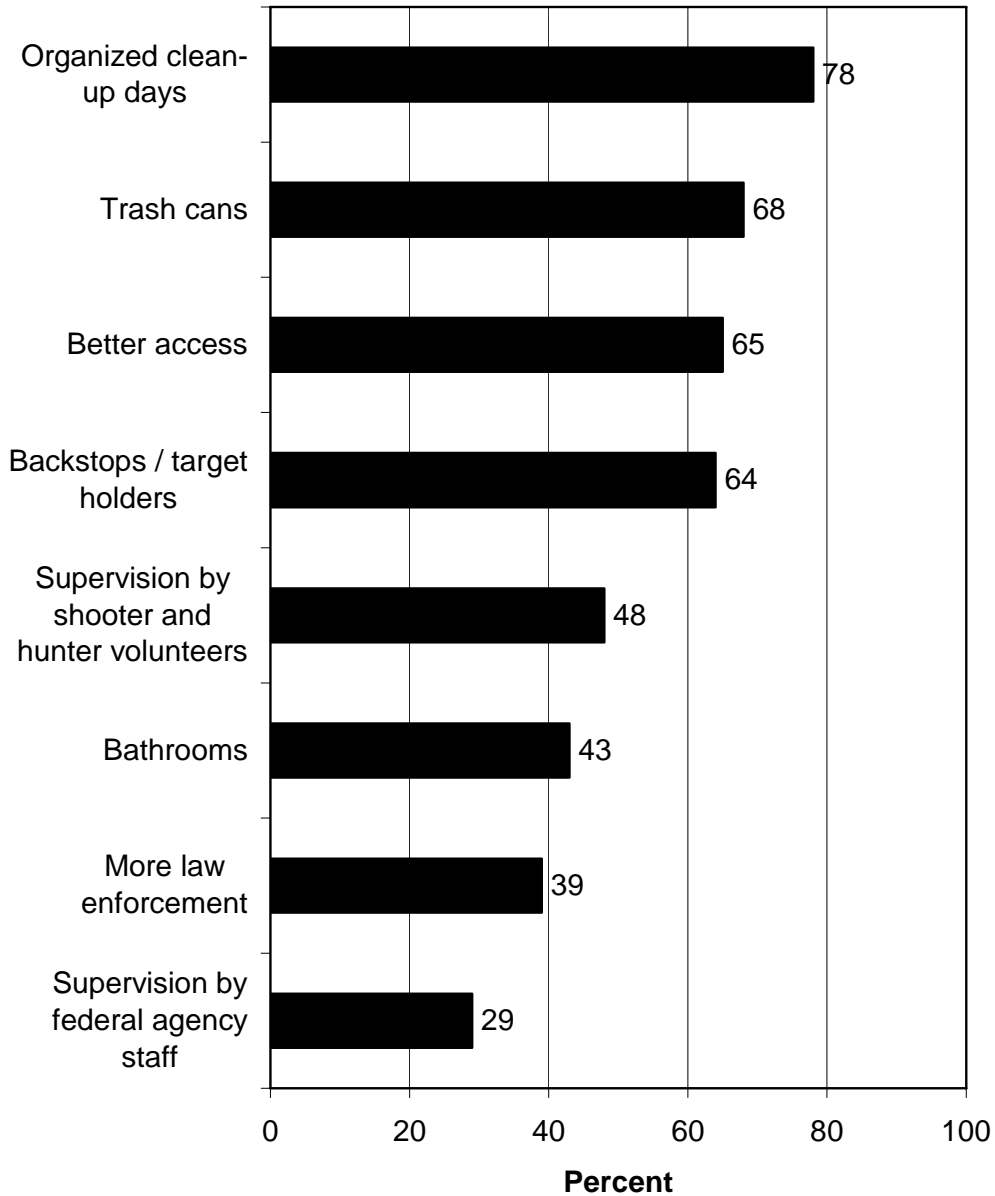
**Percent who indicated that the following items are not at all important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(California)**



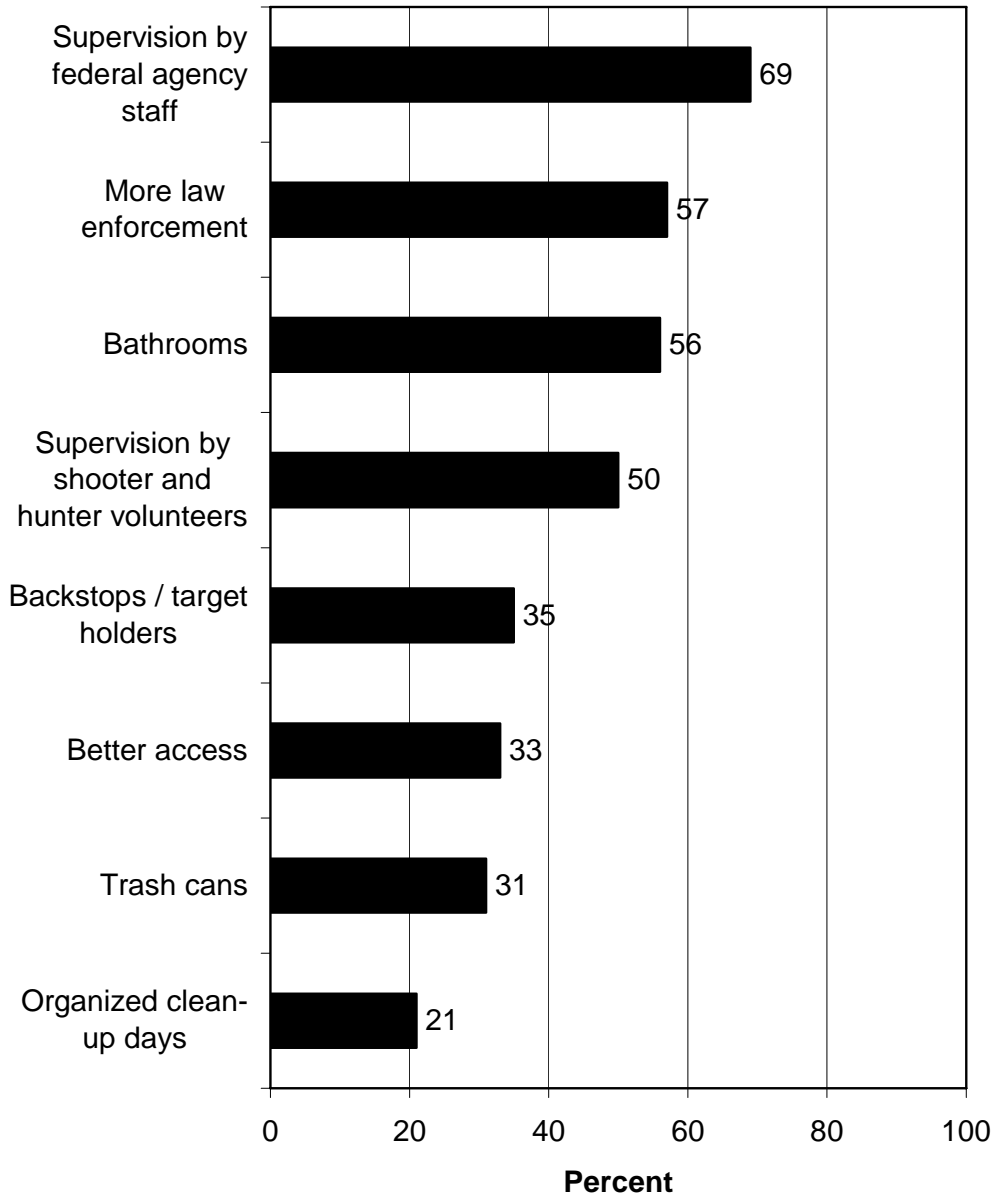
**Percent who indicated that the following items are very important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(Arizona)**



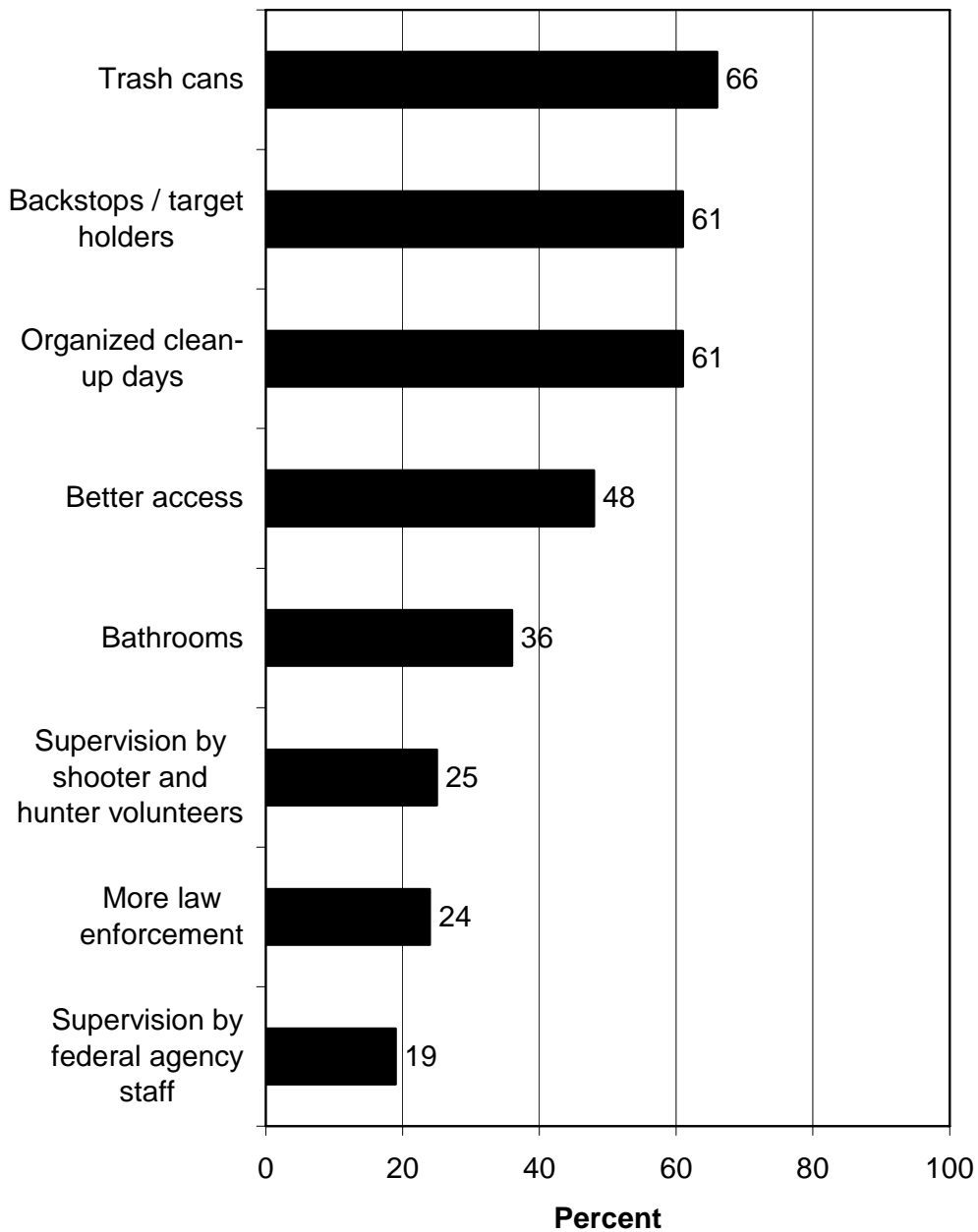
**Percent who indicated that the following items are very or somewhat important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(Arizona)**



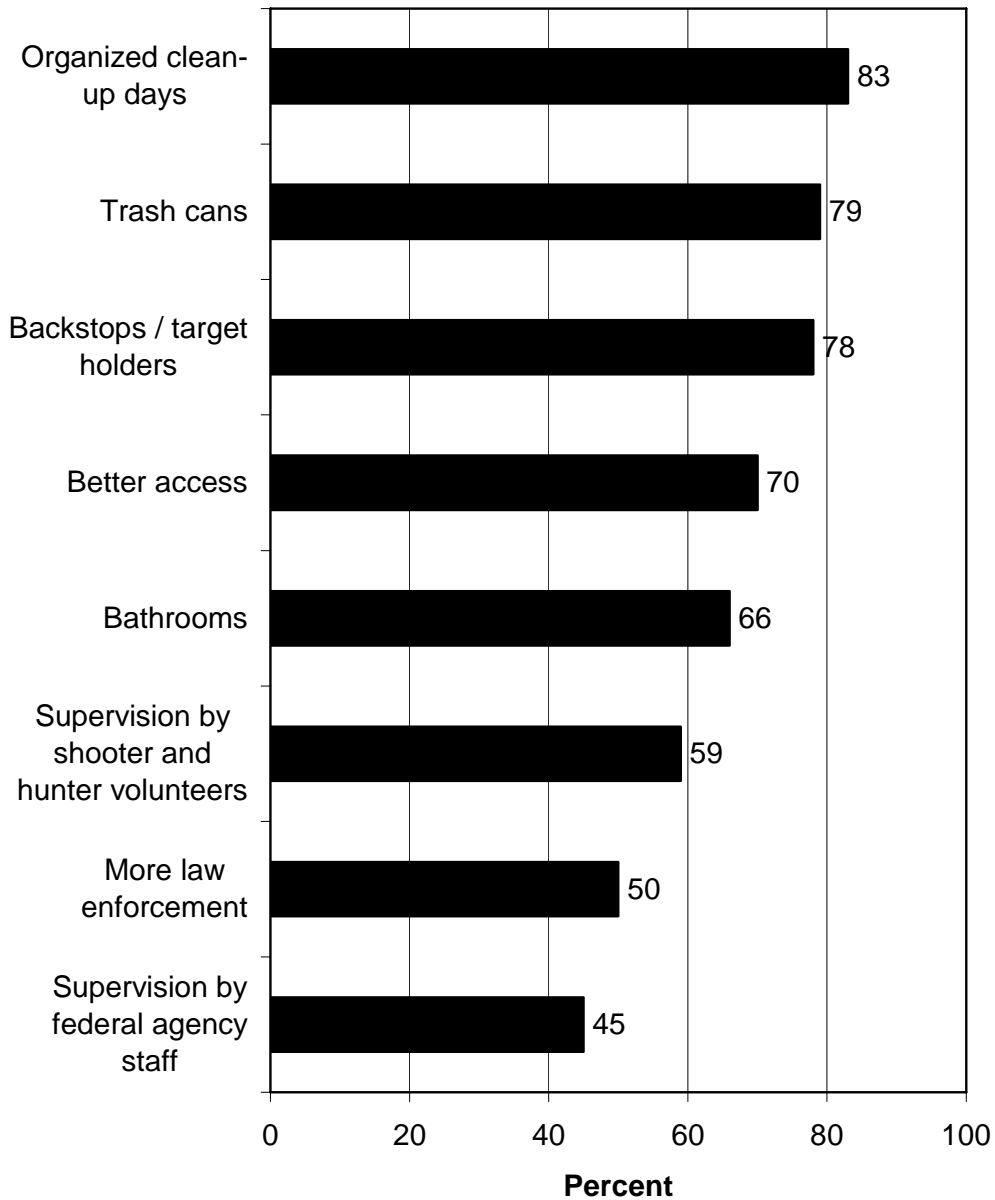
**Percent who indicated that the following items are not at all important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(Arizona)**



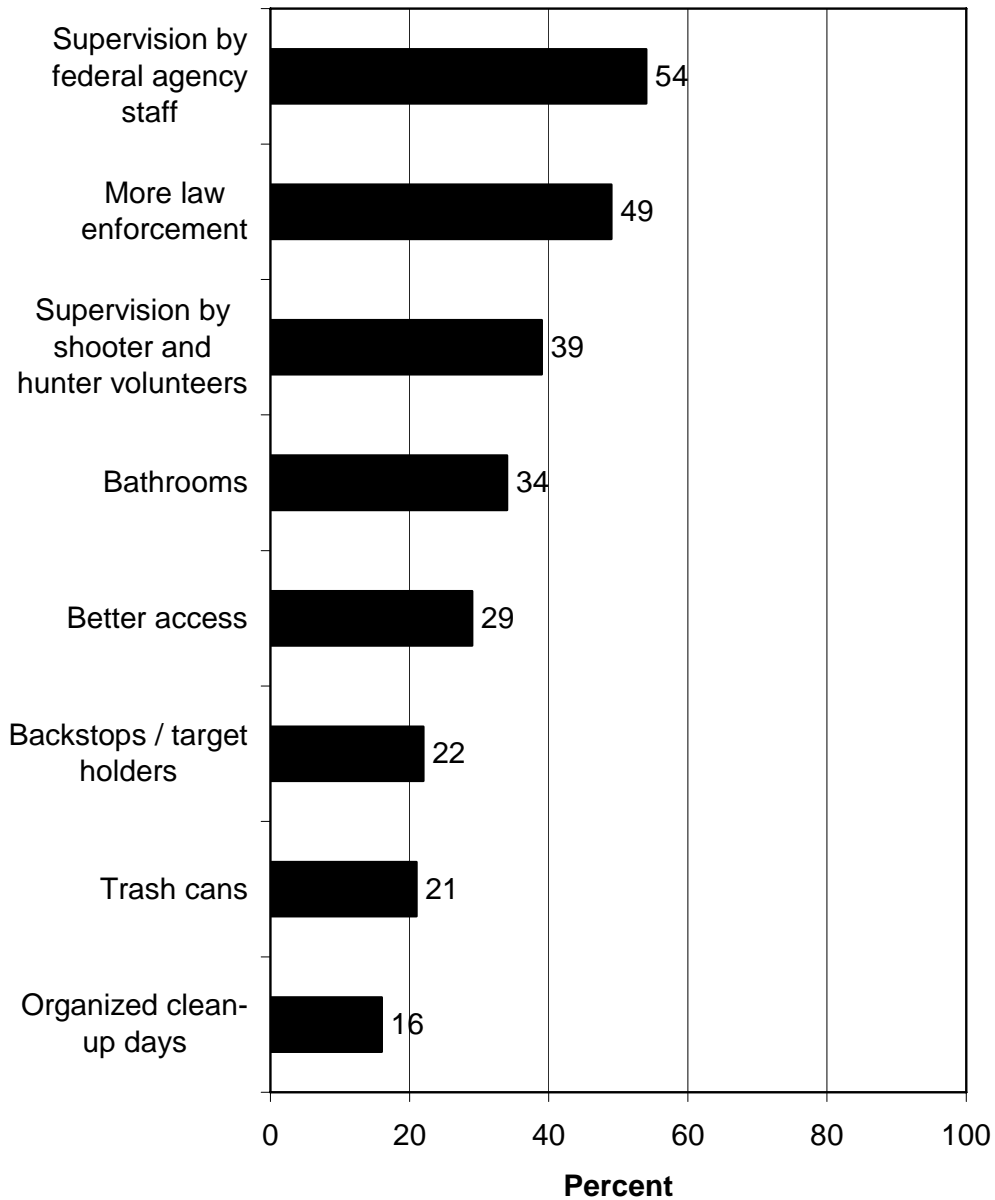
**Percent who indicated that the following items are very important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(Virginia)**



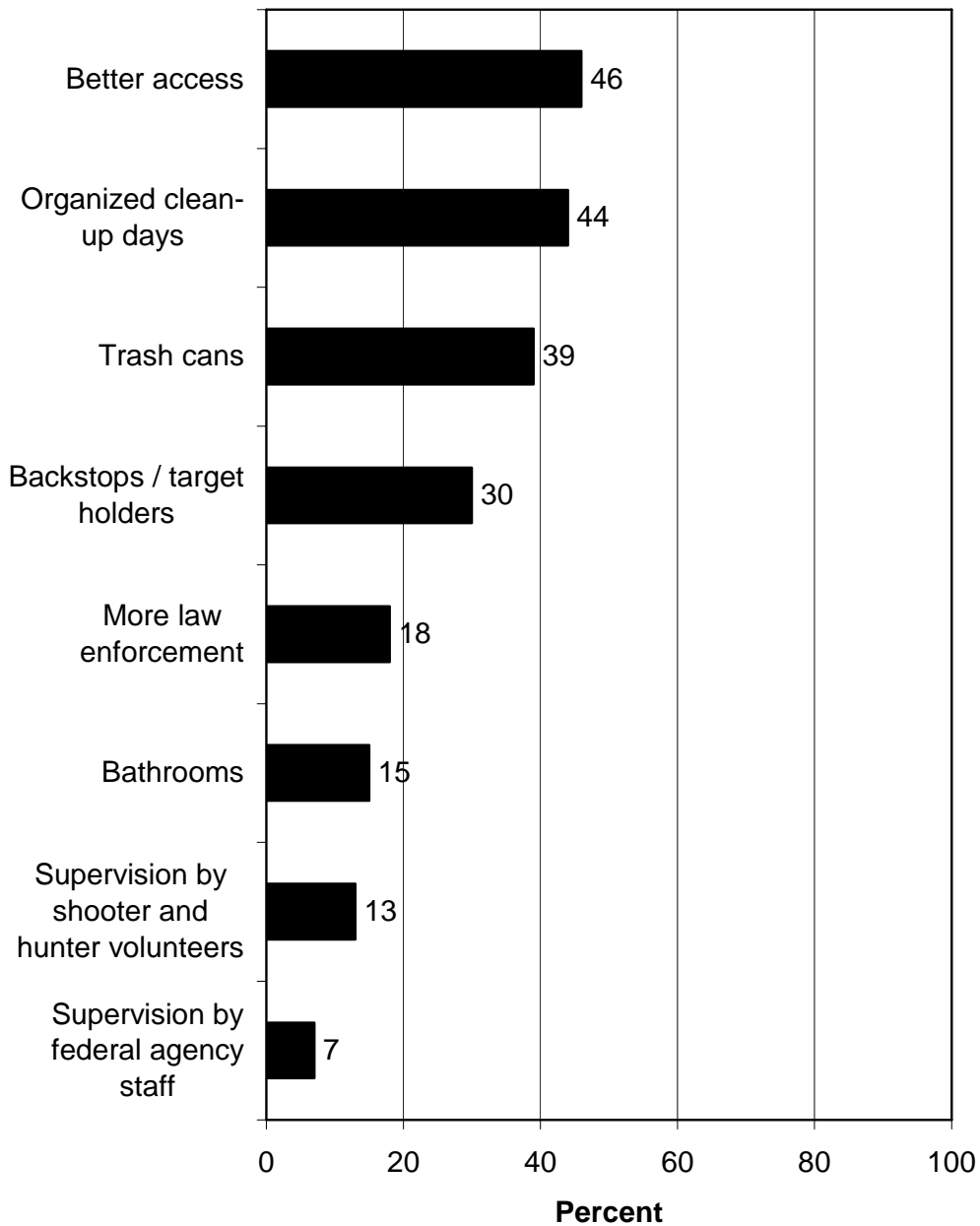
**Percent who indicated that the following items are very or somewhat important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(Virginia)**



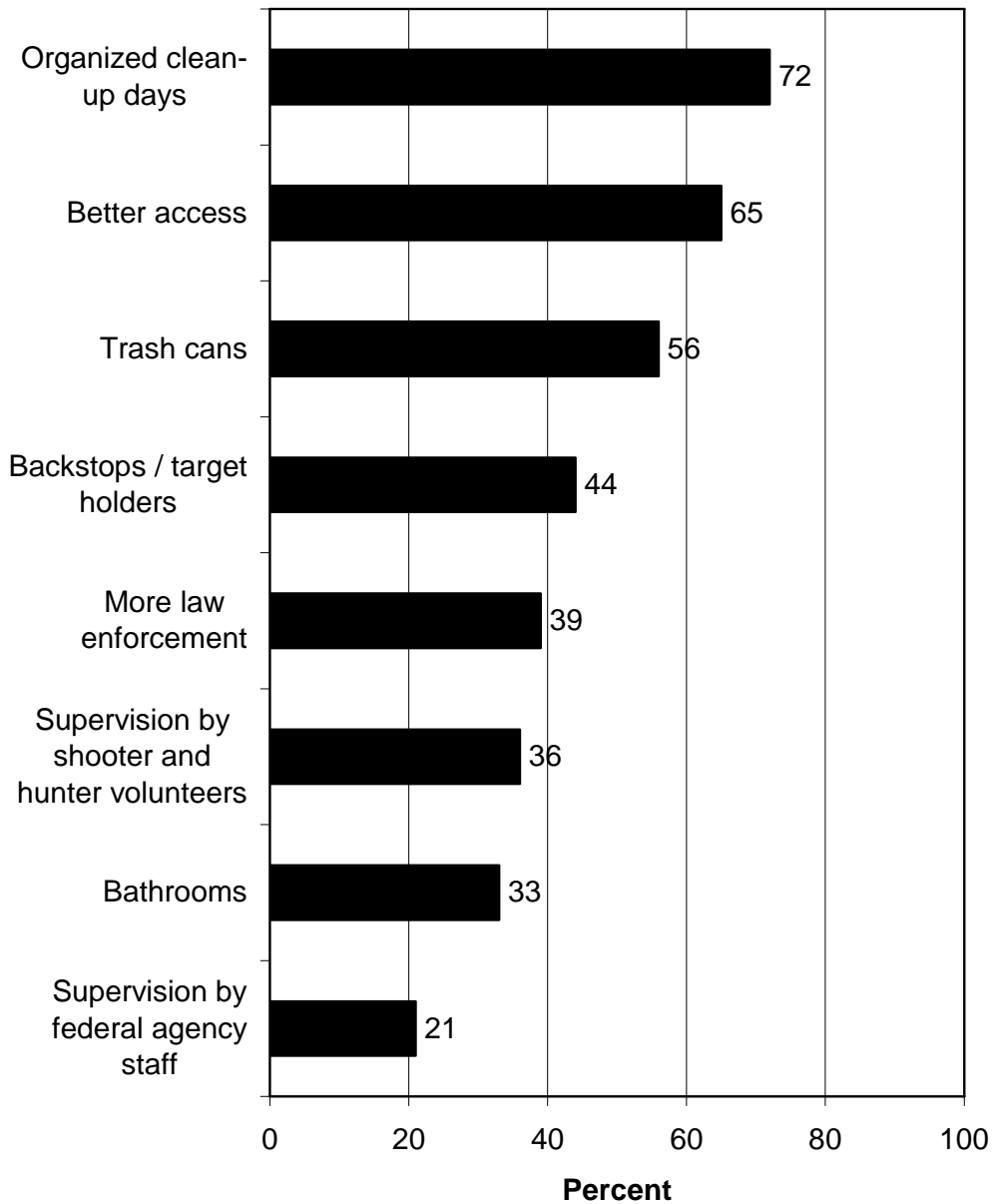
**Percent who indicated that the following items are not at all important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(Virginia)**



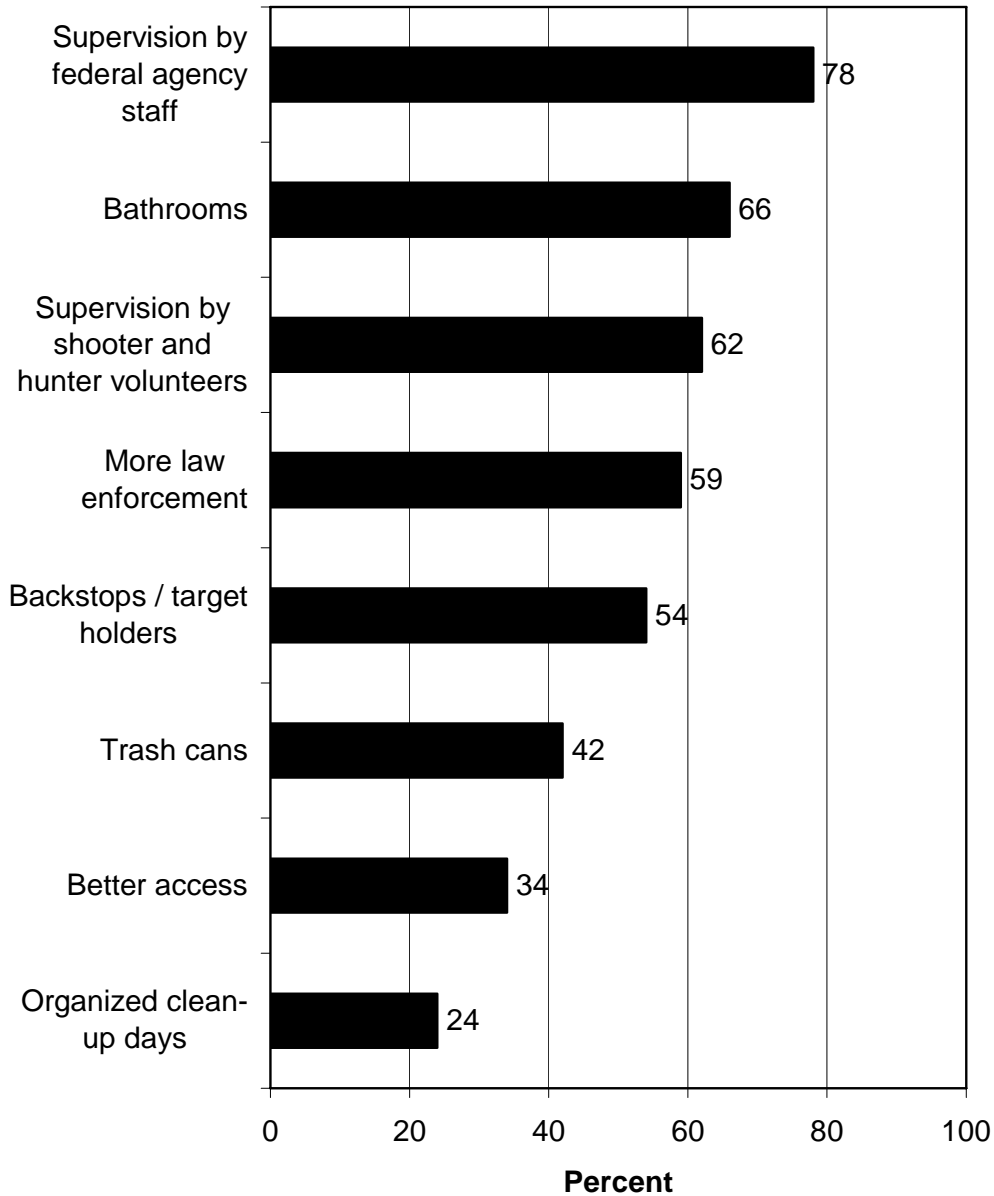
**Percent who indicated that the following items are very important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(Oregon)**



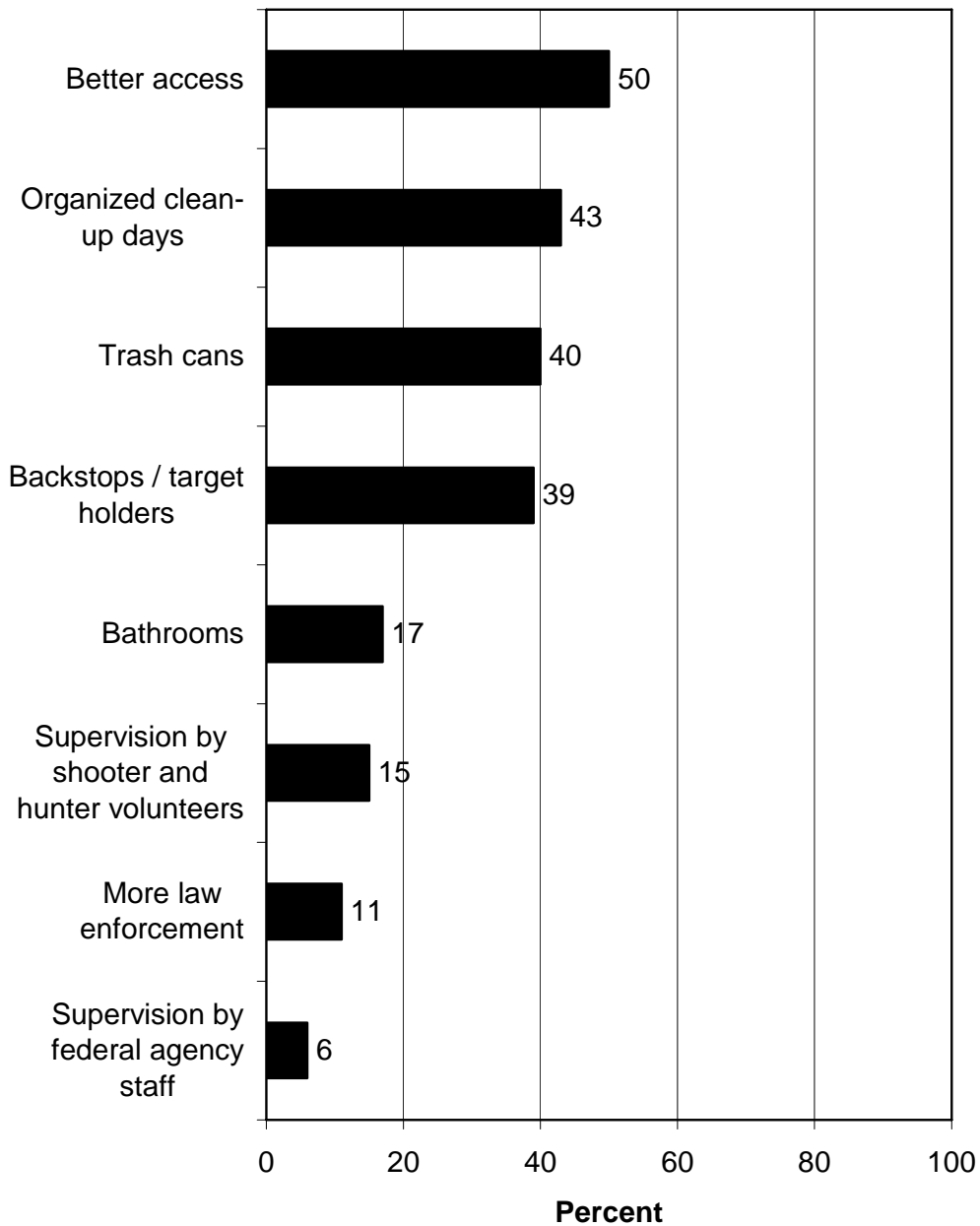
**Percent who indicated that the following items are very or somewhat important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(Oregon)**



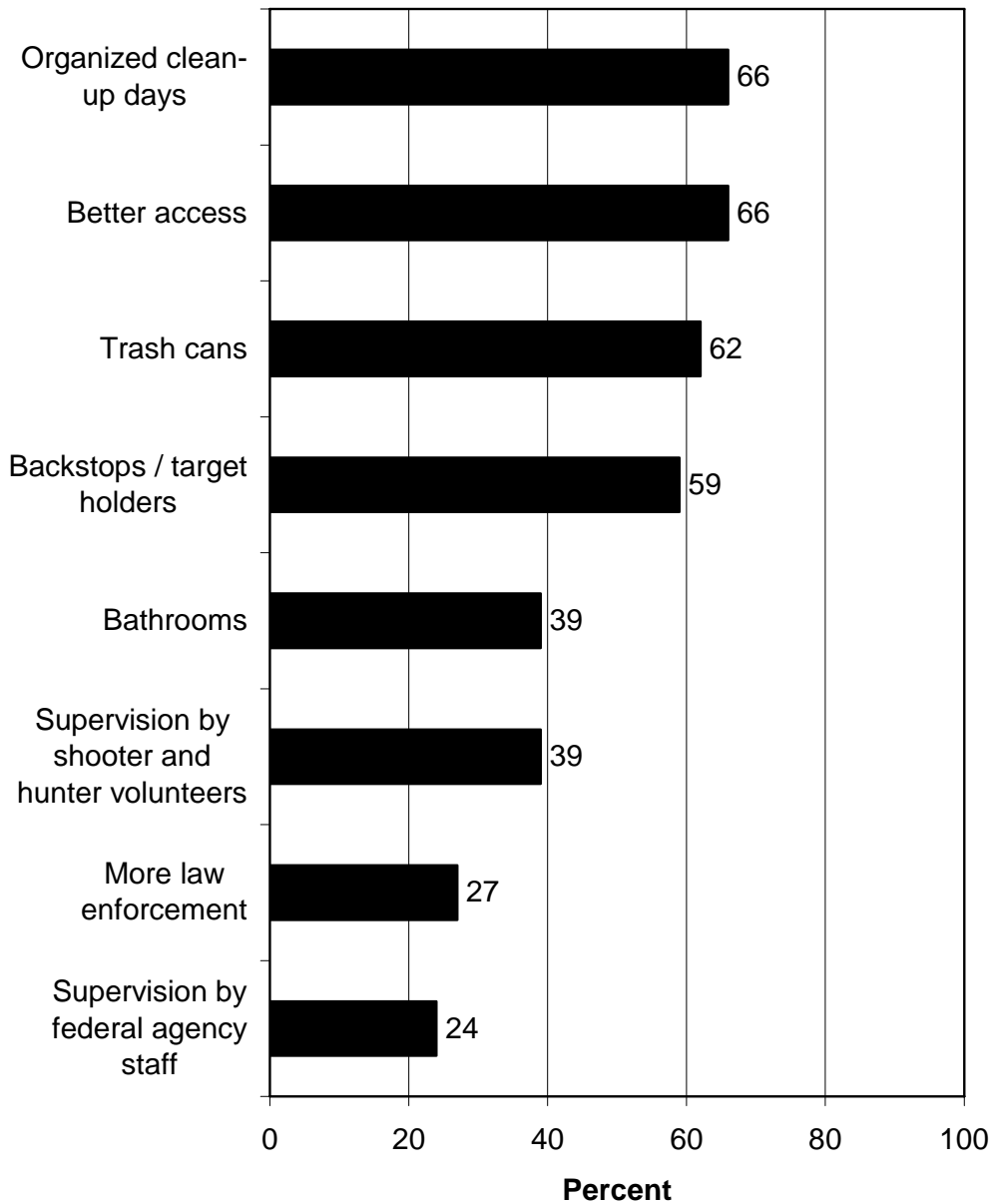
**Percent who indicated that the following items are not at all important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(Oregon)**



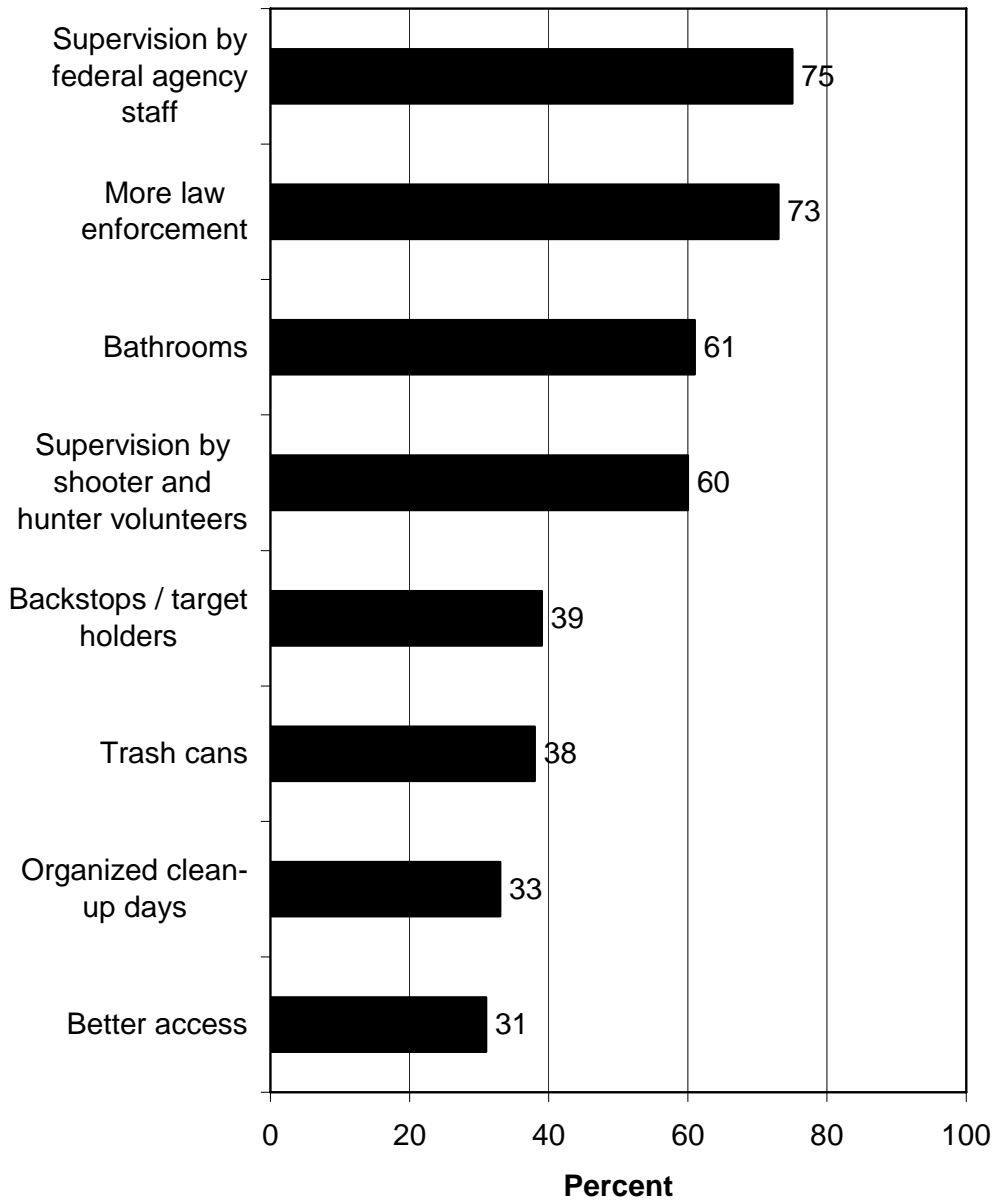
**Percent who indicated that the following items are very important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(Colorado)**



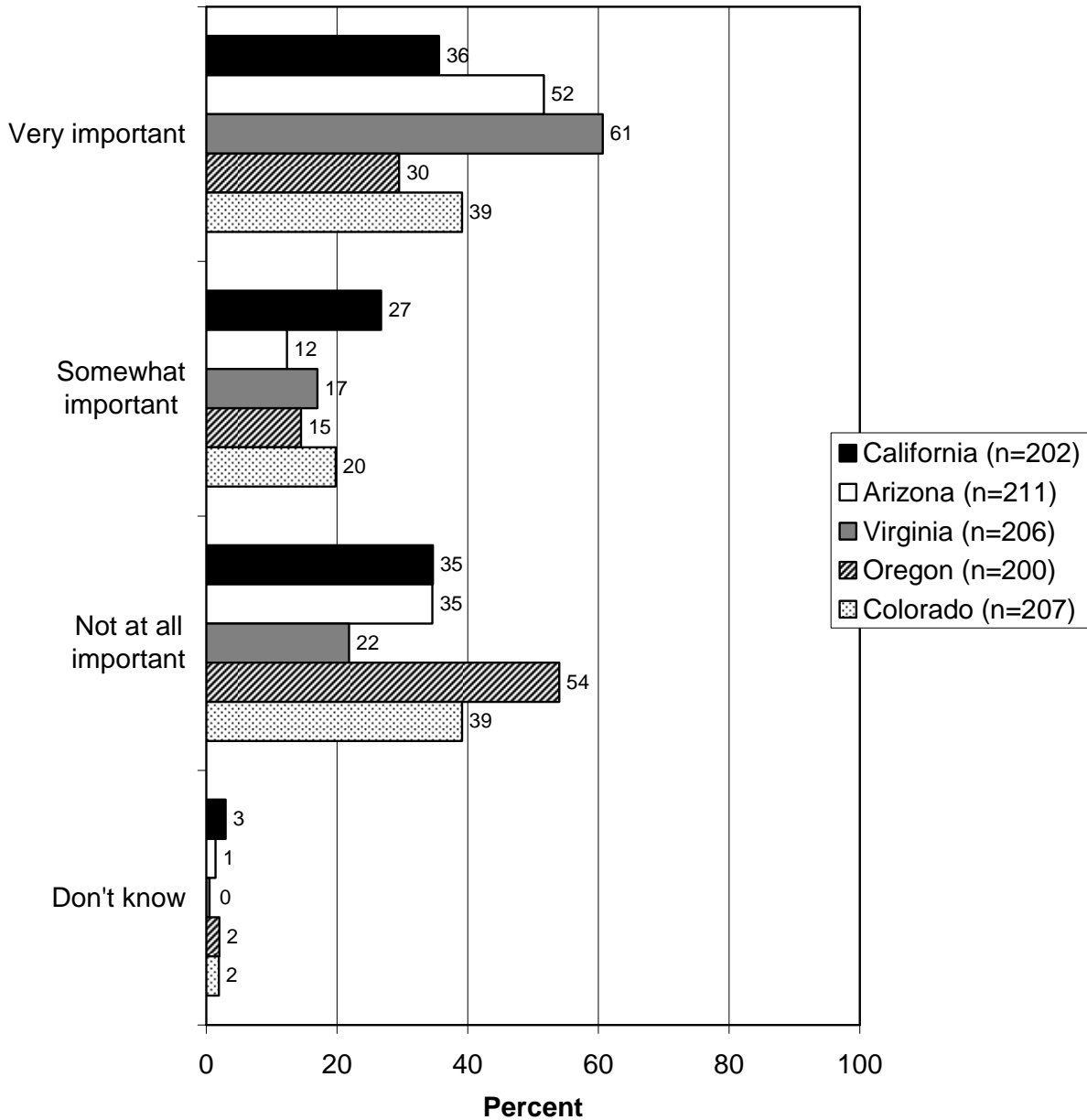
**Percent who indicated that the following items are very or somewhat important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(Colorado)**



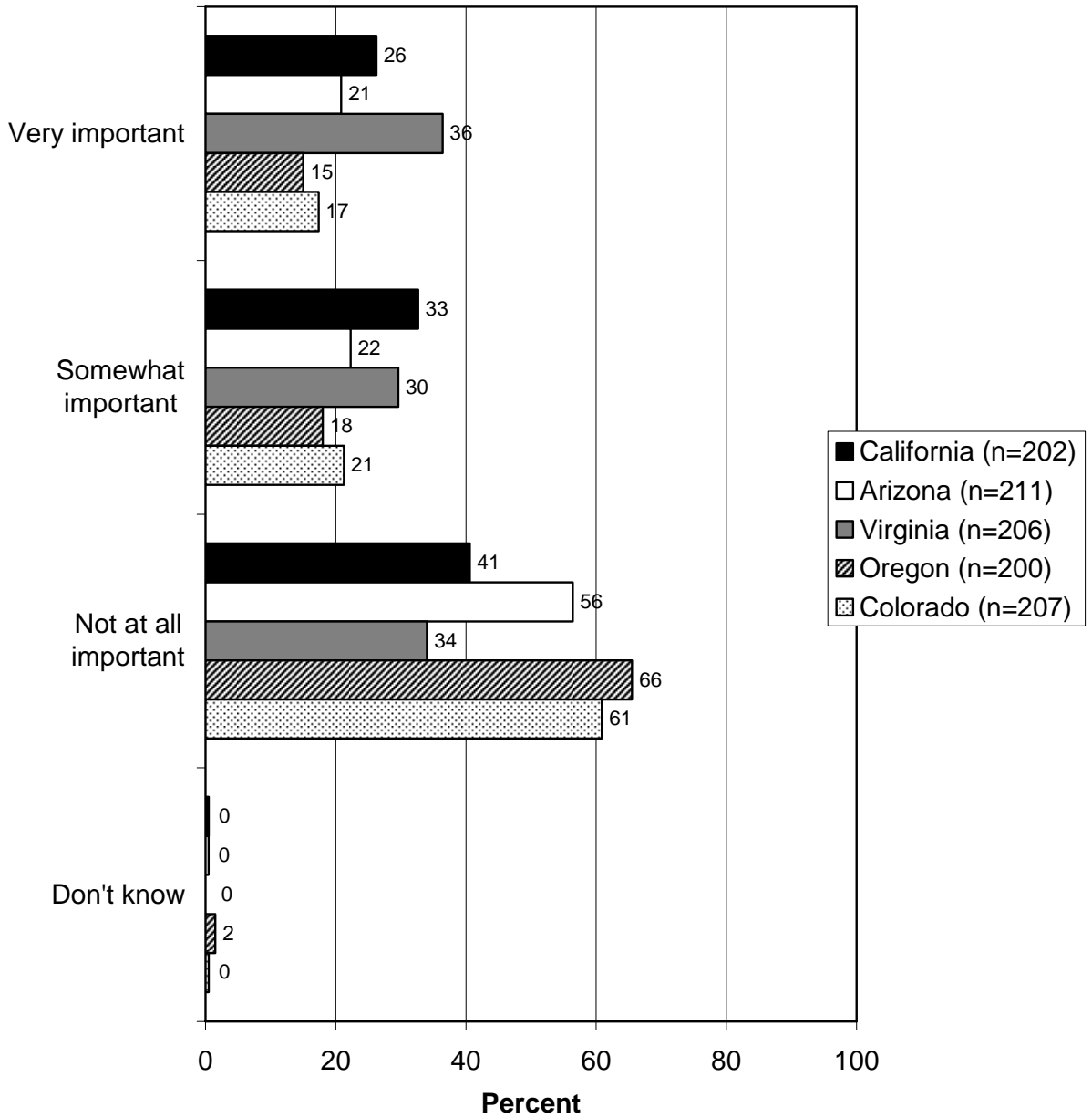
**Percent who indicated that the following items are not at all important amenities or changes he/she would like to see at the recreational shooting sites on federal lands.
(Colorado)**



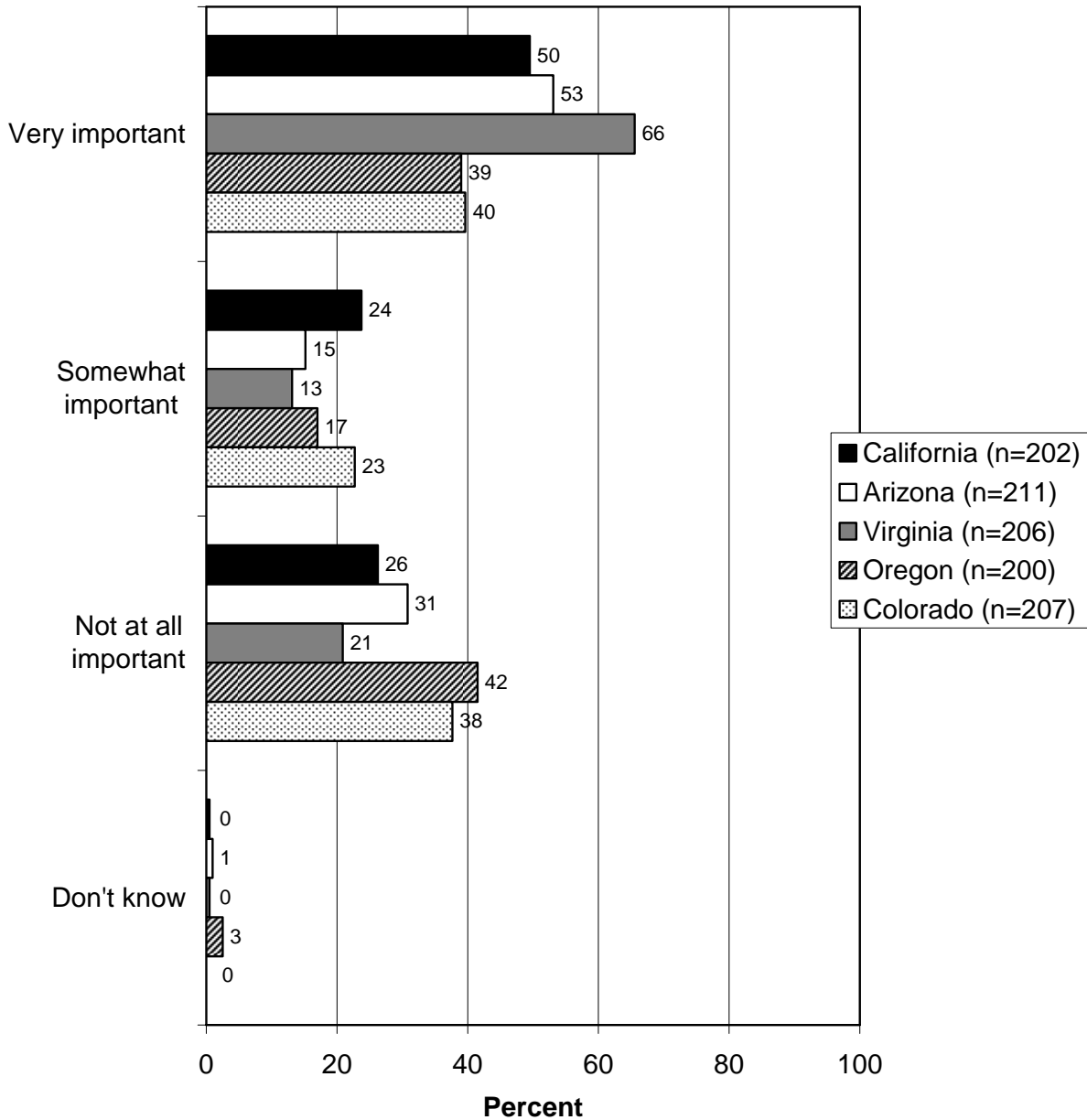
Q48. Are backstops / target holders very important, somewhat important, or not at all important to you as an amenity or change you would like to see at the recreational shooting sites on federal lands?



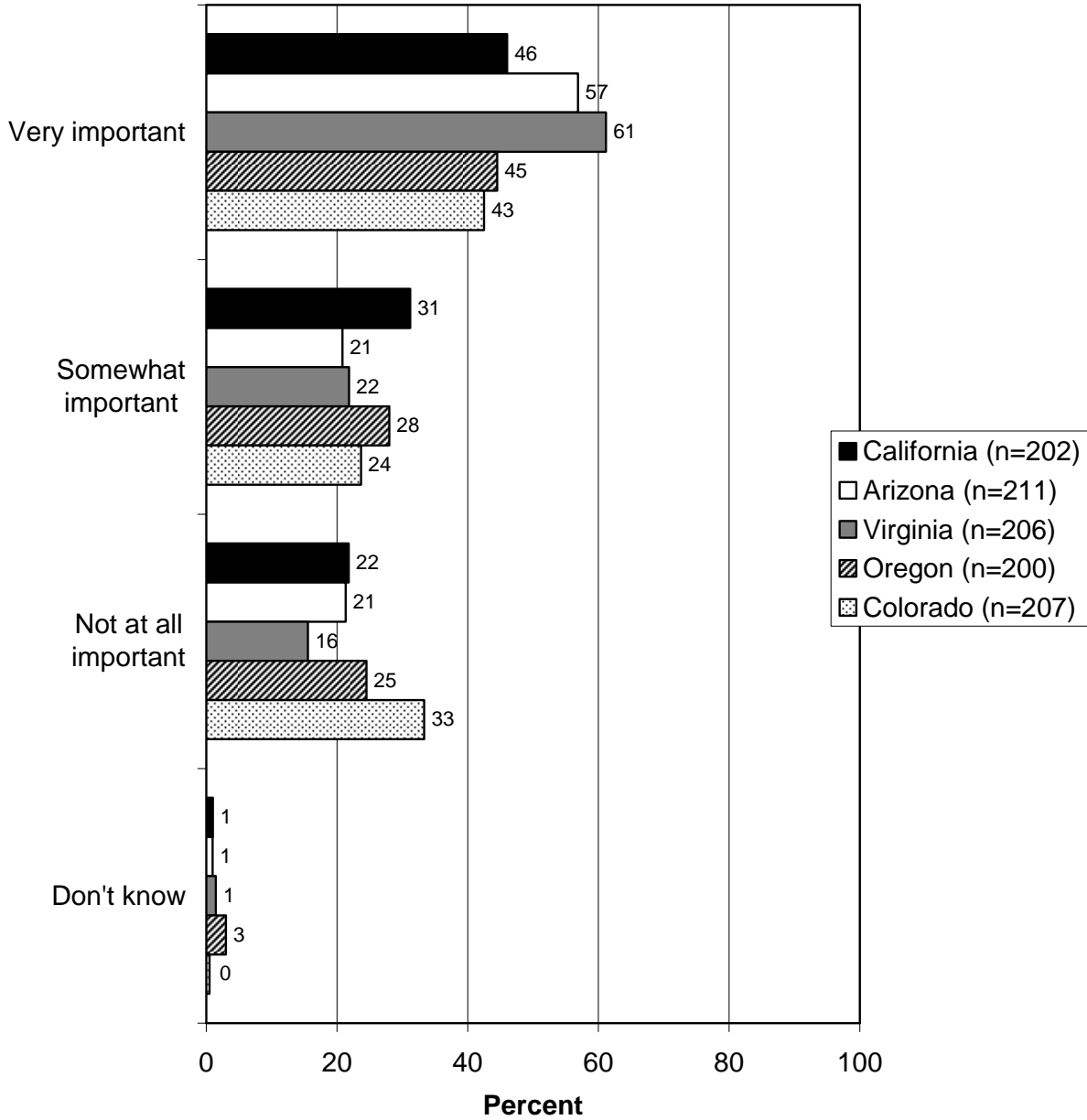
Q49. Are bathrooms very important, somewhat important, or not at all important to you as an amenity or change you would like to see at the recreational shooting sites on federal lands?



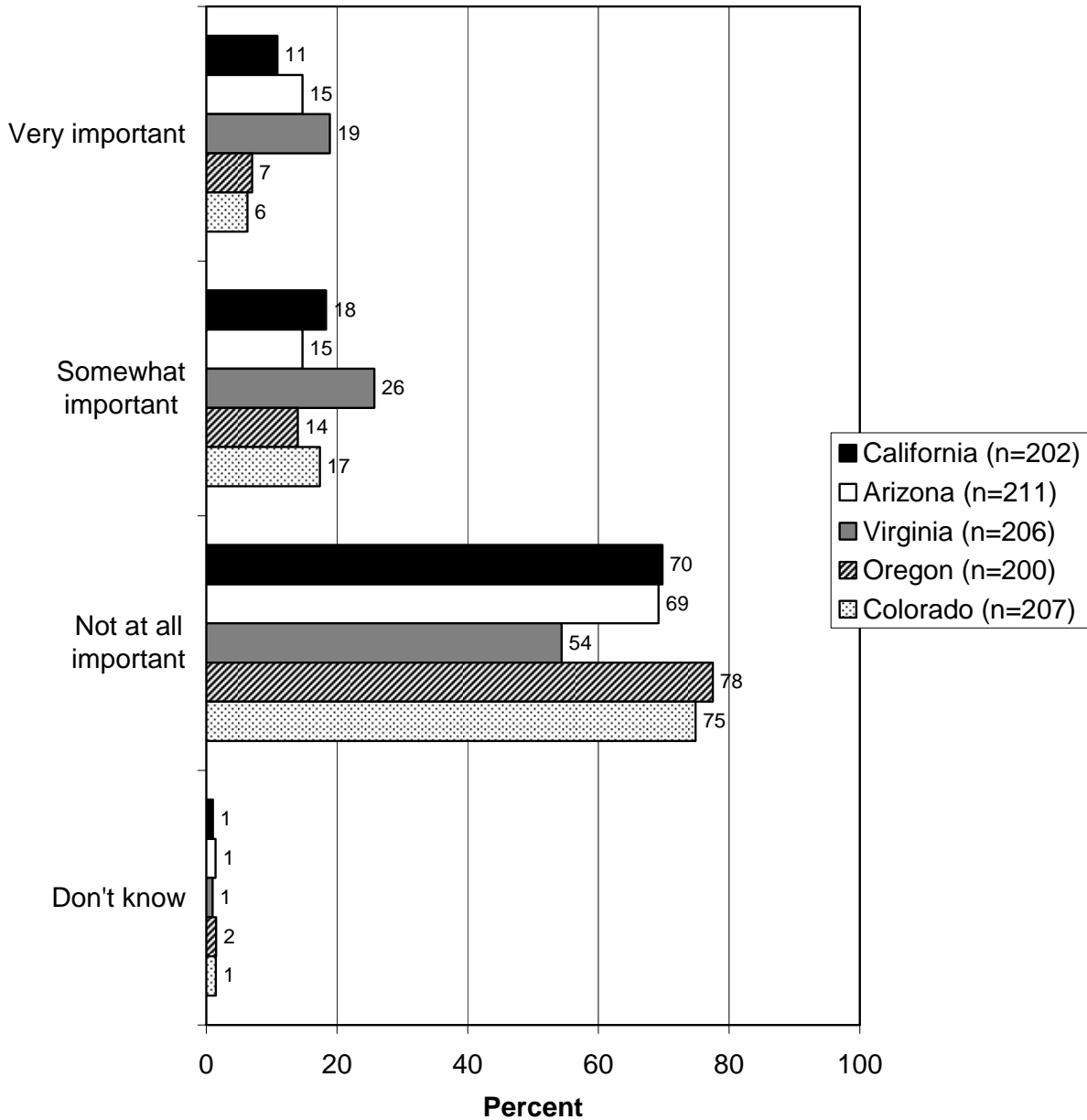
Q50. Are trash cans very important, somewhat important, or not at all important to you as an amenity or change you would like to see at the recreational shooting sites on federal lands?



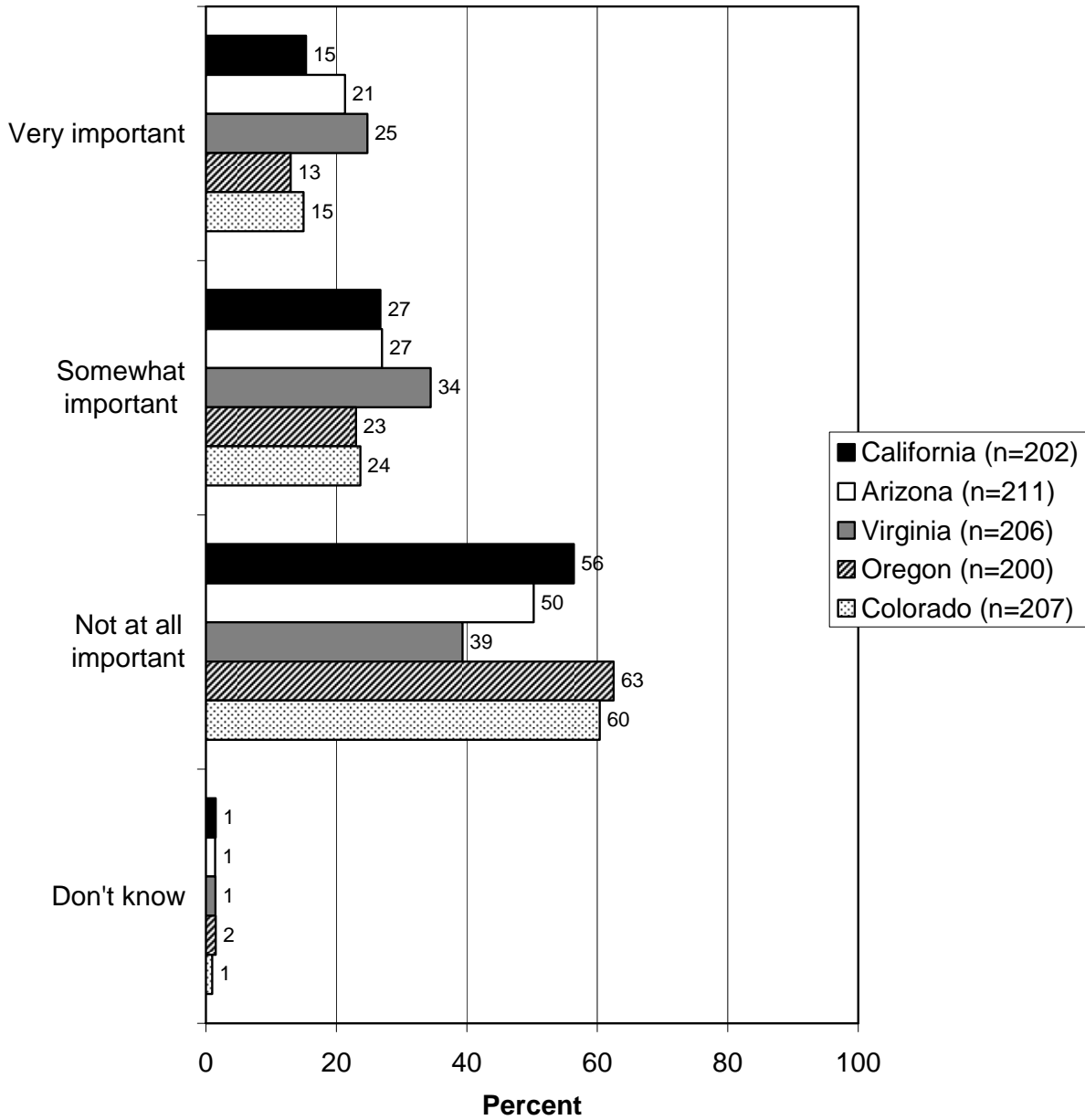
Q51. Are organized clean-up days very important, somewhat important, or not at all important to you as an amenity or change you would like to see at the recreational shooting sites on federal lands?



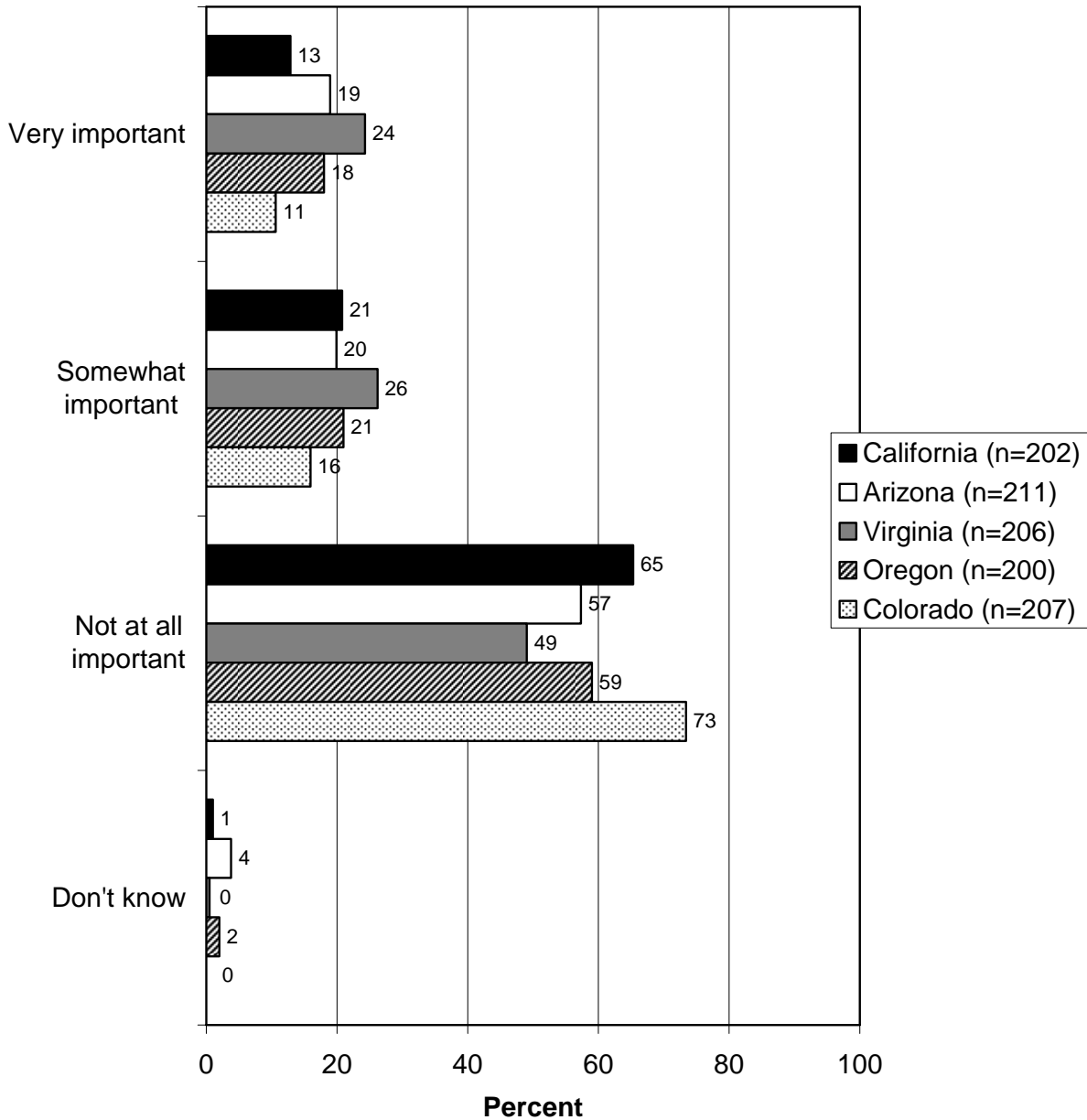
Q52. Is supervision by federal agency staff very important, somewhat important, or not at all important to you as an amenity or change you would like to see at the recreational shooting sites on federal lands?



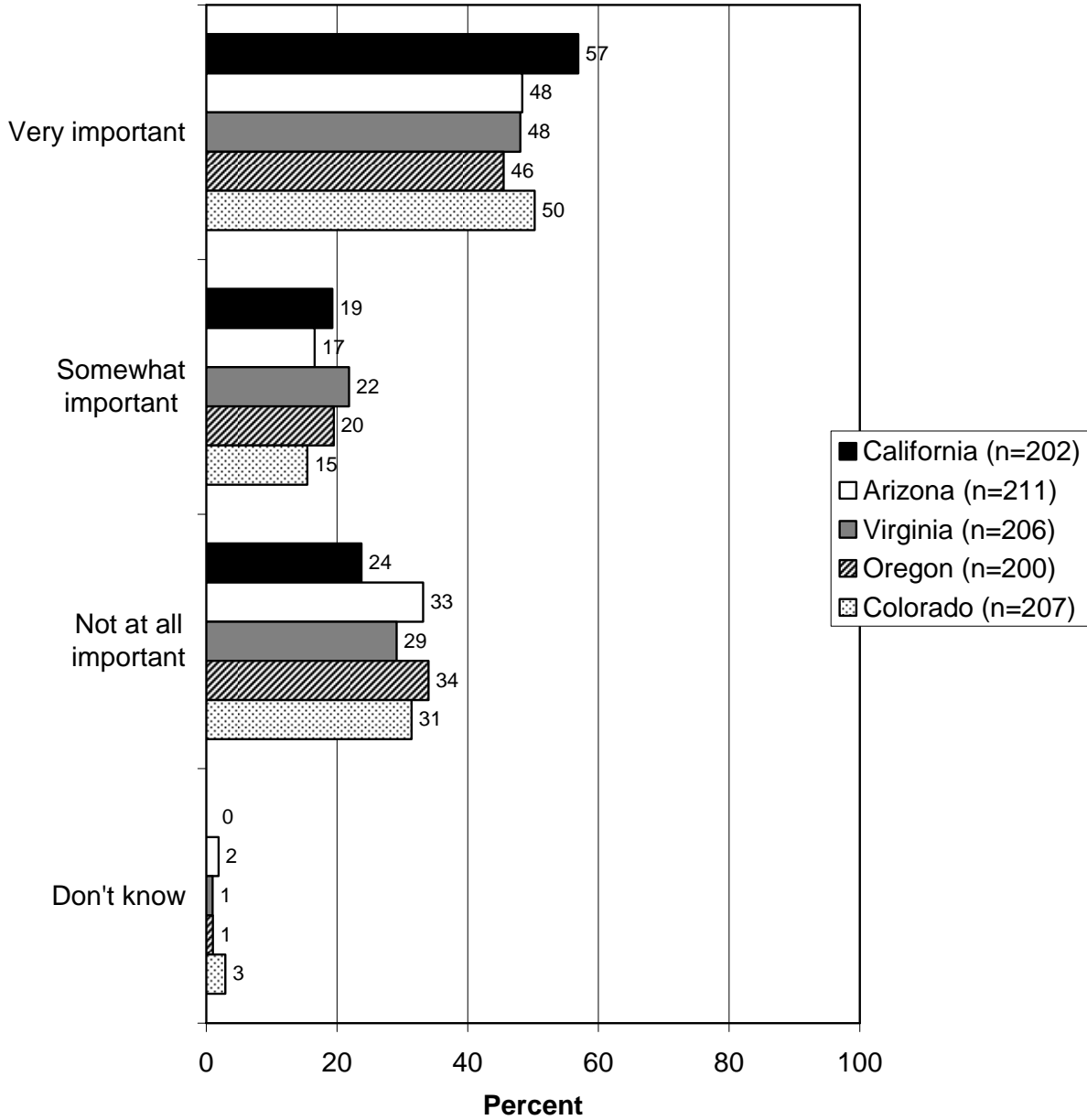
Q53. Is supervision by shooter and hunter volunteers very important, somewhat important, or not at all important to you as an amenity or change you would like to see at the recreational shooting sites on federal lands?



Q54. Is more law enforcement very important, somewhat important, or not at all important to you as an amenity or change you would like to see at the recreational shooting sites on federal lands?



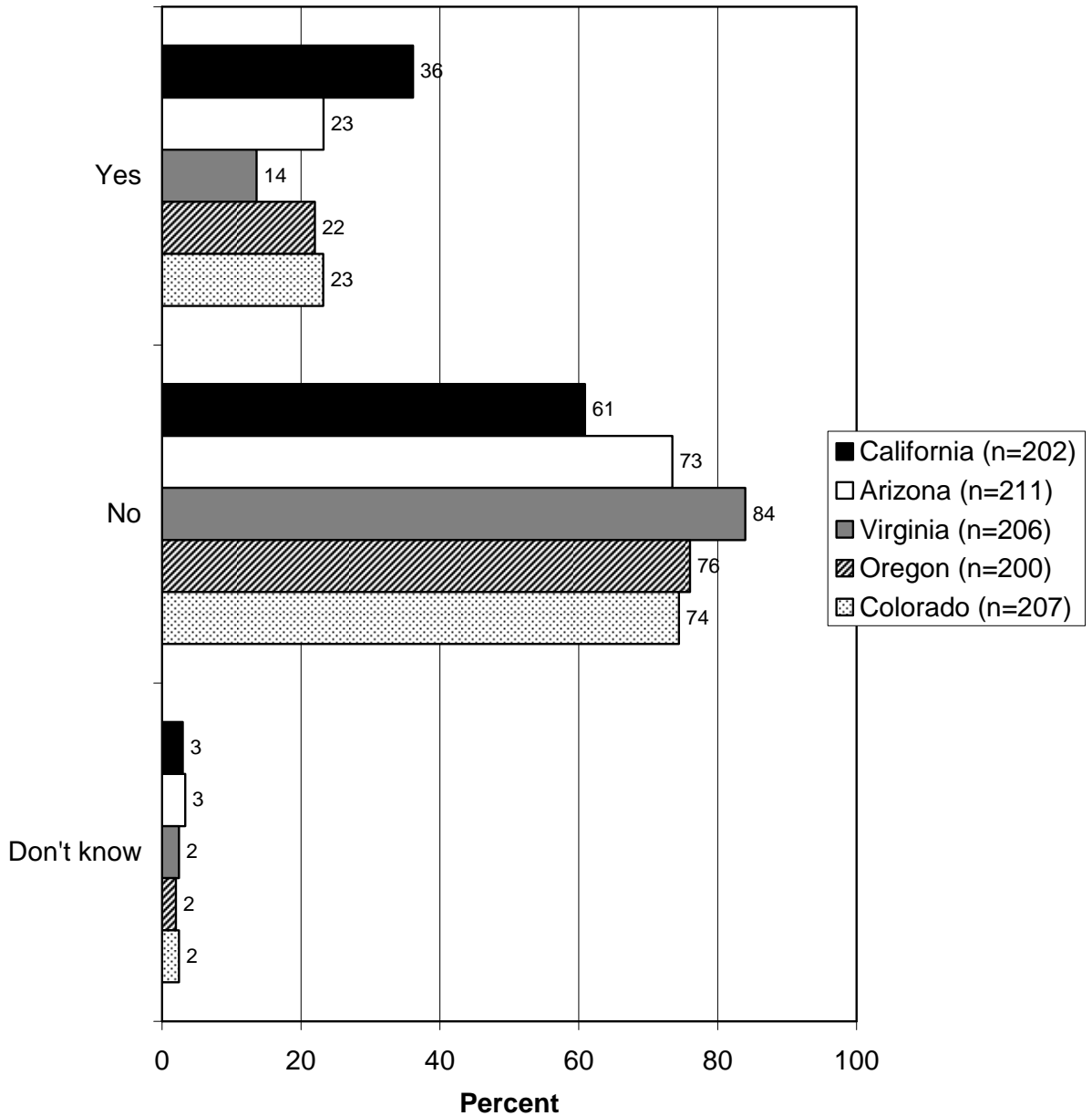
Q55. Is better access very important, somewhat important, or not at all important to you as an amenity or change you would like to see at the recreational shooting sites on federal lands?



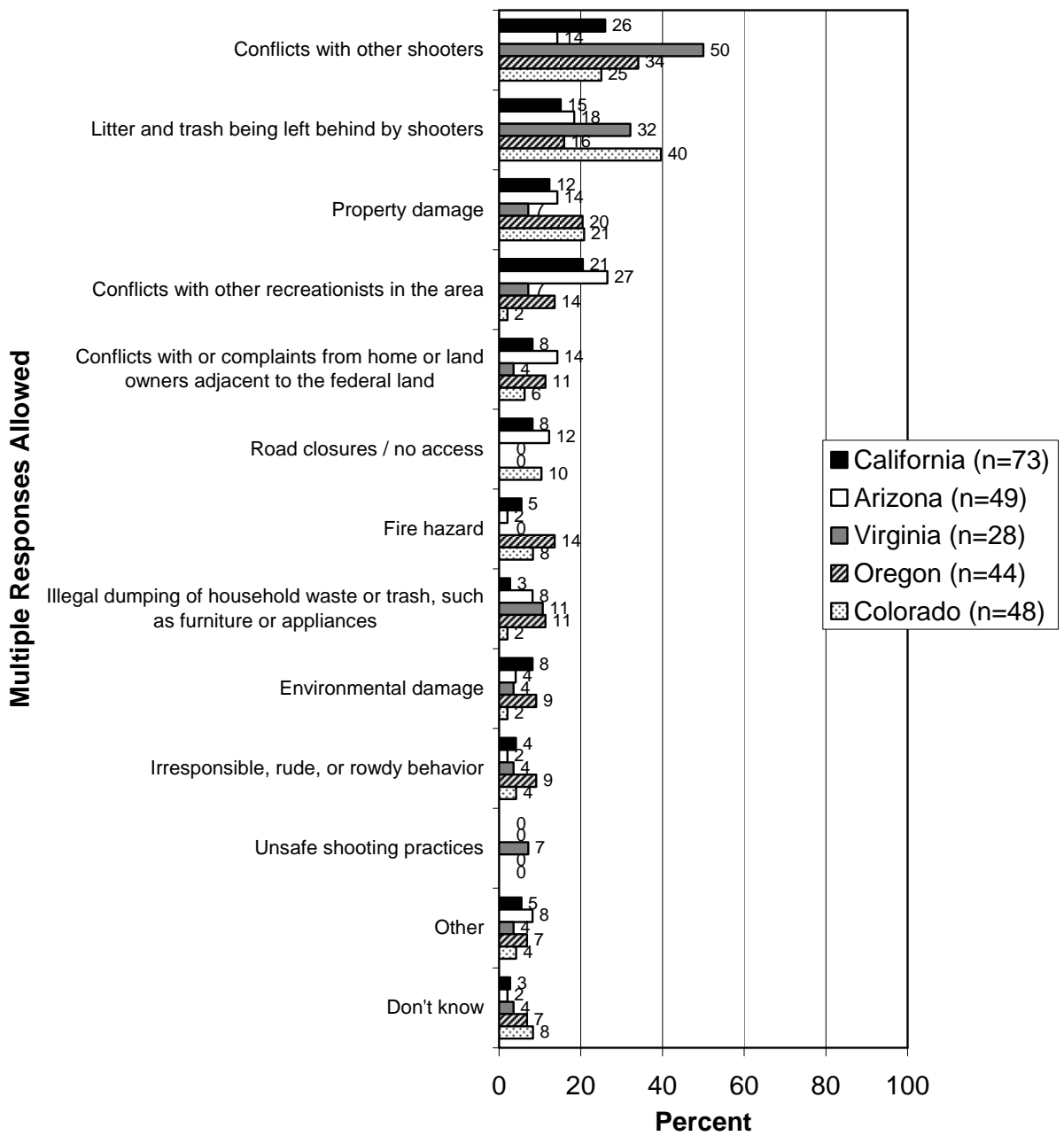
EXPERIENCES WITH CLOSURES OF SHOOTING AREAS AND RANGES ON FEDERAL LANDS AND REASONS FOR CLOSURES

- The majority of recreational shooters surveyed (61-84% of all shooters) have not experienced closures of the recreational shooting areas and ranges on federal lands they have used in the past 2 years.
 - California shooters are the most likely to have experienced a closure of a shooting area or range they have used, whereas Virginia shooters appear the least likely to have experienced such closures.
 - Those who have had a recreational shooting area or range closed were asked about the reasons for the closure. With some exceptions, the most commonly cited reasons were conflicts with other shooters, litter and trash being left behind by shooters, property damage, and conflicts with other recreationists in the area.
 - Locations of closed shooting areas and ranges (as named by respondents) are tabulated on the following pages.

Q57. Have any of the recreational shooting areas and ranges that you use on federal lands been closed in the past 2 years?



Q61-85. Why was the site closed? (Asked of those who have had a recreational shooting area or range on federal lands that he/she used closed in the past 2 years.)



California Shooting Area/Site Closings as Named by Respondents
Miramar Shooting Range, Elliot Range
Arkansas Fairy Road
Azusa
Bells Fairy Road in Anderson
Bandy Canyon
BLM lands in Los Angeles area, Southern CA
Calavera
Camp Roberts
Central California
Clear Creek
Death Valley National Park
East Camino Ciero
East of 29 Palms
El Dorado
El Dorado National Forest
Frazier Park
Fulton Avenue
Hodge Road
In the Redding area
Ventura County
Kitchen Creek
Knoxville
Lake Arrowhead
Lake Pilsbury
Las Padres, San Francisco to San Bernadino
Lido Creek
Los Angeles Mountains
Los Padres National Forest
Lyle Creek
Macroft Desert
Red Hills
Roscoe Ridge
Sacramento
San Bernadino National Forest
San Diego
San Gabriel Gun Club
San Rafarel Wilderness

California Shooting Area/Site Closings as Named by Respondents
San Benito County
Shasta County
Solano County
Fish Canyon in Southern California
South of Sacramento
Spence Field
Split Mountain
Tahoe National Forest
Upper Johnson Valley
West End Gun Club

Arizona Shooting Area/Site Closings as Named by Respondents
Skeleton Canyon
Azusa Canyon
Ben Avery's Shooting Facility
Between Cottonwood and Sedona in Prescott National Forest
BLM area south of Carefree Highway, near Wickenburg
Eager, Arizona
Cochise County
Flagstaff
Hunt Canyon
In the Prescott National Forest
Just outside of Cottonwood
Kokona County
Lake Coronado
Maricopa
Mount Lemon
National Forest areas
Near Bartlett Lake area, in Tonto National Forest
Near Mesa
North of Phoenix
Outside of Winona
In the Ironwood National Forest
Prescott
Sabino Canyon
Saguaro Lake
Sitgraves National Forest
Southern Arizona ranchlands
Southwest of Prescott
Tonto Forest around Bartlett Lake
Tuscon
Tuscon Rod And Gun Club
Pason, Arizona
BLM lands near the Salt River, near Mesa
West of Marana, Pima County
White Tanks area

Virginia Shooting Area/Site Closings as Named by Respondents
Amelia area
Big Walker Mountain
Brandywine, West Virginia
Central Virginia public land
Chickahominy in Charles City, VA
Craig's Creek National Forest area
Fauquier County
Ferry Stone State Park
Fort AP Hill and Quantico
George Washington National Forest
Giles County
Highland County
National Forest Shooting Range
Oceana Naval Air Station in Norfolk
Pocahontas State Park
Potts Mountain
Quantico, Virginia; Fort AP Hill
Quantico
Rockingham
Shenandoah, Virginia
Philpott Reservoir in Franklin County
Brandywine, West Virginia
Wildlife Management Service Clinch Mountain

Oregon Shooting Area/Site Closings as Named by Respondents
McDowell Creek Park Road
Rock Quarry in Comb's Canyon area
Above Mill City
Along the Deschutes River bordering Crooked River Ranch
Balsetz Area
Bend, Oregon badlands
Beyond Oregon City
Bryant Mountain in Climate County
Burnt Mountain
Callahan's
Coos Bay Ranger District Coast Range
Coburg Hills
Cook Road in Lane County
Dixonville Range
Eastern Oregon
Gated access roads in the Mount Hood Area
Goat Mountain area
Gravel pits roads in the national forest
Larch Mountain
Mount Hood National Forest
Mount Scott Road
Ocheko National Forest
Oregon Coast
Mount Hagan
Southeast Oregon
St. Helens Area
Steamboat Drainage
Sugarpine Road
Tillamook Forest
Vail, Ontario in eastern Oregon

Colorado Shooting Area/Site Closings as Named by Respondents
Northeast of Grand Junction off 32 Road
Alamosa Canyon
Between Hotchkiss and Crawford
Black Canyon National Park
Bolder County, Lee Hill Road
Denver State Park
Duckers, CO
Iron Creek Area
Jeff County, west of Denver
Kenyon City
Lake Christy
Larimer County
Left Hand Canyon
Left Hand Canyon, Boulder County
National Grasslands
Near Kipling and Hamilton area
North of Canyon City oil well flats
North of Grand Junction
Outside of Kremling
Pawnee Grasslands
Pawnee National Grassland
Pike National Forest
Rampart Range
Rampart Range, Hot Sulfur Springs
Rampart Range, Colorado Springs
Rampart Range, Pikes Peak Forest
Red Canyon
South of New Castle
South Park
The Hogback, Sedalia, CO
Wilderness Study Areas in Western CO

EXPOSURE TO UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR ON FEDERAL LANDS

- The survey examined nine potential problems, asking respondents to indicate if each was a major or minor problem or not at all a problem. This examination first looks at all potential problems relative to each other in each state, then the report discusses each potential problem in turn. The potential problems asked about are as follows:
- Unsafe shooting practices, such as target shooting with no backstop or using inappropriate targets
 - Property damage, such as shooting at signs, trash cans, or structures?
 - Environmental damage, such as shooting at trees
 - Litter and trash being left behind by shooters, such as shells, clay pigeon fragments, or food wrappers
 - Illegal dumping of household waste or trash, such as furniture or appliances
 - Irresponsible, rude, or rowdy behavior, such as drinking alcohol, fighting, or reckless driving
 - Conflicts with other shooters
 - Conflicts with other recreationists in the area, such as hikers
 - Conflicts with or complaints from home or land owners adjacent to the federal land
- This first examination looks at all potential problems relative to each other in each state. Overall, litter/trash and illegal dumping are the worst problems.
- In California, three problems stand out relative to the rest as *major* problems: illegal dumping (*not necessarily by the shooters*) (53% say this is a *major* problem), litter and trash left behind by shooters (44%), and property damage from shooting (37%). On the other hand, the three potential problems related to conflicts – with other recreationists, with other shooters, and with adjacent landowners – are *not* substantial problems in California.
 - In Arizona, Two potential problems markedly stand out above the others as *major* problems: litter and trash left behind by shooters (70%) and illegal dumping (*not necessarily by the shooters*) (64%). As with California, the three potential problems related to conflicts – with other recreationists, with other

shooters, and with adjacent landowners – are *not* substantial problems in Arizona.

- In Virginia, three problems stand out relative to the rest as *major* problems: litter and trash left behind by shooters (32%), illegal dumping (*not* necessarily by the shooters) (27%), and property damage from shooting (26%). Similar to other states in this survey, the three potential problems related to conflicts – with other recreationists, with other shooters, and with adjacent landowners – are *not* substantial problems in Virginia.
- In Oregon, two potential problems stand out as markedly higher as a *major* problem: illegal dumping (*not* necessarily by the shooters) (64%) and litter and trash left behind by shooters (50%), with property damage from shooting (32%) also fairly prominent as a *major* problem. On the other hand, the three potential problems related to conflicts – with other recreationists, with other shooters, and with adjacent landowners – are *not* substantial problems in Oregon.
- In Colorado, two potential problems stand out as markedly higher as a *major* problem: litter and trash left behind by shooters (40%) and illegal dumping (*not* necessarily by the shooters) (40%). Three items are *not* substantial problems in Colorado: conflicts or complaints from homeowners or landowners, conflicts with other shooters, and irresponsible/rude/rowdy behavior.
- These results are shown in graphs that follow; they are also tabulated below for the reader's convenience. This tabulation allows a quick comparison among states.

Comparison Among States of Series of Questions on Rating of Potential Problems

Percent saying each is a <i>major</i> problem	CA	AZ	VA	OR	CO
50% or more	illegal dumping	litter and trash left by shooters illegal dumping	NONE	illegal dumping litter and trash left by shooters	NONE
40% to 49%	litter and trash left by shooters	NONE	NONE	NONE	litter and trash left by shooters illegal dumping
30% to 39%	property damage	property damage	litter and trash left by shooters	property damage	NONE
20% to 29%	unsafe shooting environ. damage	unsafe shooting	illegal dumping property damage	rude / rowdy behavior unsafe shooting	property damage
10% to 19%	rude / rowdy behavior	environ. damage rude / rowdy behavior conflicts w/ land-owners	unsafe shooting rude / rowdy behavior	environ. damage	unsafe shooting environ. damage rude / rowdy behavior conflicts w/ other recs. conflicts w/ land-owners
Less than 10%	conflicts w/ other recs. conflicts w/ land-owners conflicts w/ other shooters	conflicts w/ other recs. conflicts w/ other shooters	environ. damage conflicts w/ other recs. conflicts w/ other shooters conflicts w/ land-owners	conflicts w/ other recs. conflicts w/ land-owners conflicts w/ other shooters	conflicts w/ other shooters

- This examination looks at marked differences among states in the survey (California, Arizona, Virginia, Oregon, and Colorado) regarding the rating of the severity of each potential problem.
- Unsafe shooting practices: This problem is markedly worse in California and Arizona; this is less of a problem, relative to other states, in Virginia.
 - Property damage: This is markedly less of a problem in Virginia and Colorado.
 - Environmental damage: In the sum of those saying it is a problem (major or minor), the states are not markedly different; Virginia respondents are less likely, relative to other states' respondents, to say this is a *major* problem.
 - Litter and trash left by shooters: Arizona residents are much more likely, relative to other states' respondents, to say this is a *major* problem. Large majorities in all five states indicate that this is a problem.
 - Illegal dumping: Colorado and Virginia respondents are the least likely to find this to be a problem.
 - Irresponsible, rude, or rowdy behavior: The states are not markedly different on this question.
 - Conflicts with other shooters: The states are not markedly different on this question. Large majorities in each state consider this *not* to be a problem.
 - Conflicts with other recreationists: Very low percentage think of this as a *major* problem (no more than 12% in any state). Colorado respondents are the most likely to consider this a *major* or *minor* problem).
 - Conflicts with homeowners or landowners adjacent to federal land: The states are not markedly different on this question. Large majorities in all five states indicate that this is *not* a problem.

- The survey also asked respondents to indicate if they had personally witnessed or otherwise experienced each of those same nine potential problems while shooting on federal lands in their state, using a scale from “always” witnessing or experiencing the problem to through “often,” “sometimes,” and “rarely” to “never.” This examination first looks at all potential problems relative to each other in each state, then the report discusses each potential problem in turn.
- In California, litter and trash left behind by shooters (69% witnessed/ experienced this at least some of the time while shooting on federal lands) and illegal dumping (*not* necessarily by the shooters) (55%) are the major problems witnessed or experienced, markedly more common than other problems.
 - In Arizona, litter and trash left behind by shooters (73%) and illegal dumping (*not* necessarily by the shooters) (56%) are the major problems witnessed or experienced. These are followed by two other problems moderately common: unsafe shooting (47%) and environmental damage (46%).
 - In Virginia, litter and trash left behind by shooters (66%) is the major problem, far exceeding other problems.
 - In Oregon, litter and trash left behind by shooters (68%) and illegal dumping (*not* necessarily by the shooters) (53%) are the major problems witnessed or experienced. These are fairly closely followed by property damage (49%) and unsafe shooting (45%).
 - In Colorado, litter and trash left behind by shooters (66%) is the major problem, far exceeding other problems.
 - These results are shown in graphs that follow; they are also tabulated below for the reader’s convenience. This tabulation allows a quick comparison among states.

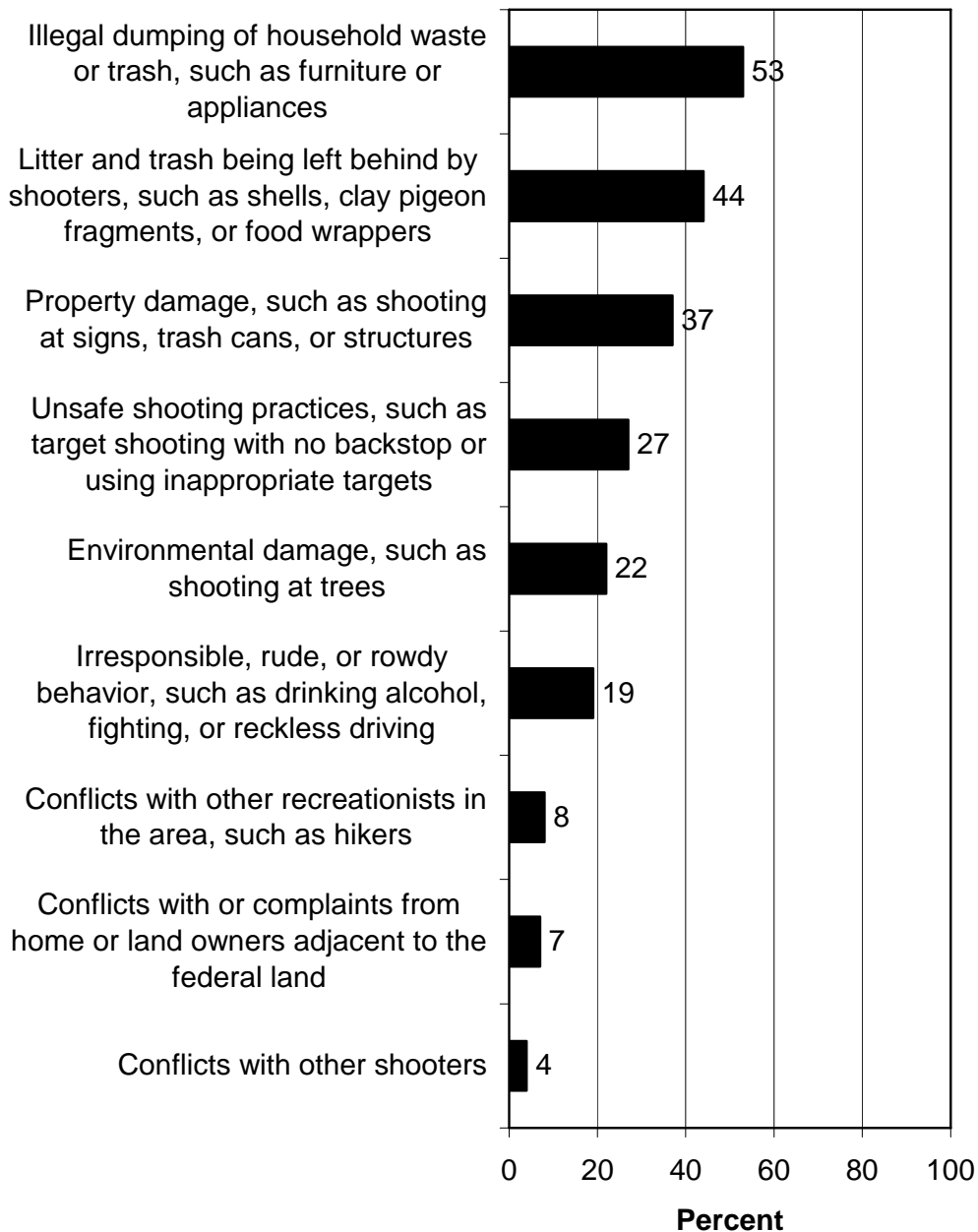
Comparison Among States of Series of Questions on Witnessing or Experiencing Potential Problems

Percent saying each witnessed or experienced the problem at least some of the time	CA	AZ	VA	OR	CO
60% or more	litter and trash left by shooters	litter and trash left by shooters	litter and trash left by shooters	litter and trash left by shooters	litter and trash left by shooters
50% to 59%	illegal dumping	illegal dumping	NONE	illegal dumping	NONE
40% to 49%	unsafe shooting	unsafe shooting environ. damage	NONE	property damage unsafe shooting	NONE
30% to 39%	rude / rowdy behavior environ. damage property damage	property damage rude / rowdy behavior conflicts w/ other recs.	unsafe shooting property damage rude / rowdy behavior	rude / rowdy behavior	unsafe shooting illegal dumping property damage environ. damage conflicts w/ other recs.
20% to 29%	conflicts w/ other recs. conflicts w/ other shooters	conflicts w/ other shooters	illegal dumping environ. damage	environ. damage	rude / rowdy behavior conflicts w/ other shooters
Less than 20%	conflicts w/ land-owners	conflicts w/ land-owners	conflicts w/ other shooters conflicts w/ other recs. conflicts w/ land-owners	conflicts w/ other recs. conflicts w/ other shooters conflicts w/ land-owners	conflicts w/ land-owners

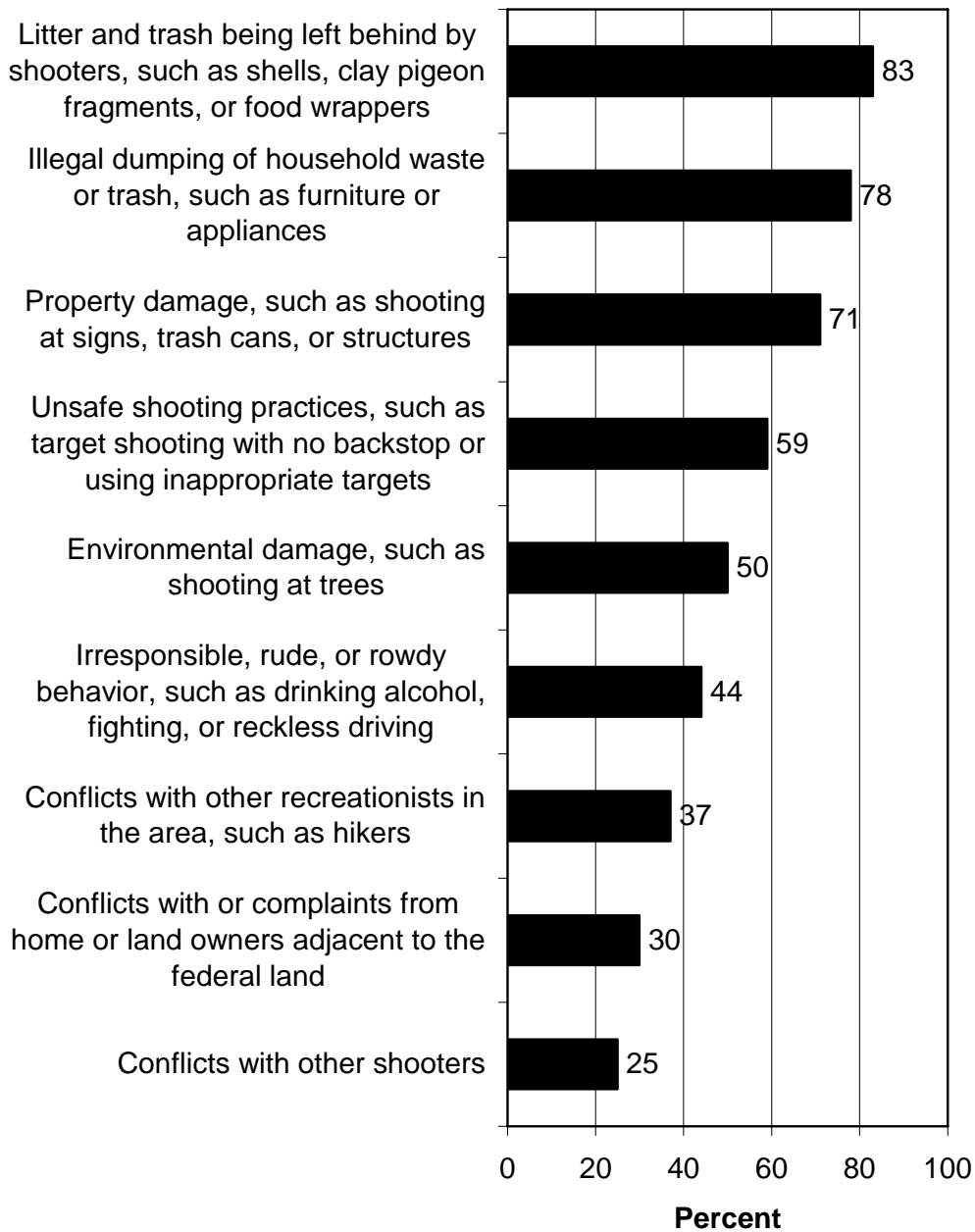
- This examination looks at marked differences among states in the survey (California, Arizona, Virginia, Oregon, and Colorado) regarding personally witnessing or experiencing each potential problem. For most of the potential problems, follow-up questions asked respondents to indicate if shooters, hunters, or non-hunters/non-shooters had been the party responsible for the problem, and then the survey asked for a further description. These results are also discussed.
- Unsafe shooting practices: The states are not markedly different on this question. Young males predominate as those responsible for this problem.
 - Property damage: Oregon respondents are slightly more likely to have witnessed or experienced this problem, relative to respondents from other states. Shooters and non-hunters/non-shooters are most commonly named as being responsible. Young males are also prominent as causing this problem (although many witnesses saw only the damage itself, not the damage being done, and could not determine who had caused the damage).
 - Environmental damage: Arizona respondents are slightly more likely to have witnessed or experienced this problem, relative to respondents from other states. On the other hand, Virginia respondents are the most likely to indicate that they have never witnessed or experienced this problem, which may be a function of its climate—the more humid climate in Virginia (in general) may allow for plant growth to more readily repair or otherwise hide environmental damage, while the more arid climates of the other states (again, in general—realizing that parts of Oregon, for instance, have great amounts of precipitation) may make for more fragile habitat. Oregon and Colorado shooters are more likely than are the other states to attribute this problem to other shooters. Again, young males are prominent as causing this problem.
 - Litter and trash left by shooters: The states are not markedly different on this question. Large majorities of shooters in all states in the survey report that they have witnessed or experienced this problem. Again, young males are prominent as causing this problem.

- **Illegal dumping:** This is more of a problem in California, Arizona, and Oregon; less of a problem in Virginia and Colorado. This problem is seen as most commonly being caused by non-hunters/non-shooters. Most commonly, respondents could not determine who had caused the problem, having seen only the result, not the action. Nonetheless, males are prominent in the blame.
- **Irresponsible, rude, or rowdy behavior:** The states are not markedly different on this question. Large majorities have *never* witnessed or experienced this problem. This problem is seen as being commonly caused by shooters in California, Virginia, and Colorado and by non-hunters/non-shooters in Arizona and Oregon. Young males predominate.
- **Conflicts with other shooters:** The states are not markedly different on this question. Large majorities have *never* witnessed or experienced this problem. Young males predominate.
- **Conflicts with other recreationists:** This is slightly more of a problem in California, Arizona, and Colorado than it is in Oregon or Virginia. In addition to young males, other common descriptions of the people causing these problems include hikers/campers and ATV users.
- **Conflicts with homeowners or landowners adjacent to federal land:** The states are not markedly different on this question. Large majorities have *never* witnessed or experienced this problem.

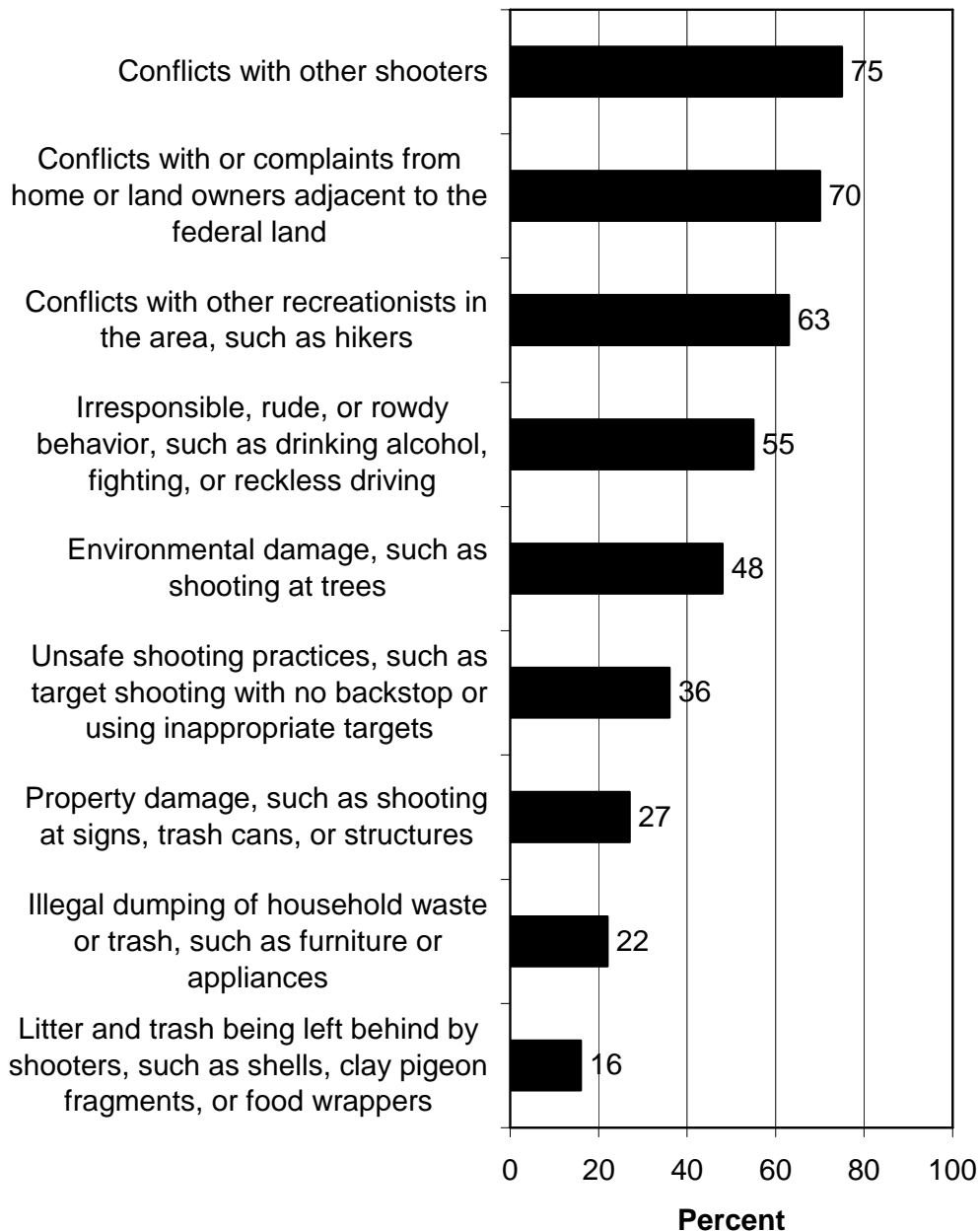
**Percent who indicated that the the following issues
are major problems at recreational shooting areas
and ranges on federal lands.
(California)**



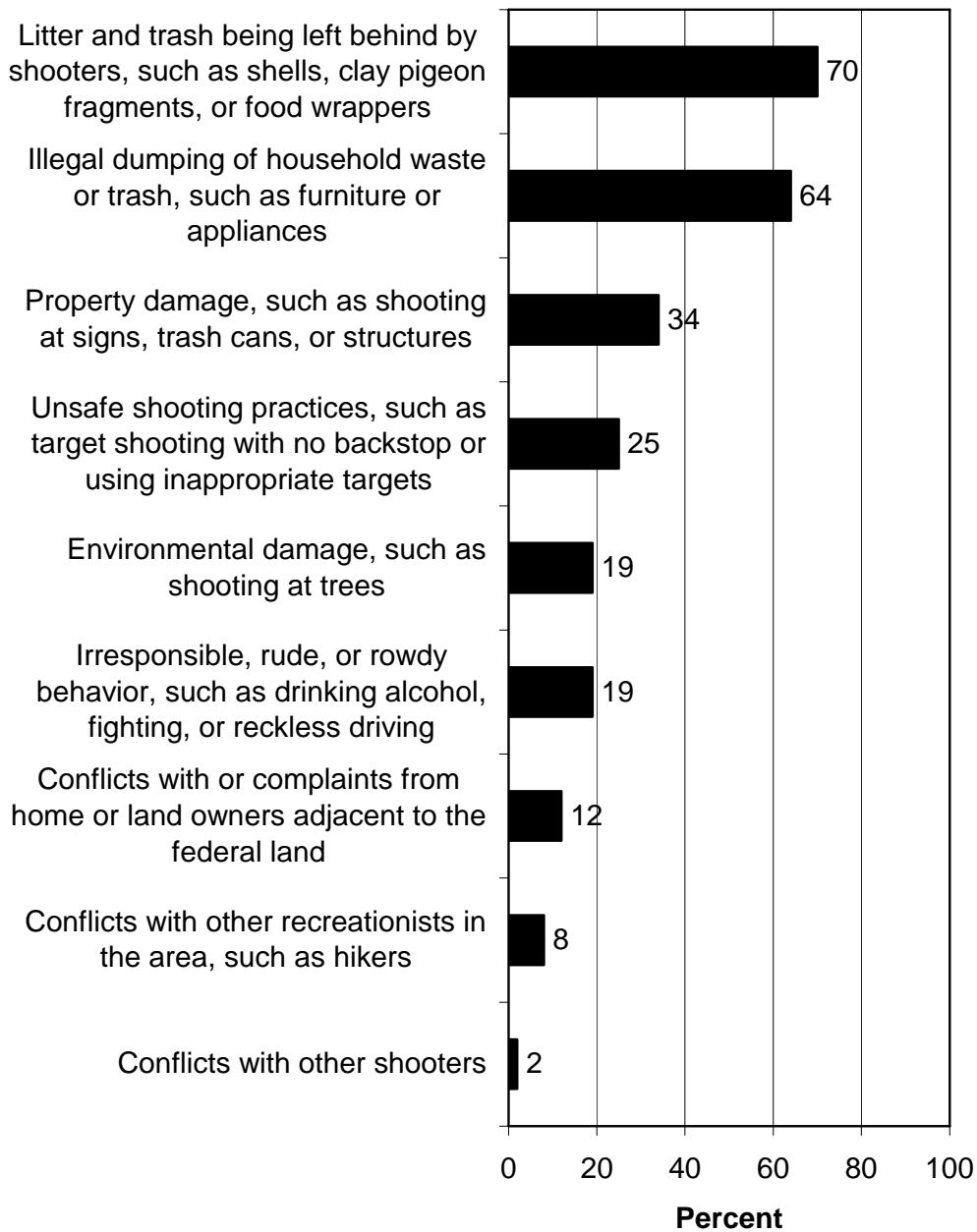
Percent who indicated that the the following issues are major or minor problems at recreational shooting areas and ranges on federal lands. (California)



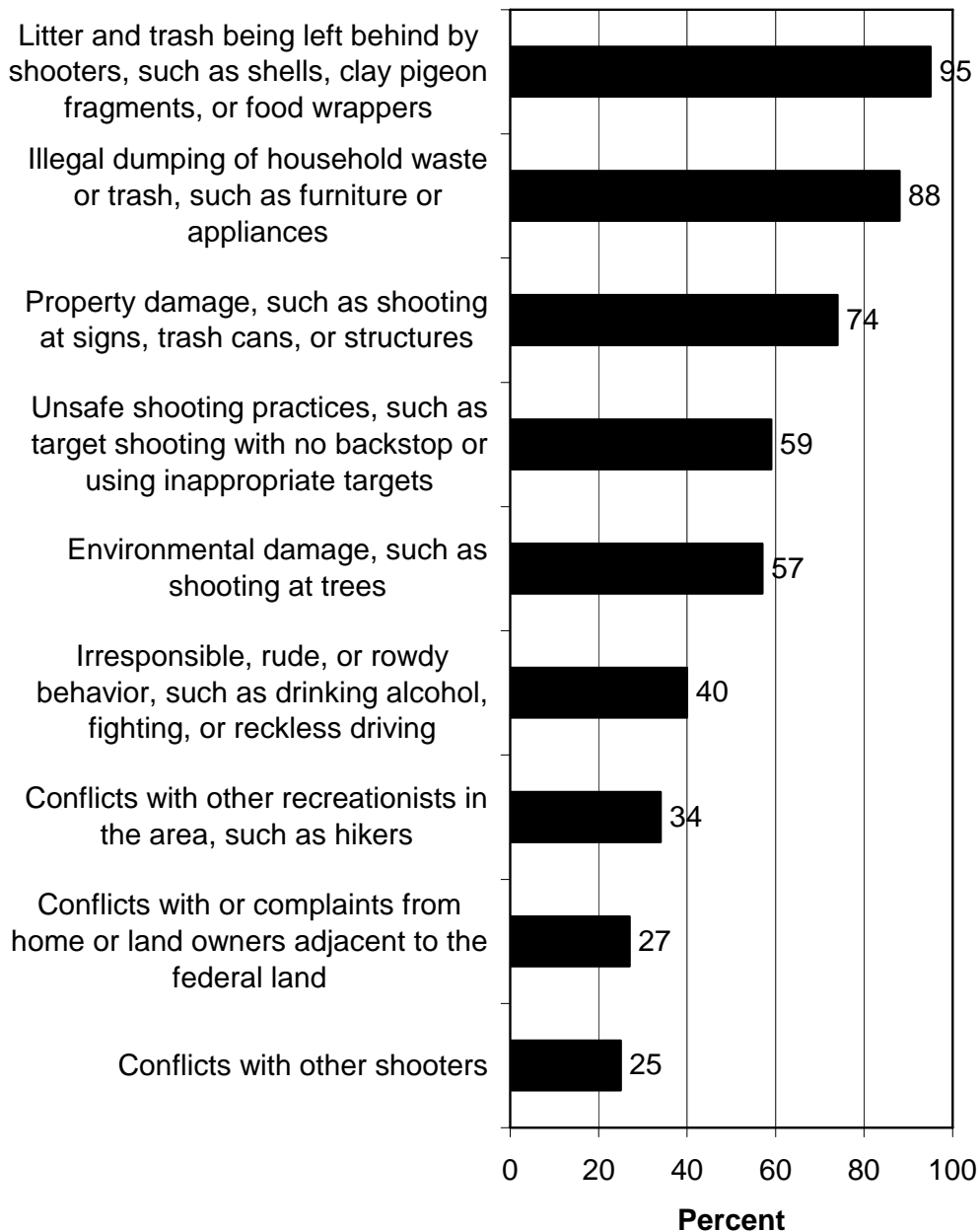
**Percent who indicated that the the following issues
are not at all problems at recreational shooting
areas and ranges on federal lands.
(California)**



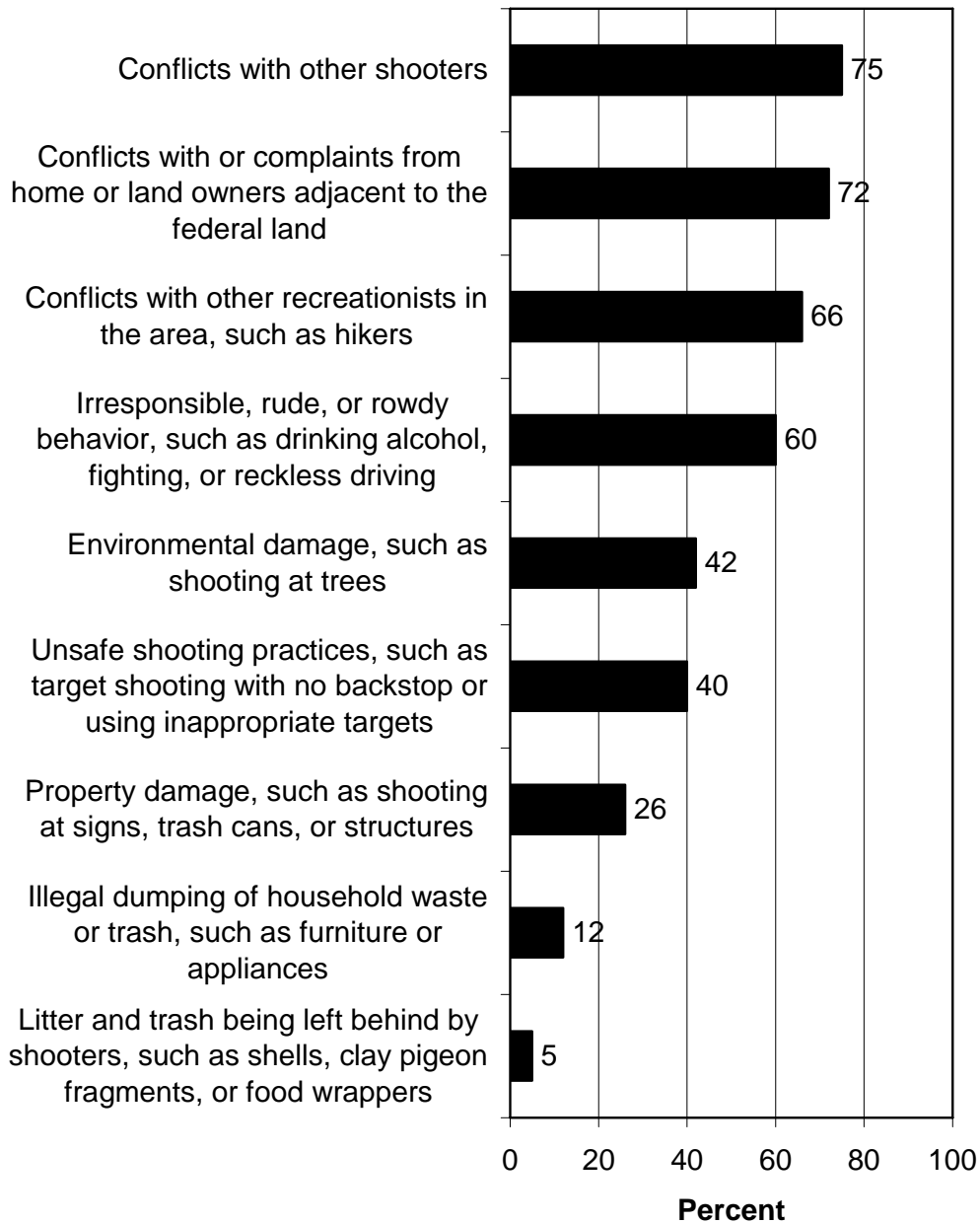
Percent who indicated that the the following issues are major problems at recreational shooting areas and ranges on federal lands. (Arizona)



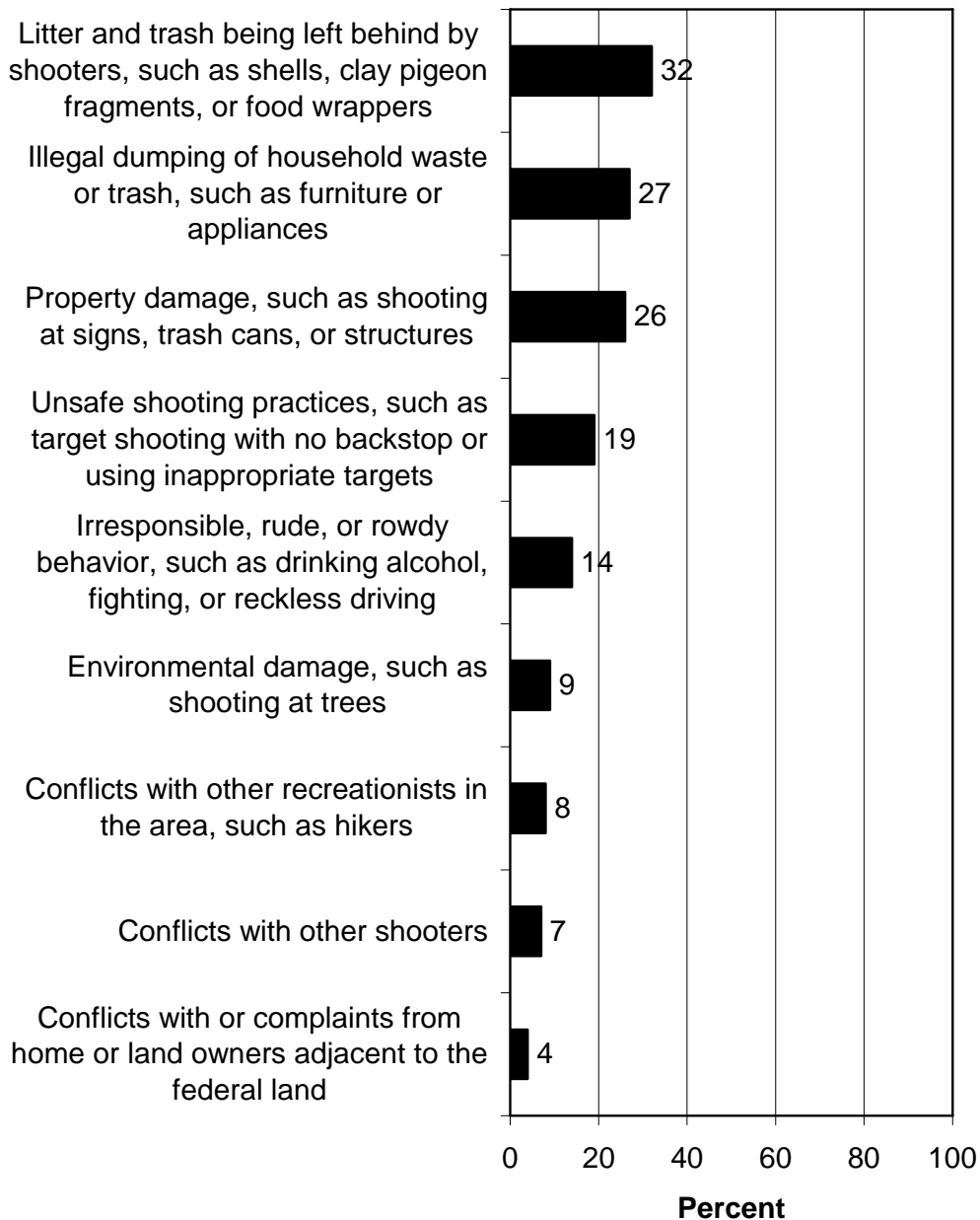
**Percent who indicated that the the following issues
are major or minor problems at recreational
shooting areas and ranges on federal lands.
(Arizona)**



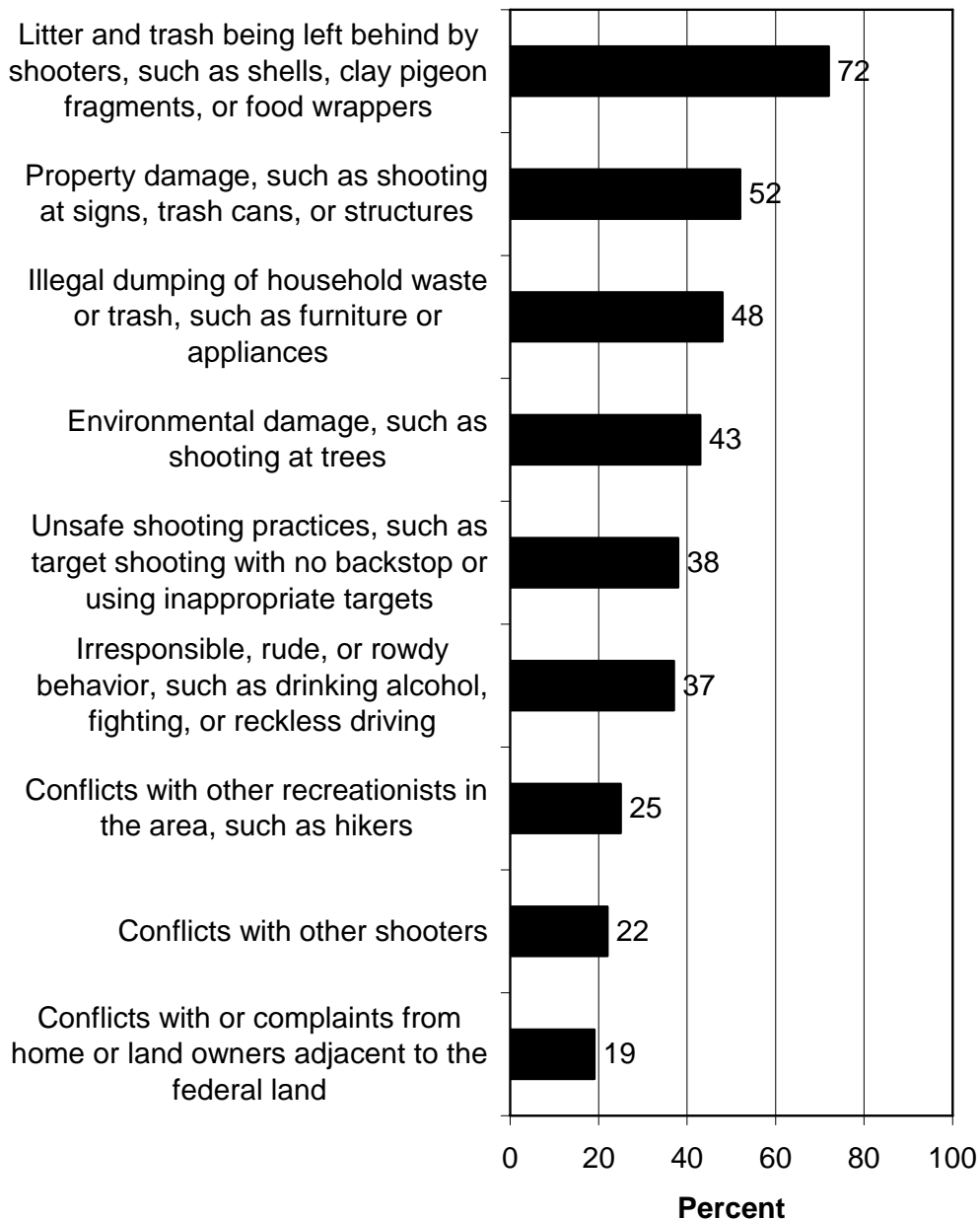
Percent who indicated that the the following issues are not at all problems at recreational shooting areas and ranges on federal lands. (Arizona)



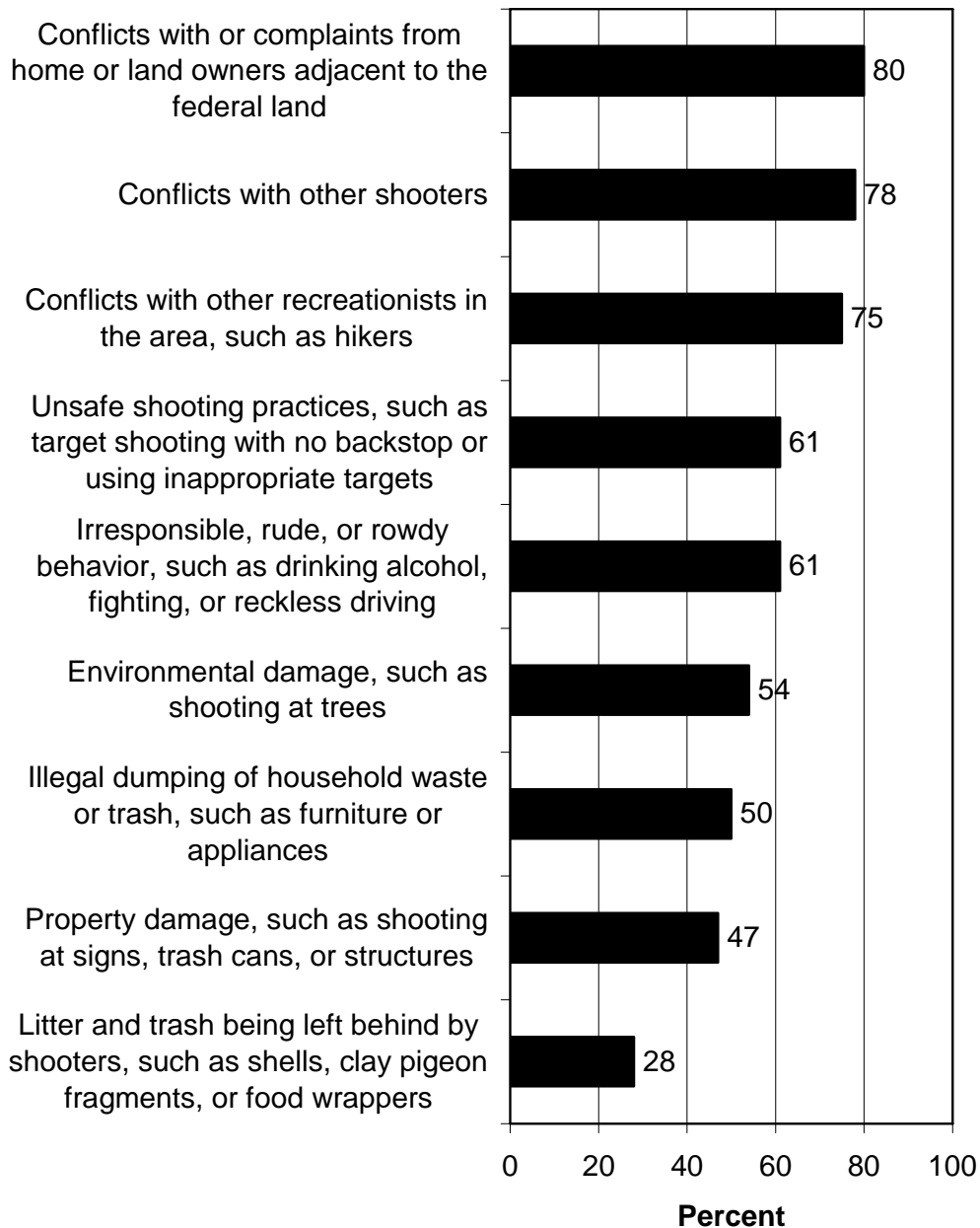
**Percent who indicated that the the following issues
are major problems at recreational shooting areas
and ranges on federal lands.
(Virginia)**



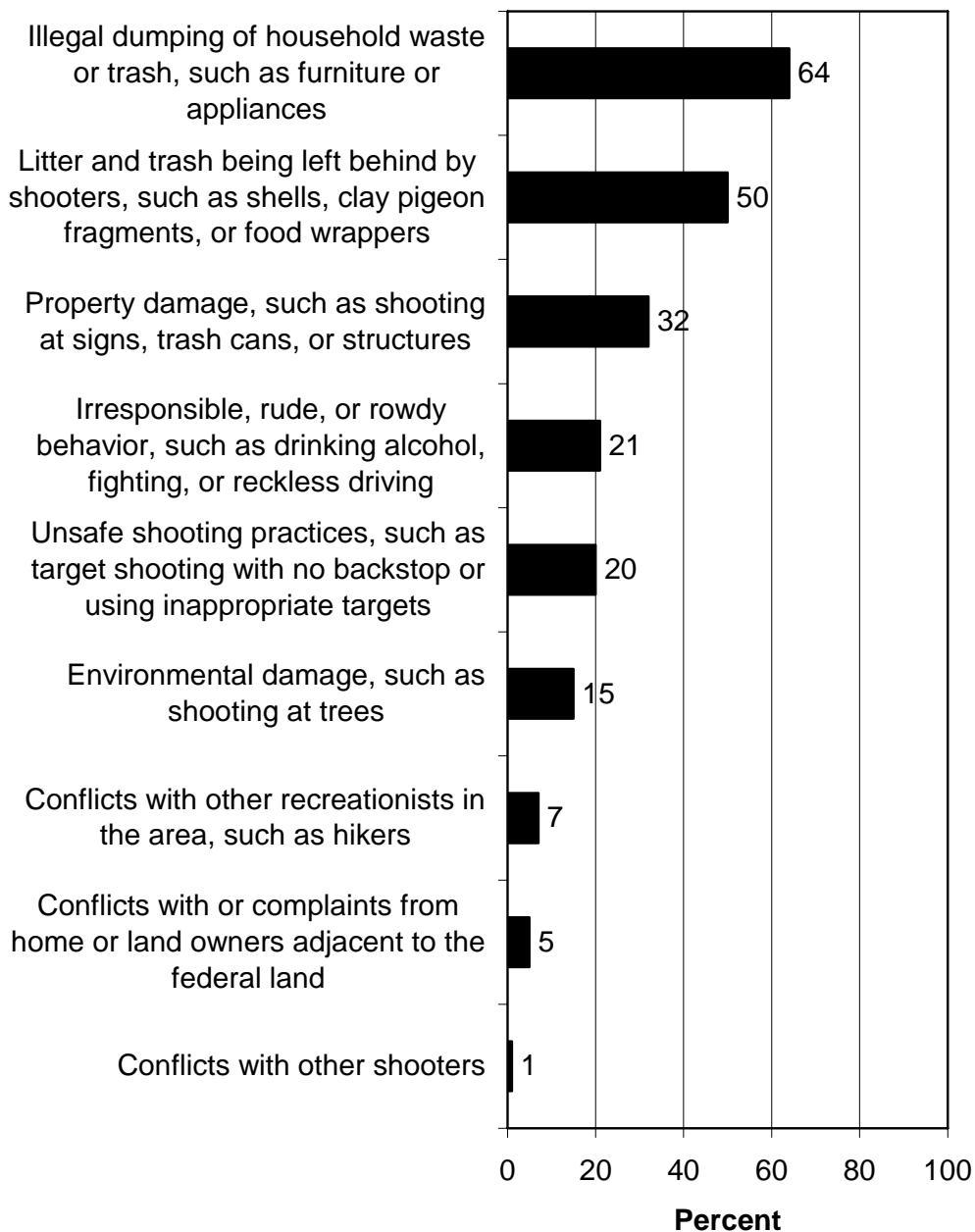
Percent who indicated that the the following issues are major or minor problems at recreational shooting areas and ranges on federal lands. (Virginia)



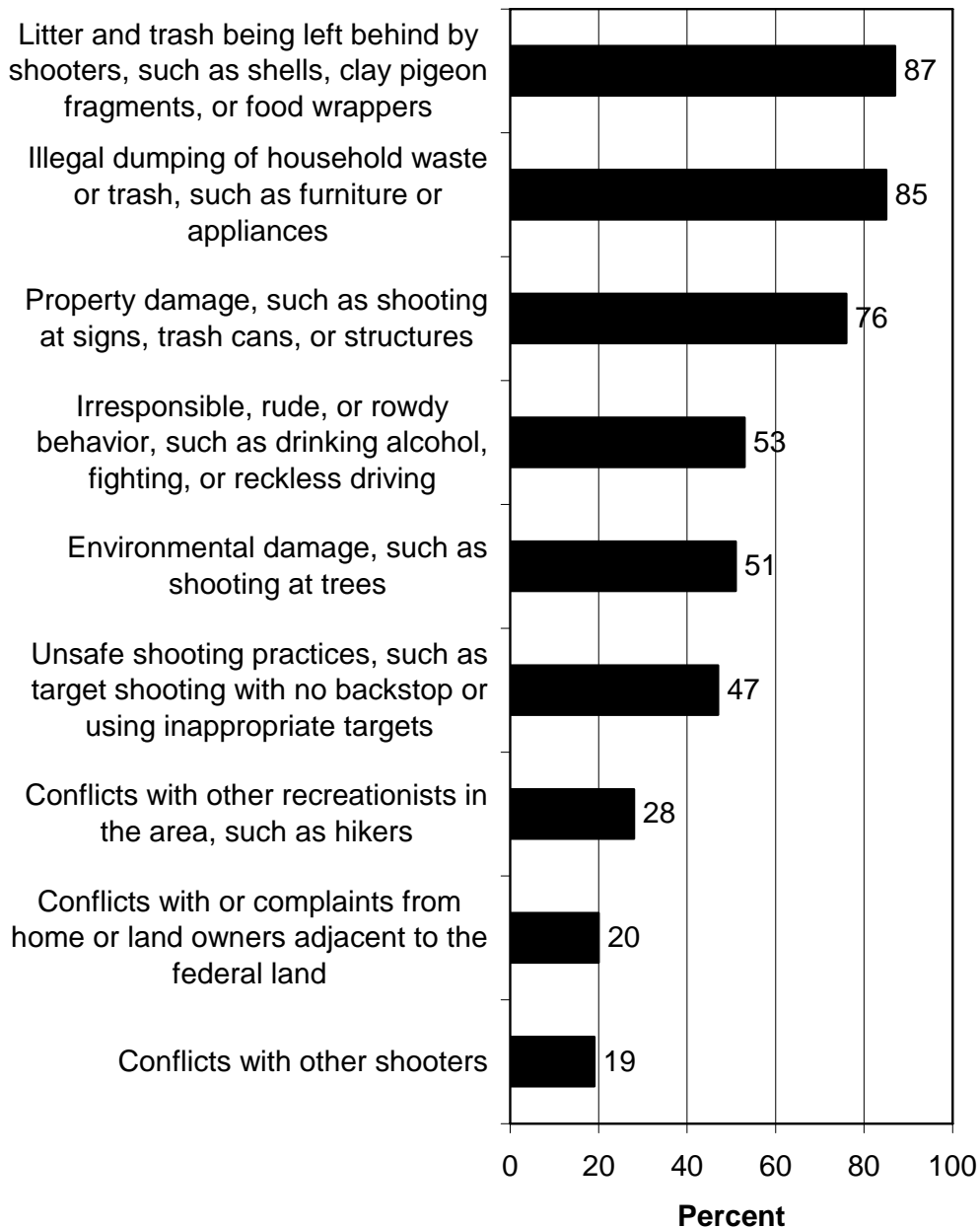
**Percent who indicated that the the following issues
are not at all problems at recreational shooting
areas and ranges on federal lands.
(Virginia)**



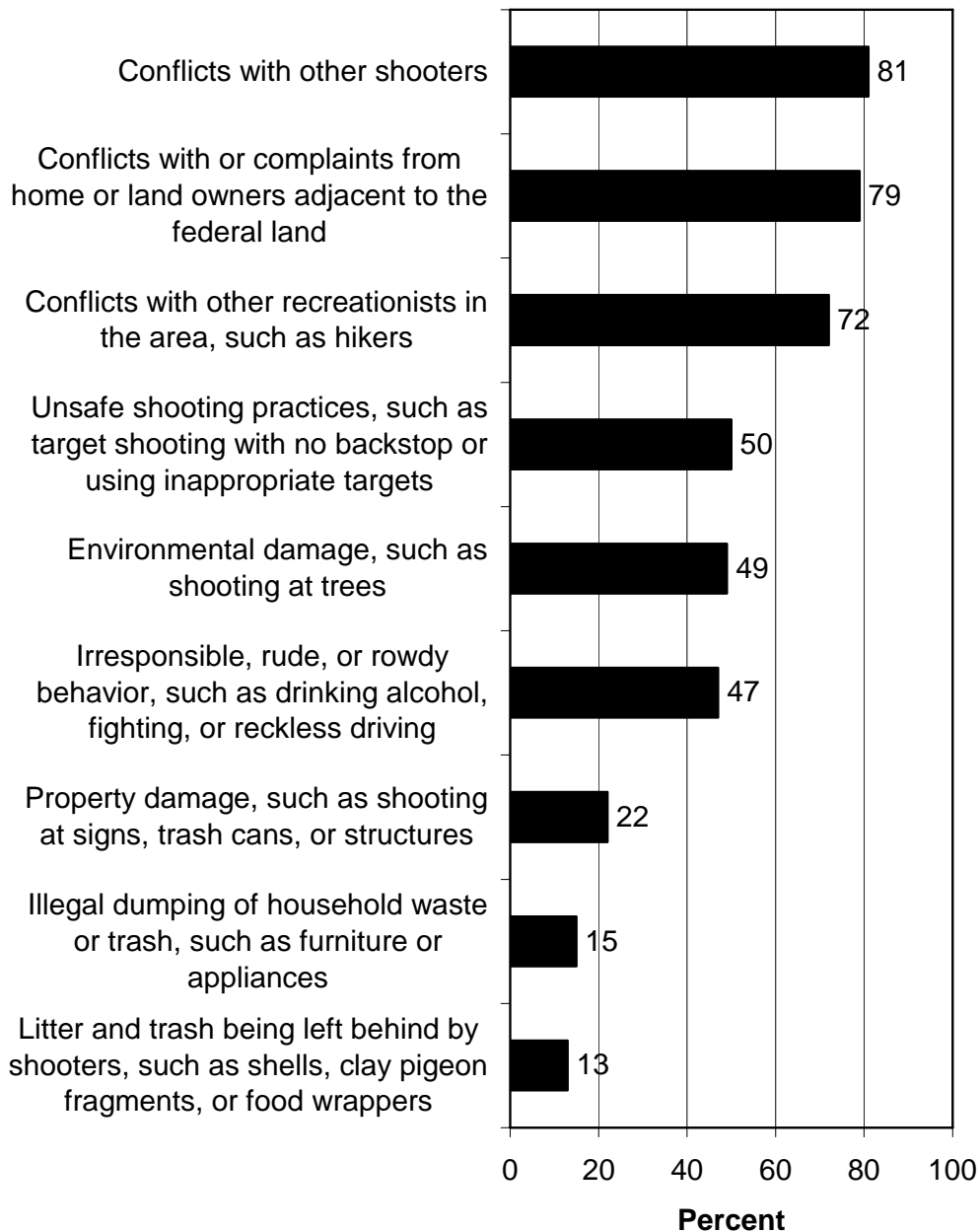
**Percent who indicated that the the following issues
are major problems at recreational shooting areas
and ranges on federal lands.
(Oregon)**



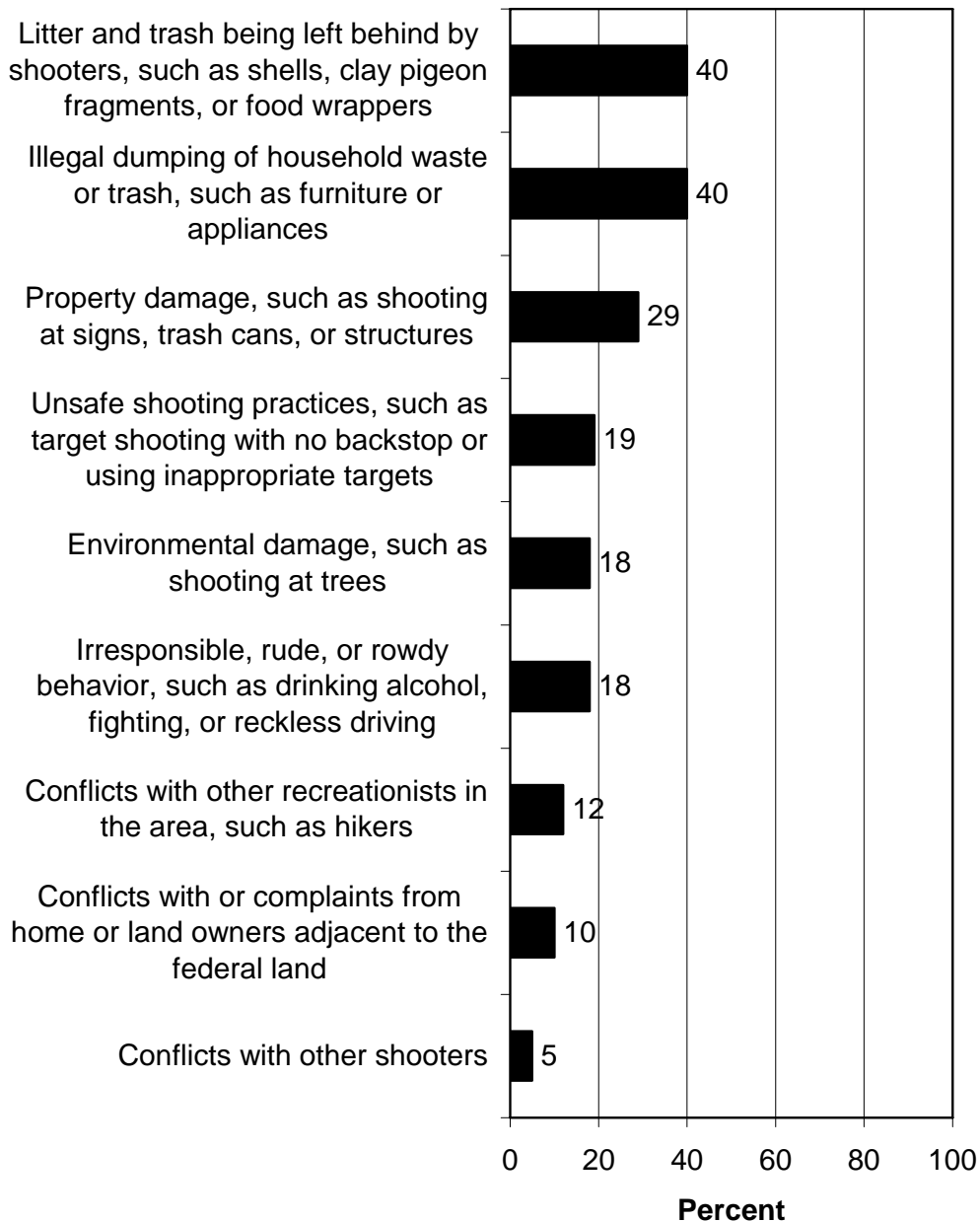
**Percent who indicated that the the following issues
are major or minor problems at recreational
shooting areas and ranges on federal lands.
(Oregon)**



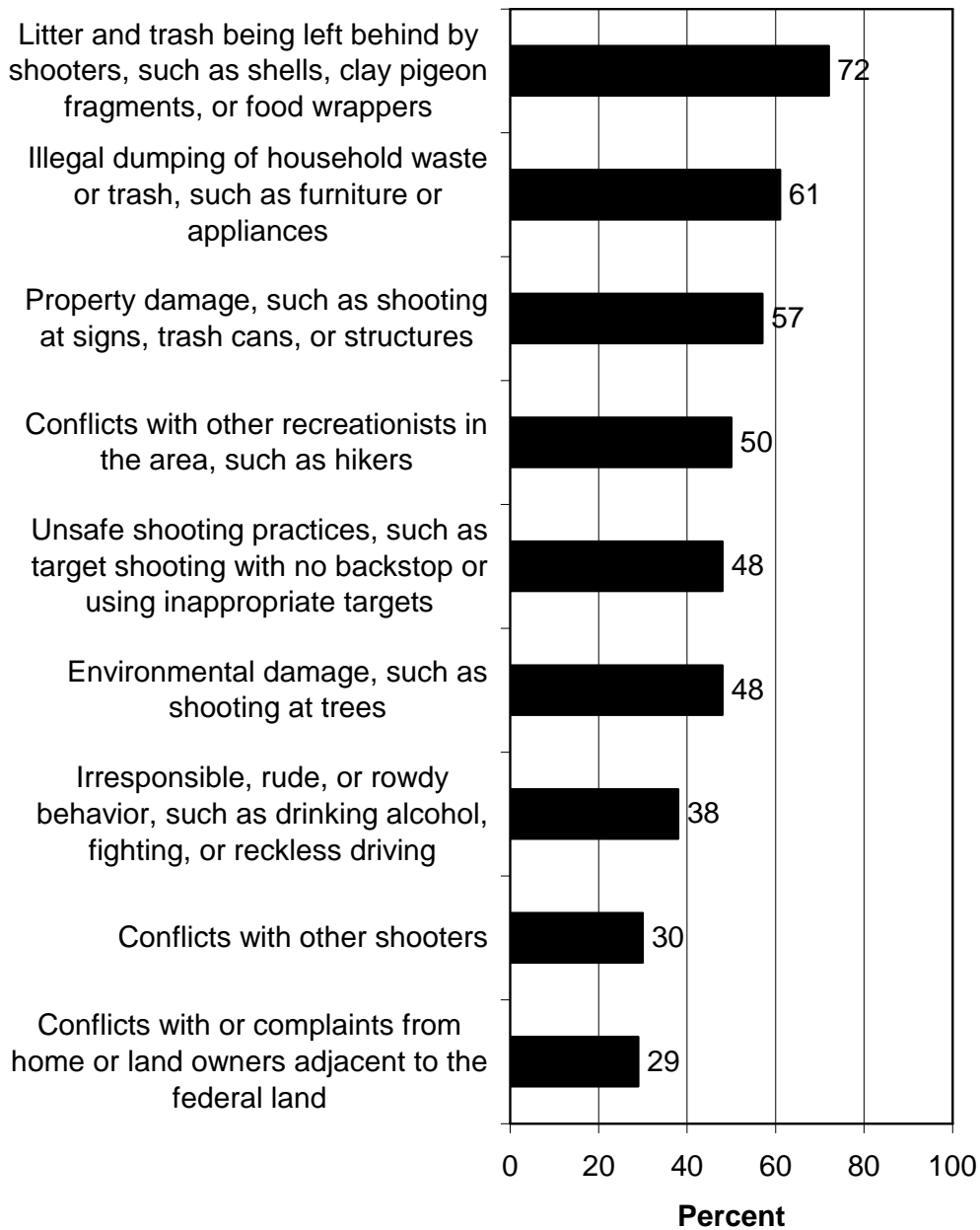
Percent who indicated that the the following issues are not at all problems at recreational shooting areas and ranges on federal lands. (Oregon)



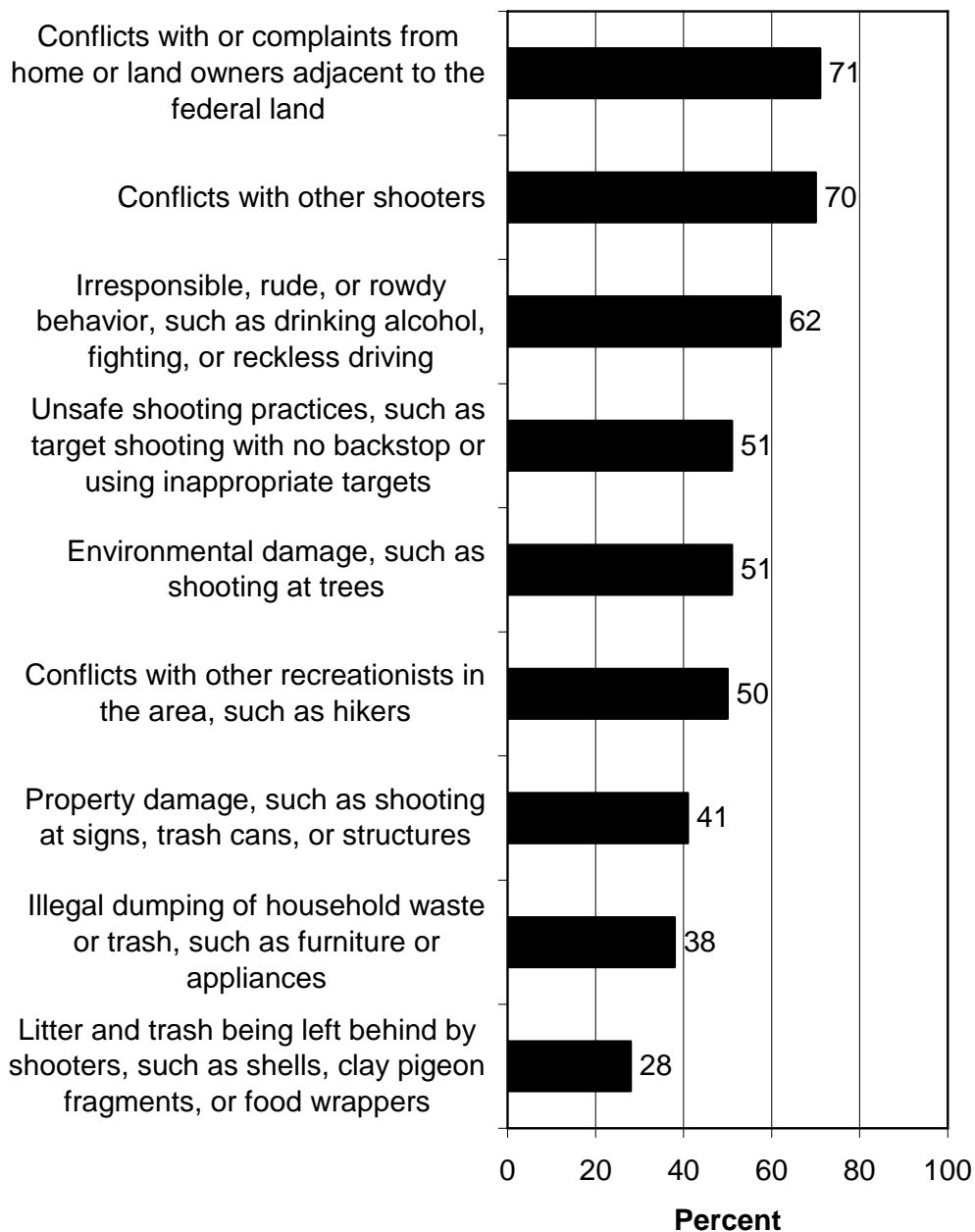
**Percent who indicated that the the following issues
are major problems at recreational shooting areas
and ranges on federal lands.
(Colorado)**



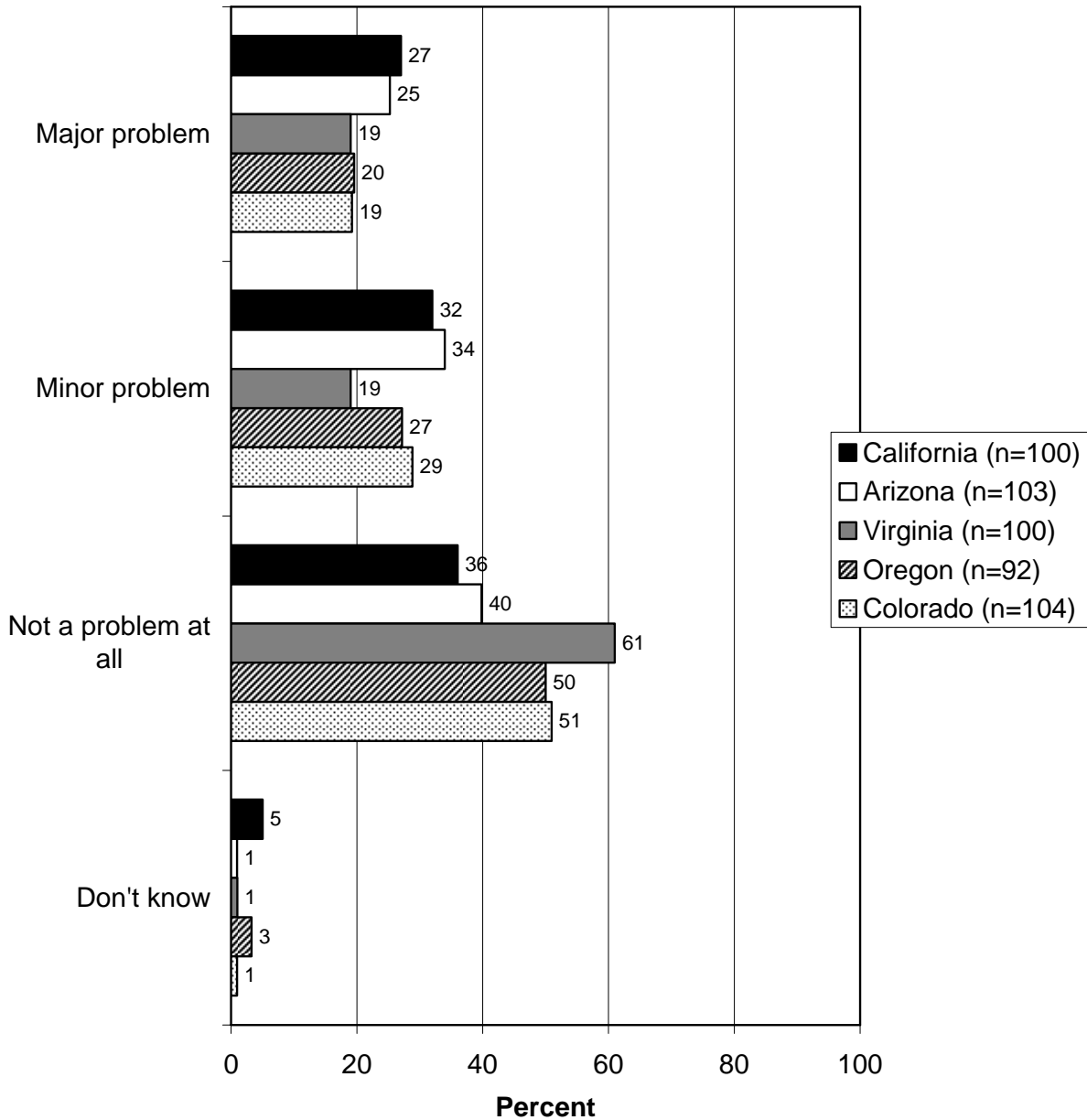
Percent who indicated that the the following issues are major or minor problems at recreational shooting areas and ranges on federal lands. (Colorado)



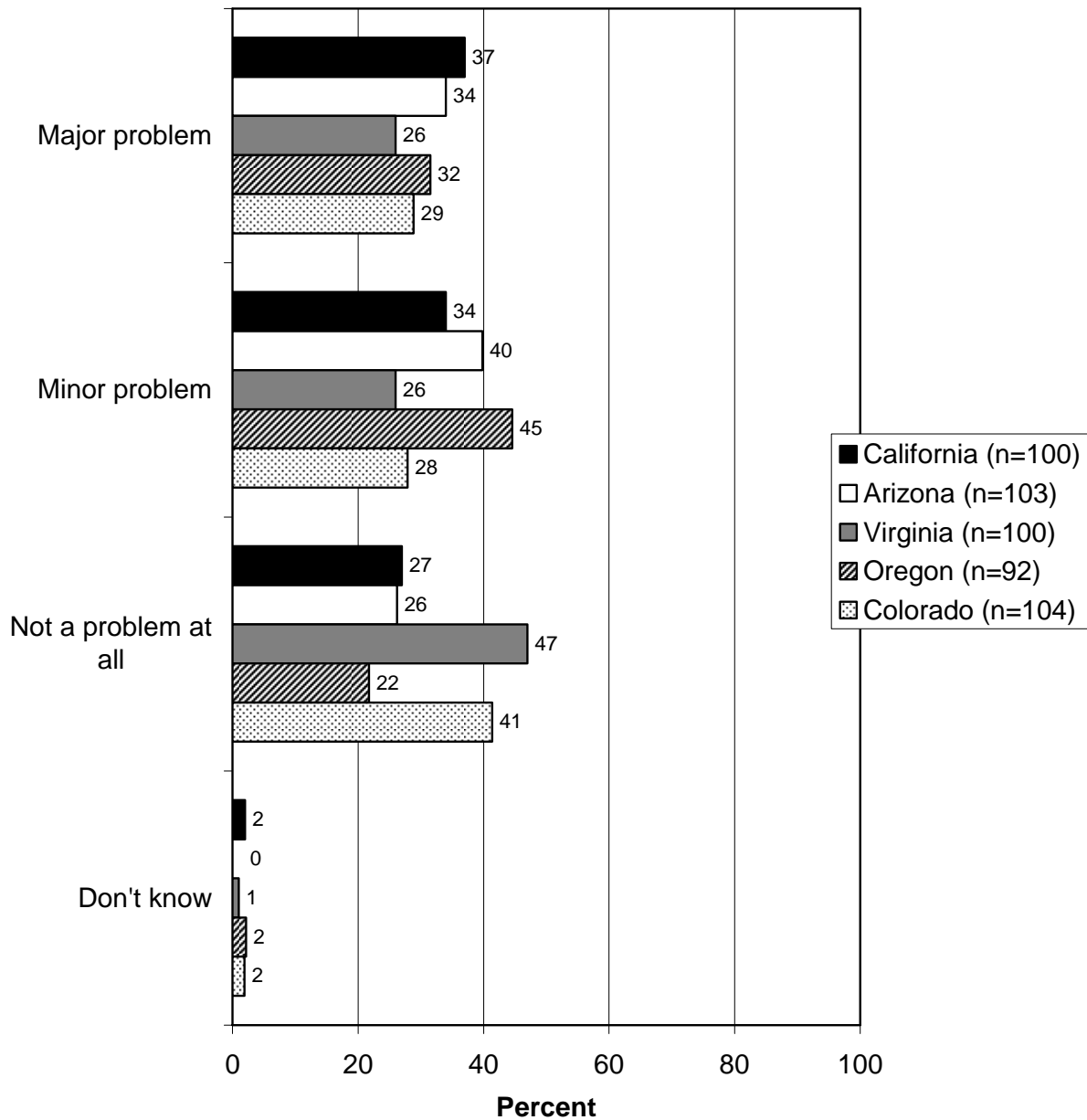
**Percent who indicated that the the following issues
are not at all problems at recreational shooting
areas and ranges on federal lands.
(Colorado)**



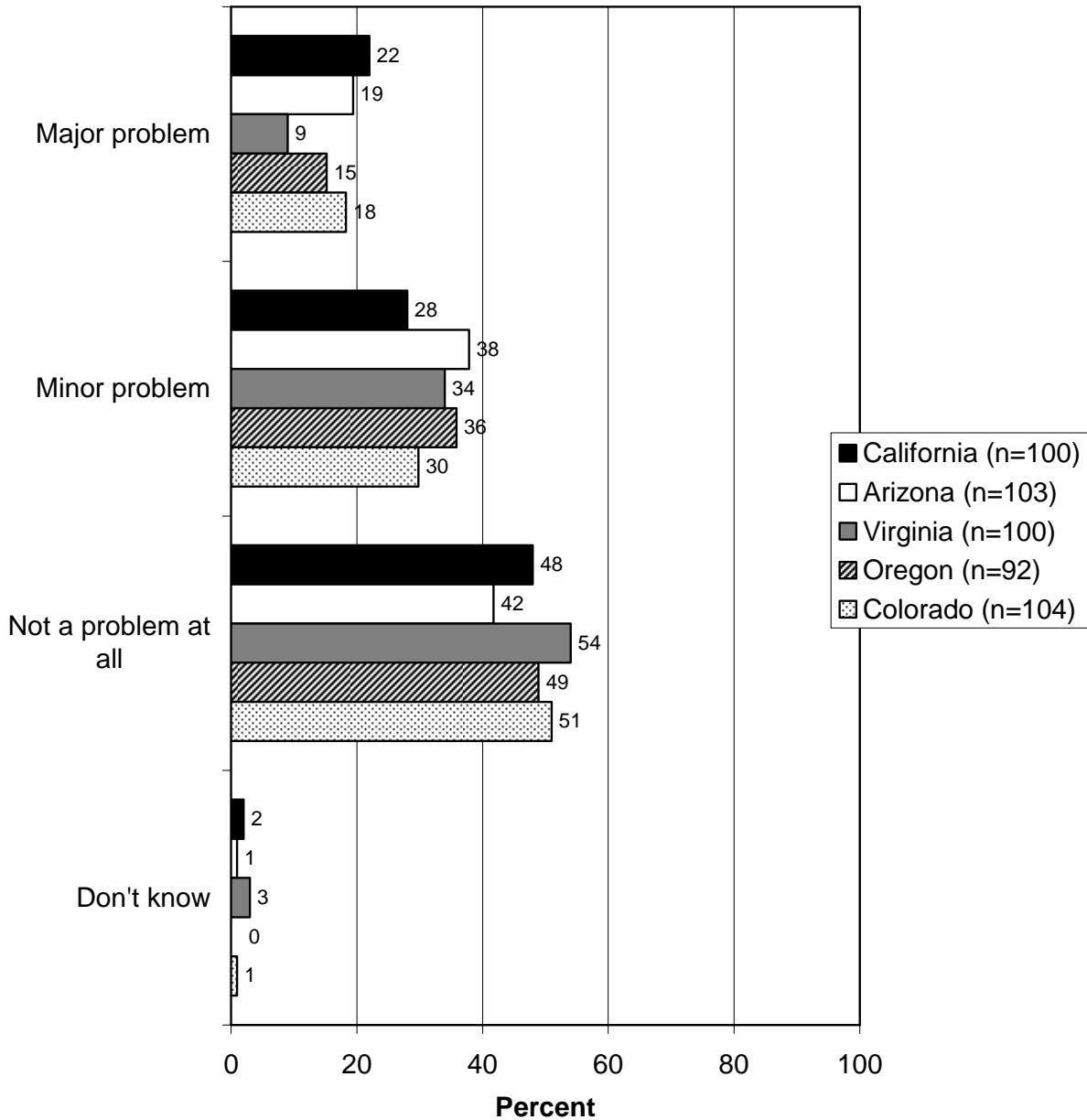
Q91. How about unsafe shooting practices, such as target shooting with no backstop or using inappropriate targets? Would you say it is a major problem, a minor problem, or not a problem at all?



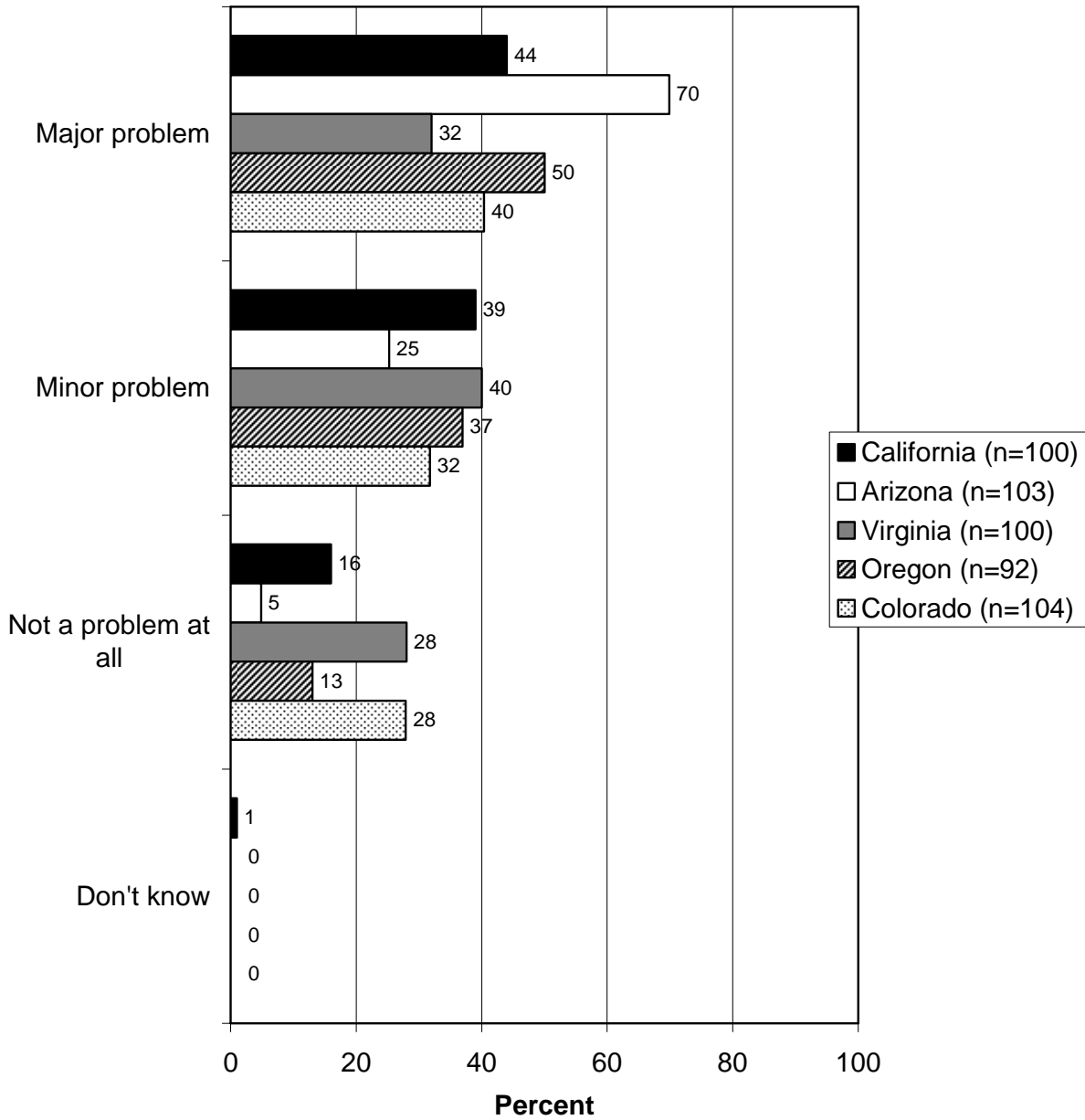
Q92. How about property damage, such as shooting at signs, trash cans, or structures? Would you say it is a major problem, a minor problem, or not a problem at all?



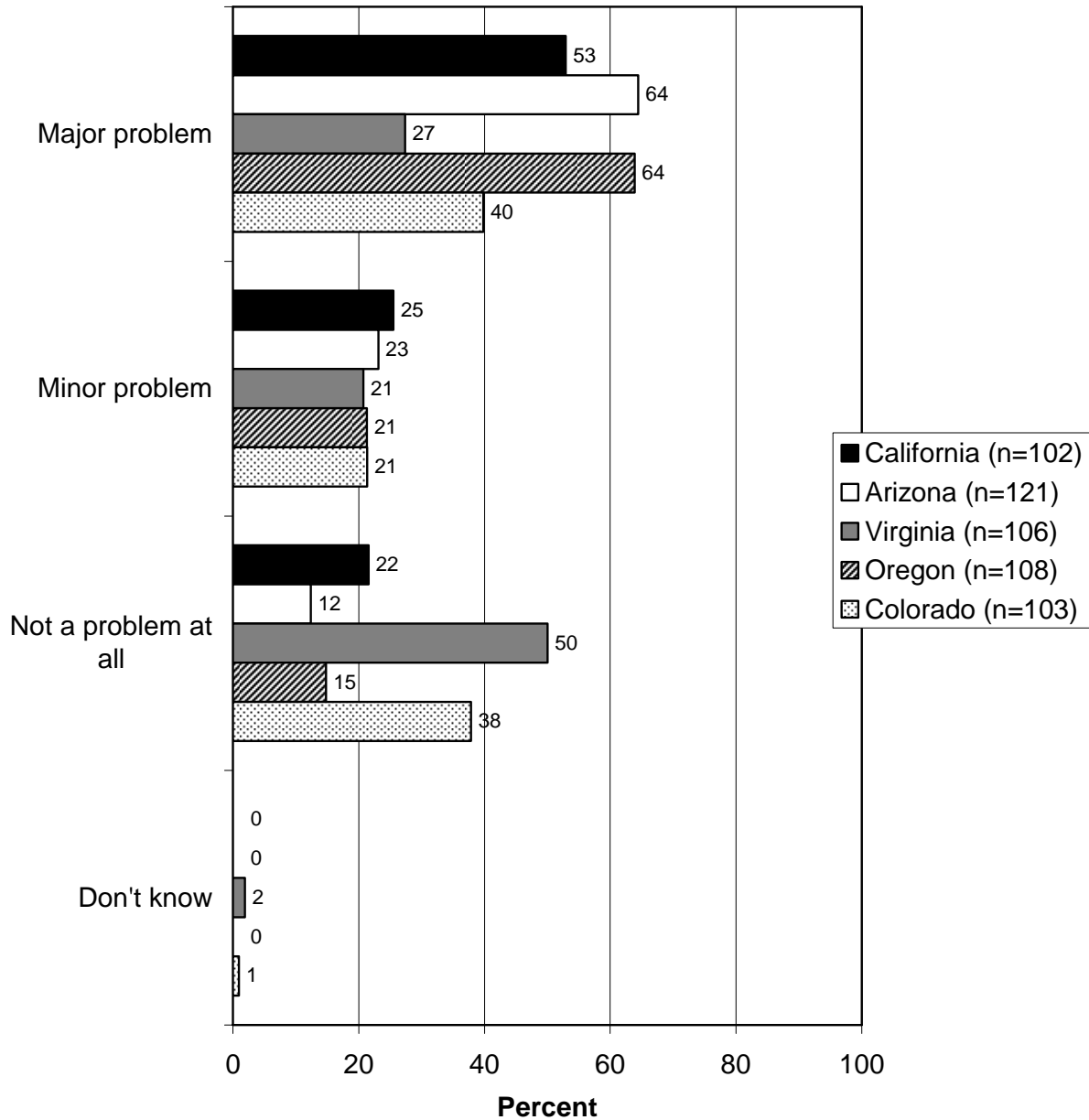
Q93. How about environmental damage, such as shooting at trees? Would you say it is a major problem, a minor problem, or not a problem at all?



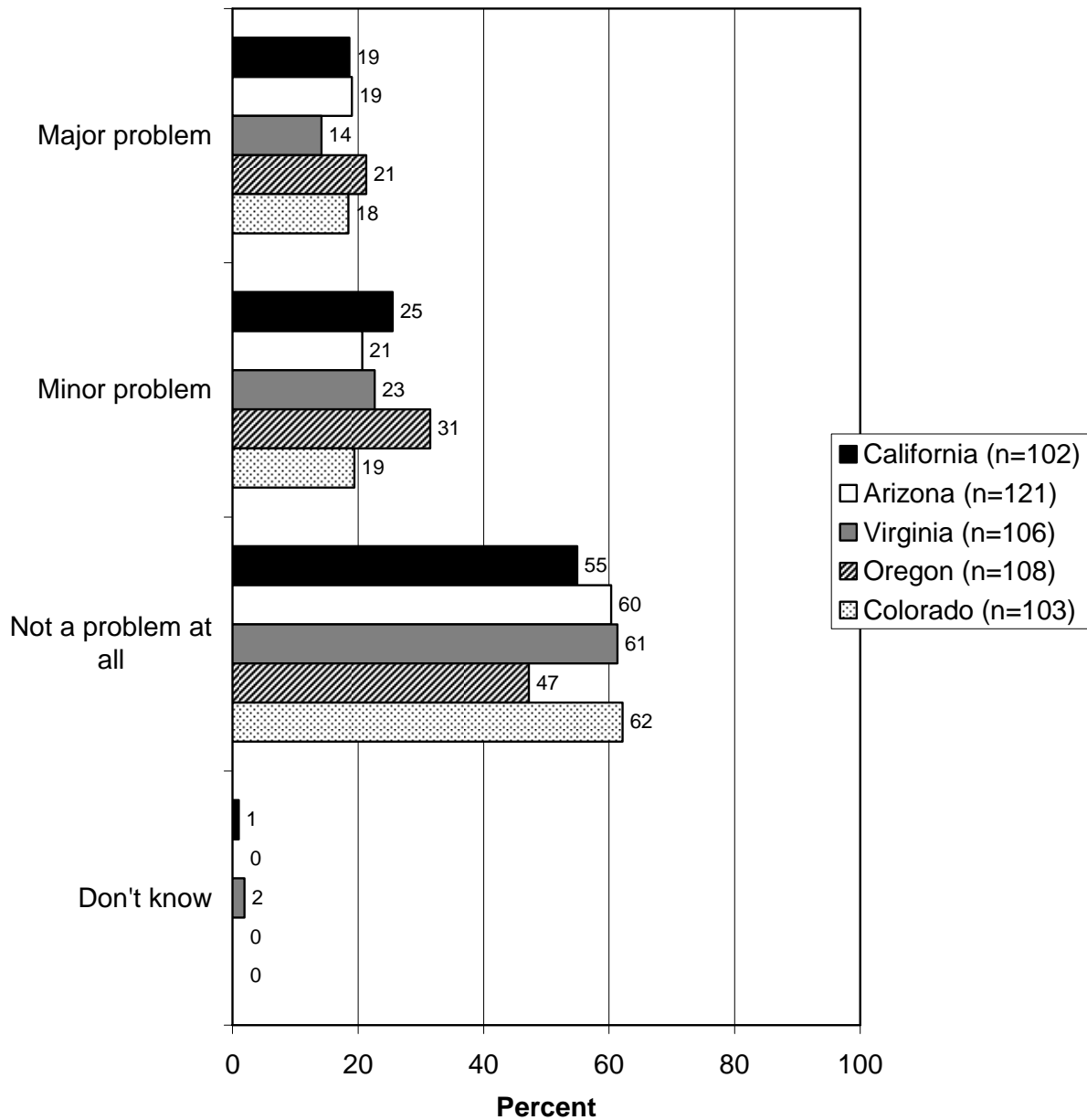
Q94. How about litter and trash being left behind by shooters, such as shells, clay pigeon fragments, or food wrappers? Would you say it is a major problem, a minor problem, or not a problem at all?



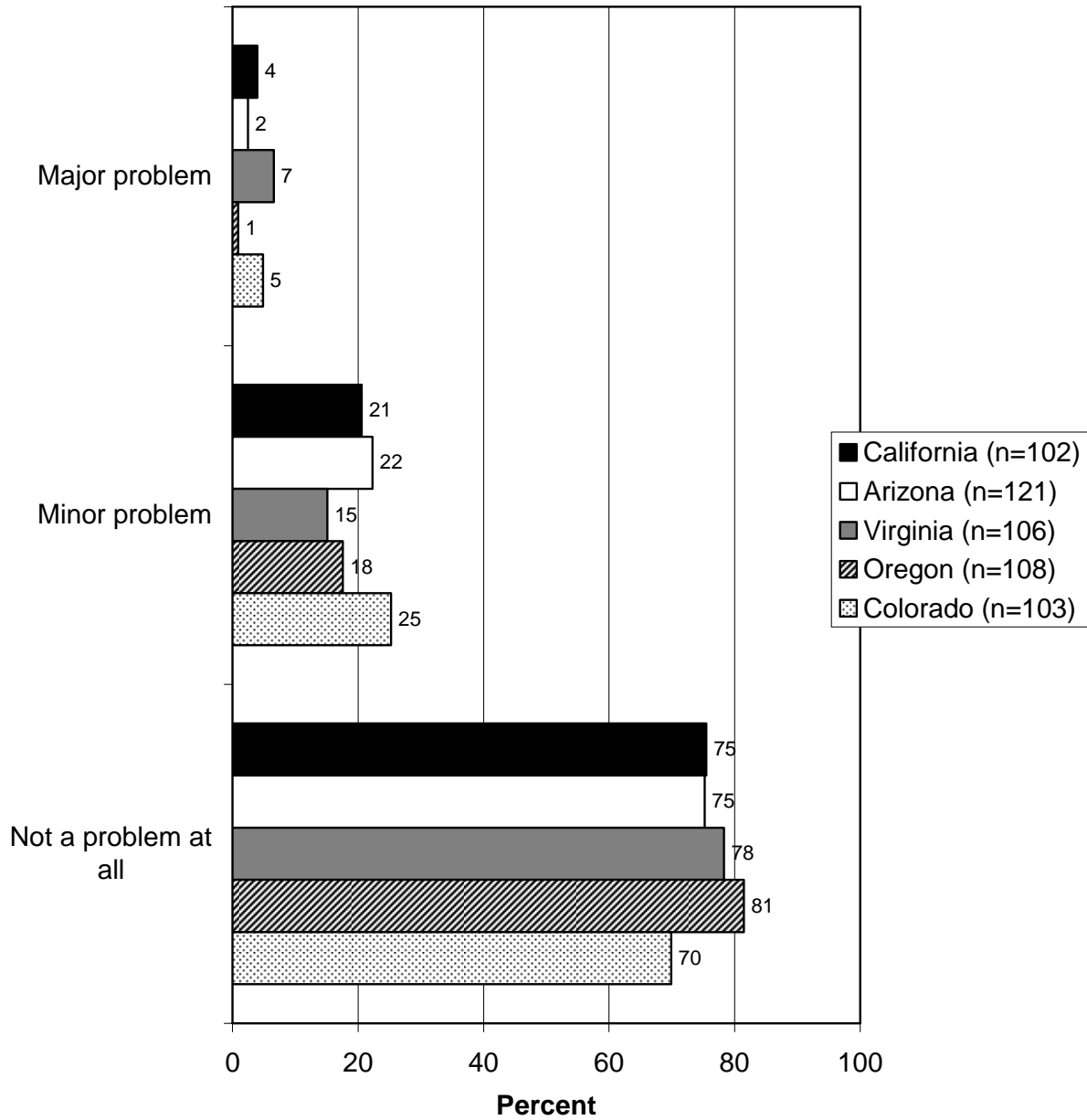
**Q95. How about illegal dumping of household waste or trash, such as furniture or appliances?
Would you say it is a major problem, a minor problem, or not a problem at all?**



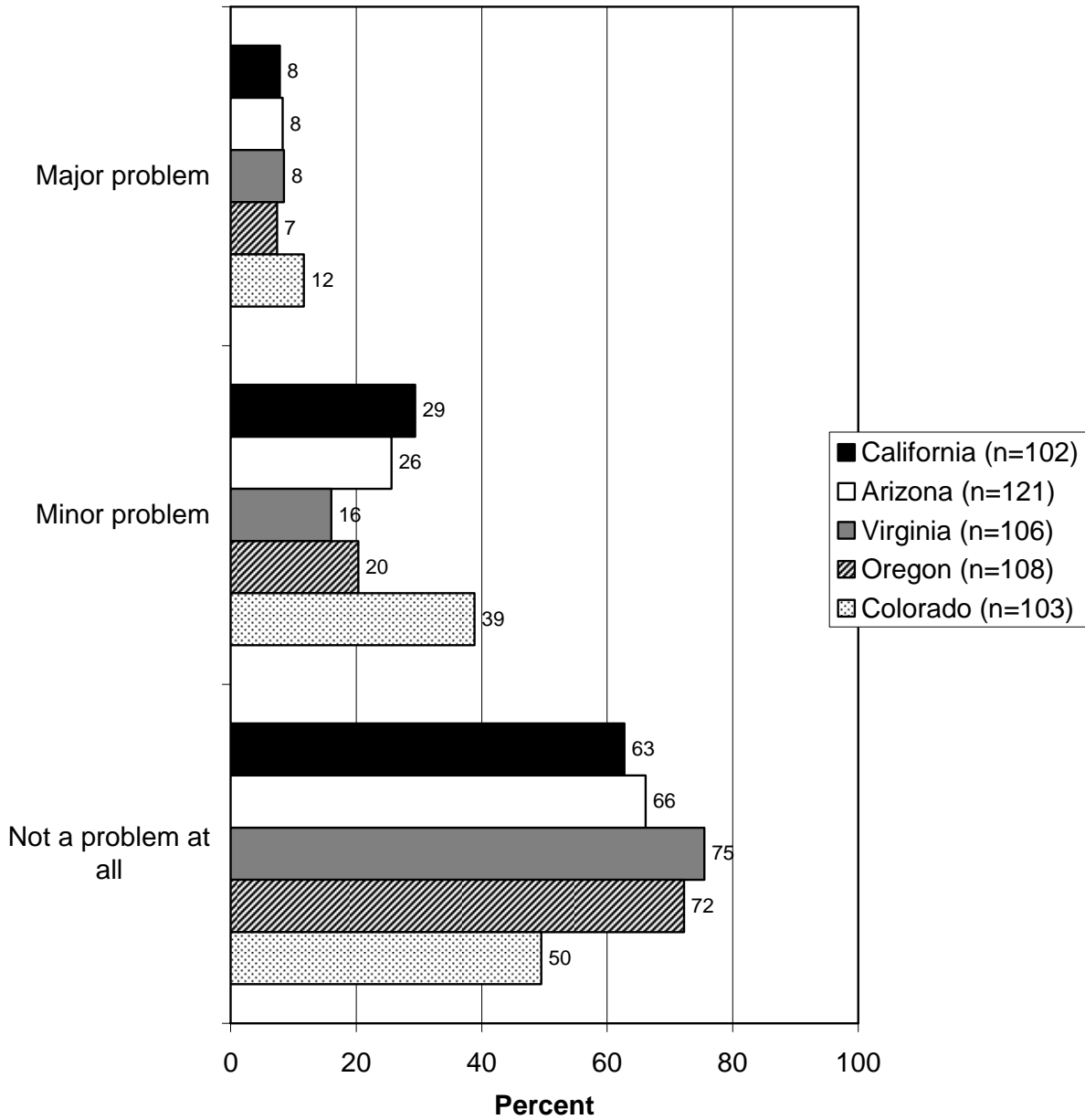
Q96. How about irresponsible, rude, or rowdy behavior, such as drinking alcohol, fighting, or reckless driving? Would you say it is a major problem, a minor problem, or not a problem at all?



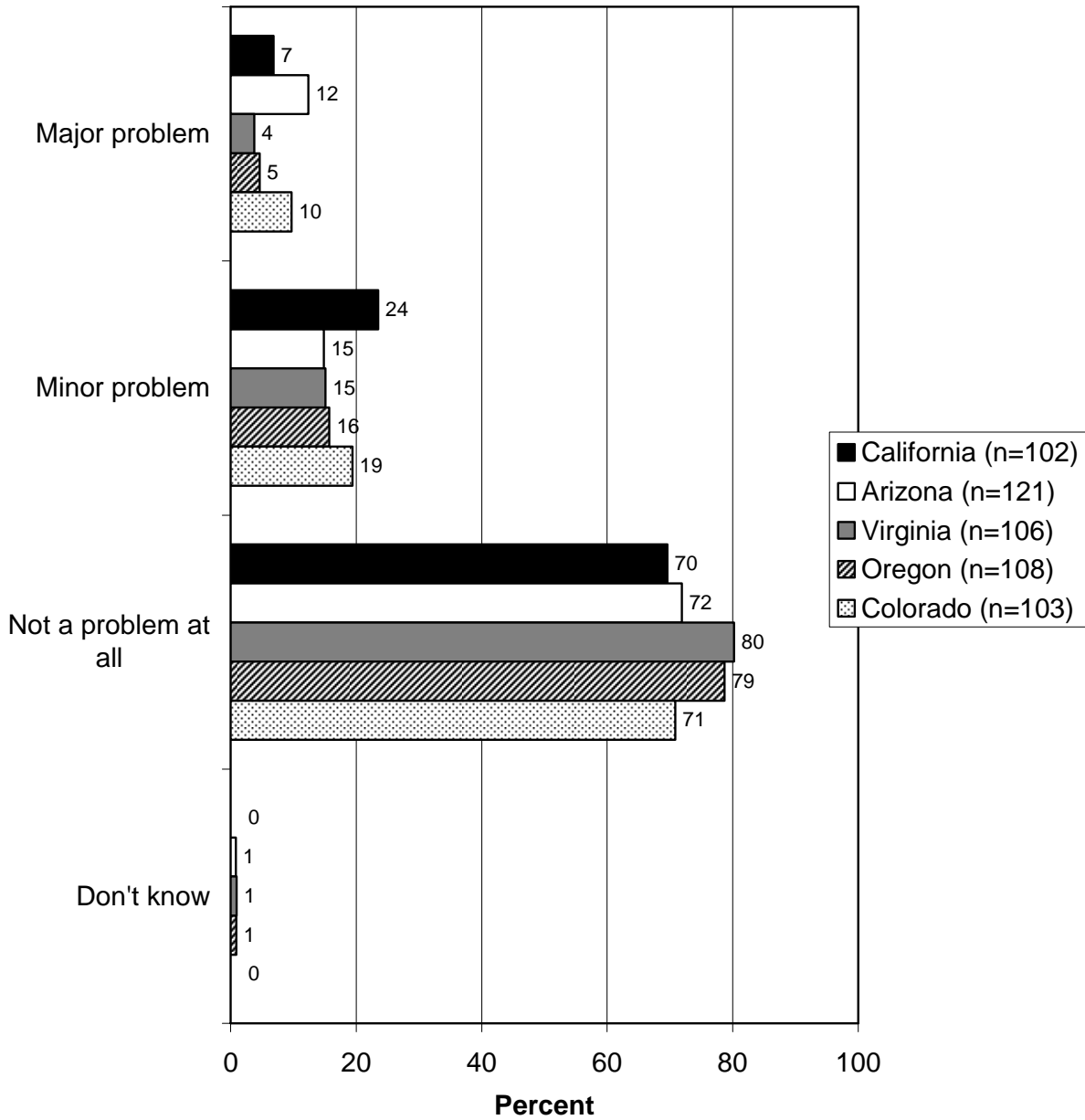
**Q97. How about conflicts with other shooters?
Would you say it is a major problem, a minor
problem, or not a problem at all?**



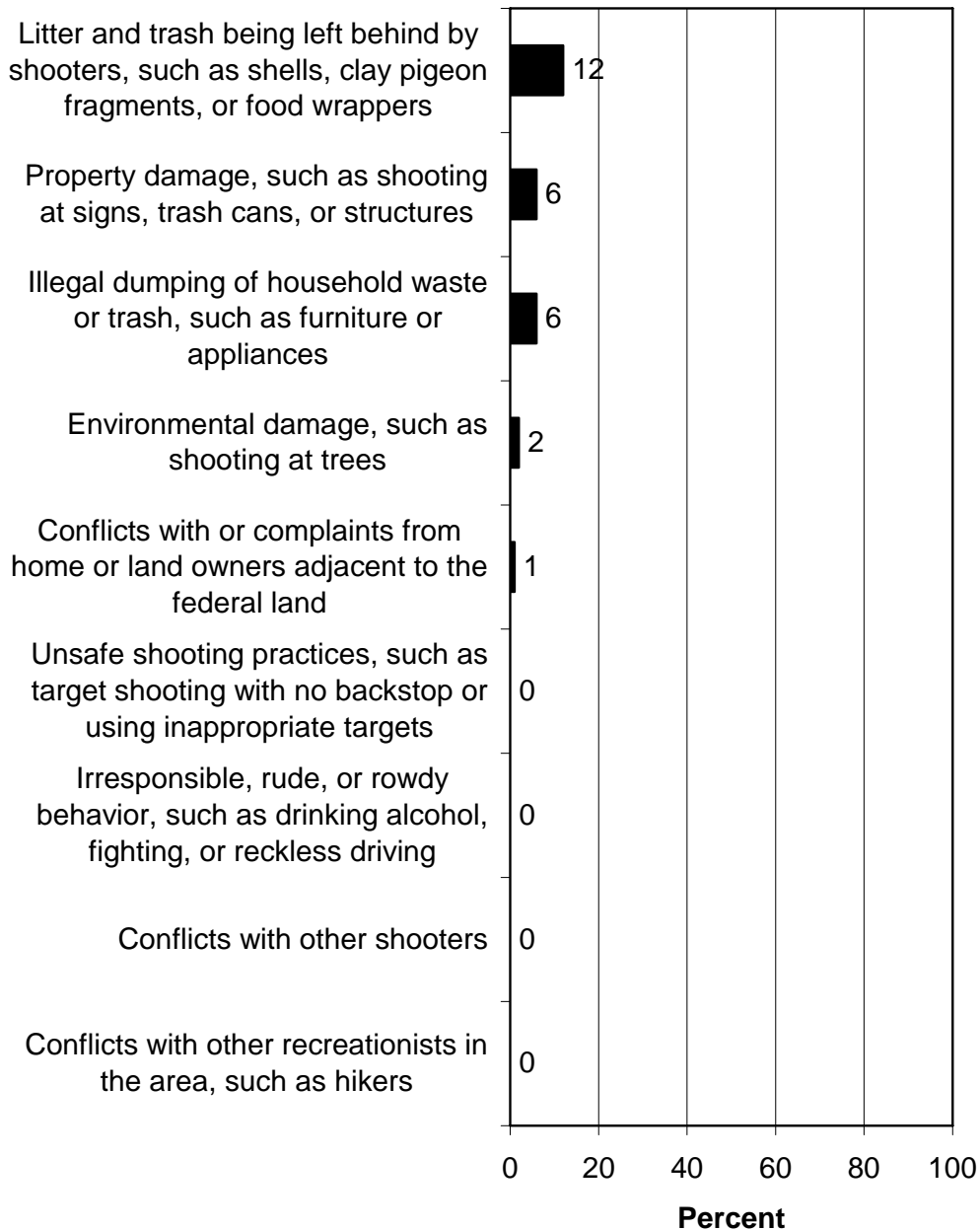
Q98. How about conflicts with other recreationists in the area, such as hikers? Would you say it is a major problem, a minor problem, or not a problem at all?



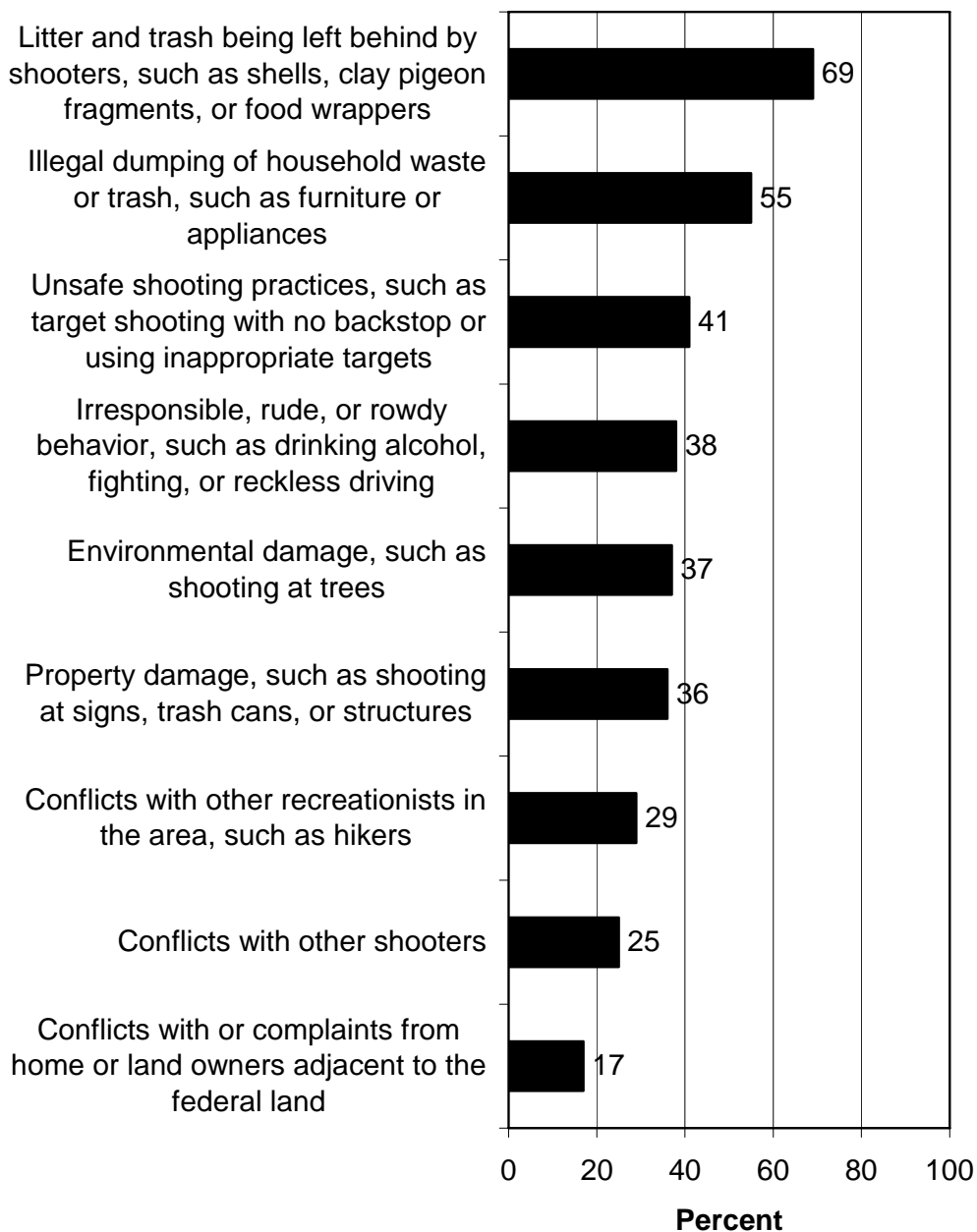
**Q99. How about conflicts with or complaints from home or land owners adjacent to the federal land?
Would you say it is a major problem, a minor problem, or not a problem at all?**



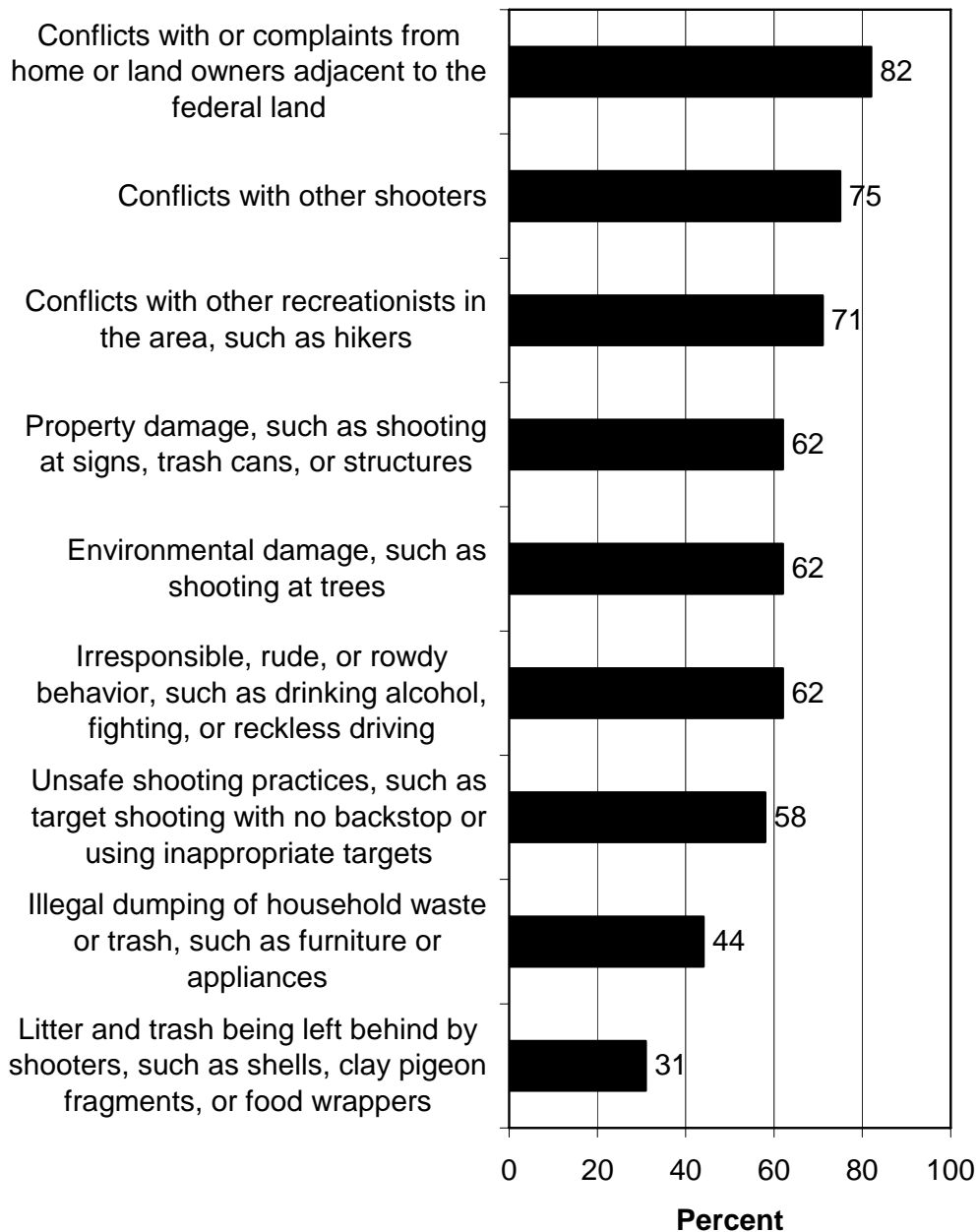
**Percent who have always personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years.
(California)**



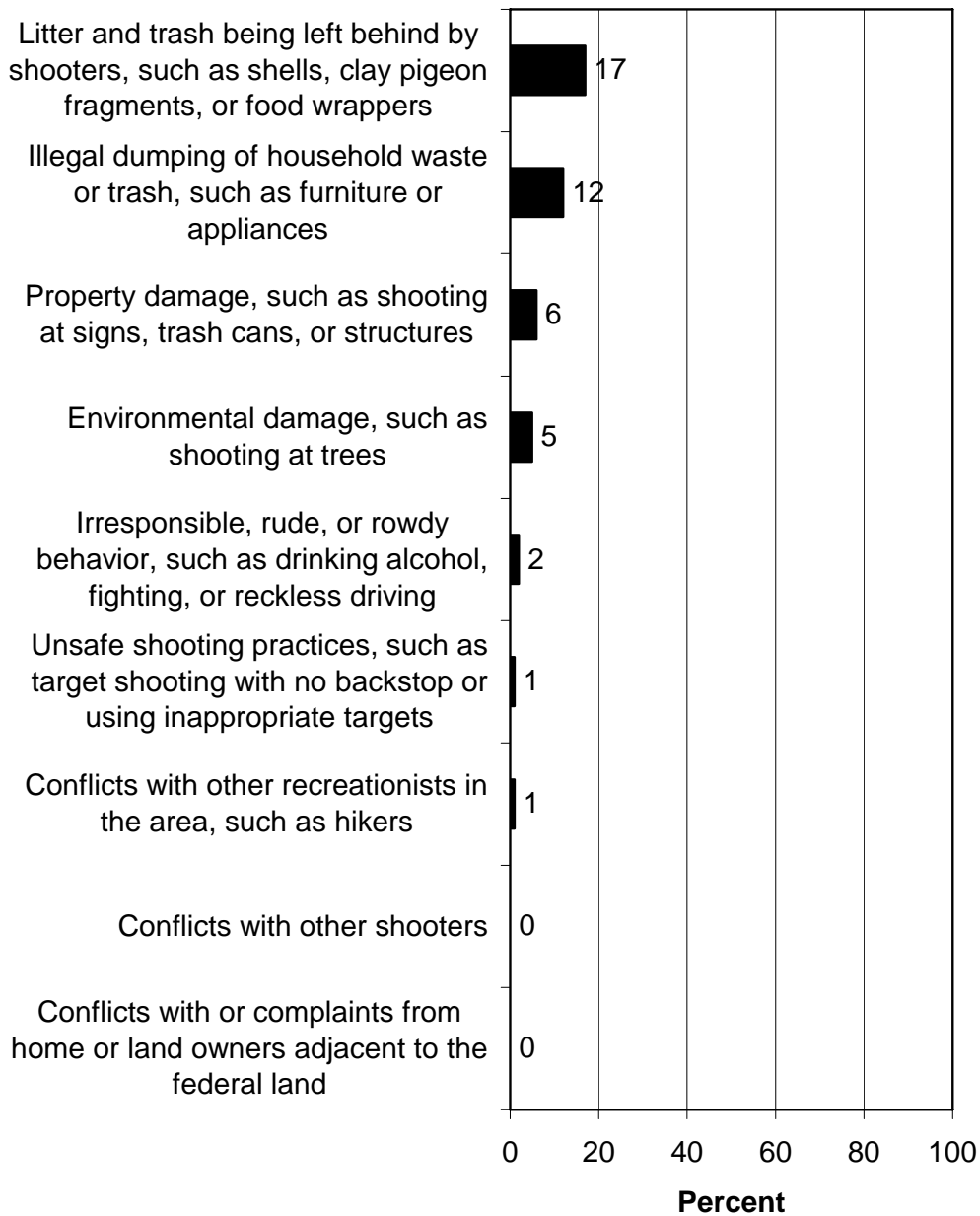
**Percent who have always, often, sometimes, or rarely (i.e., not never) personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years.
(California)**



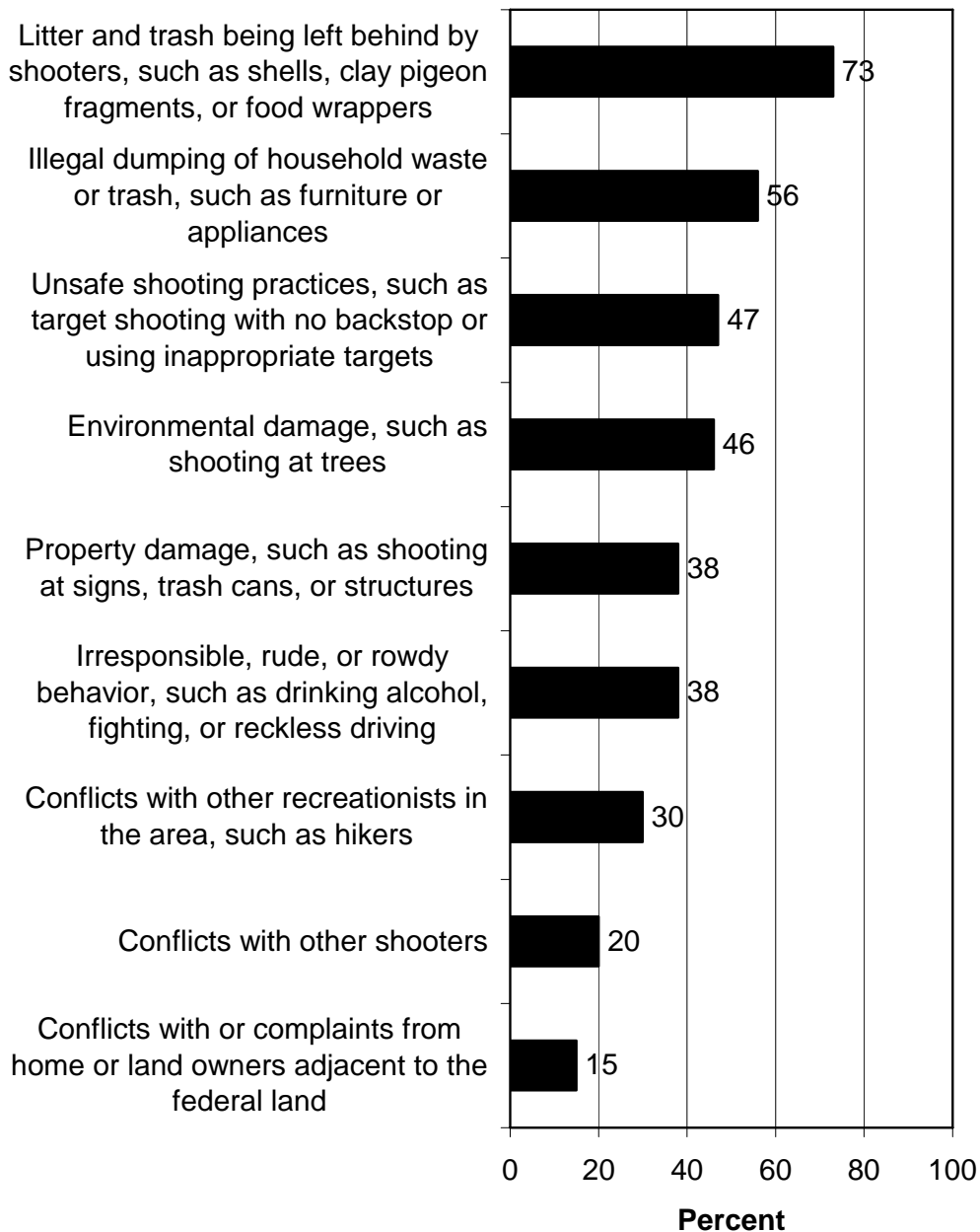
Percent of those who have never personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years. (California)



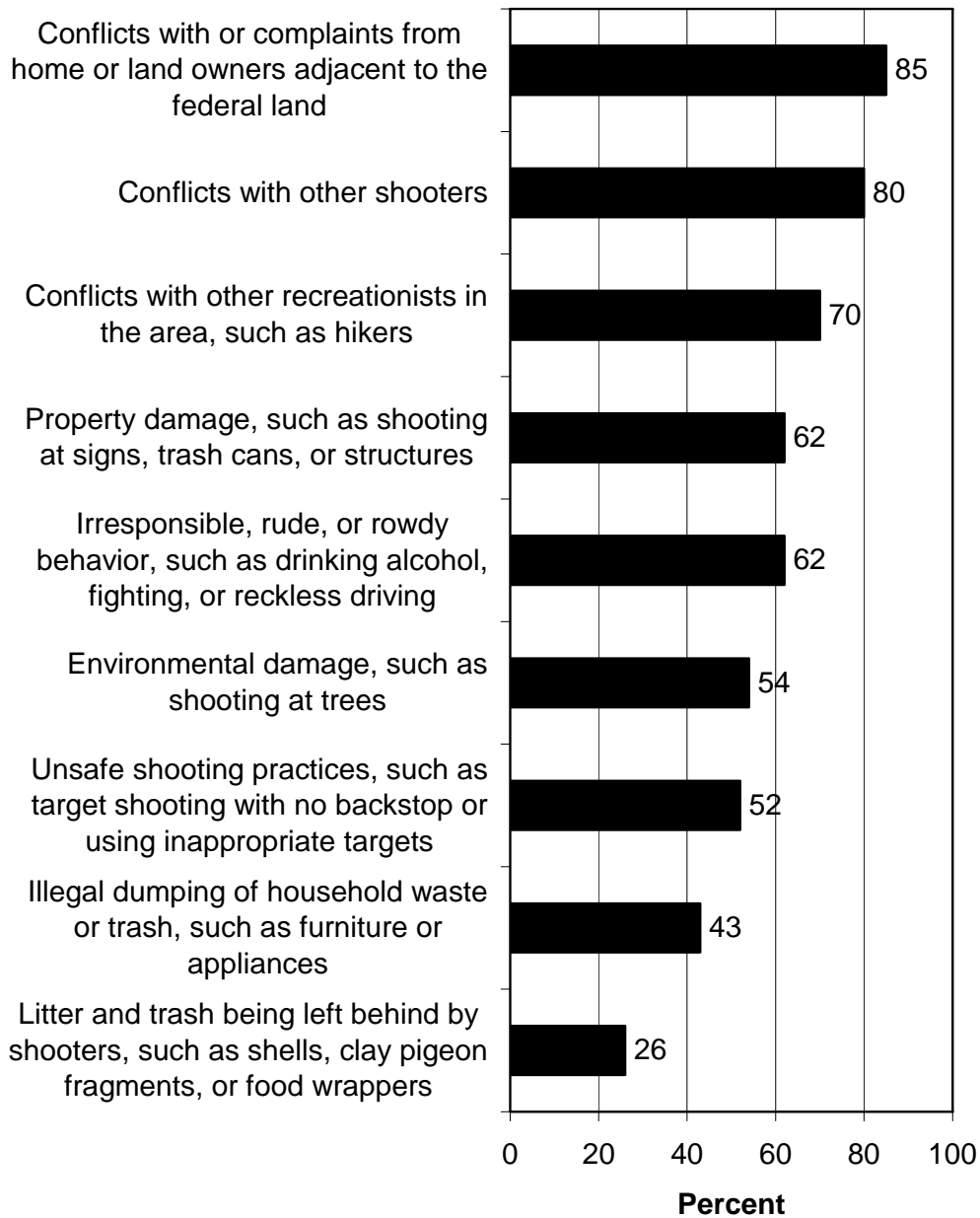
**Percent who have always personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years.
(Arizona)**



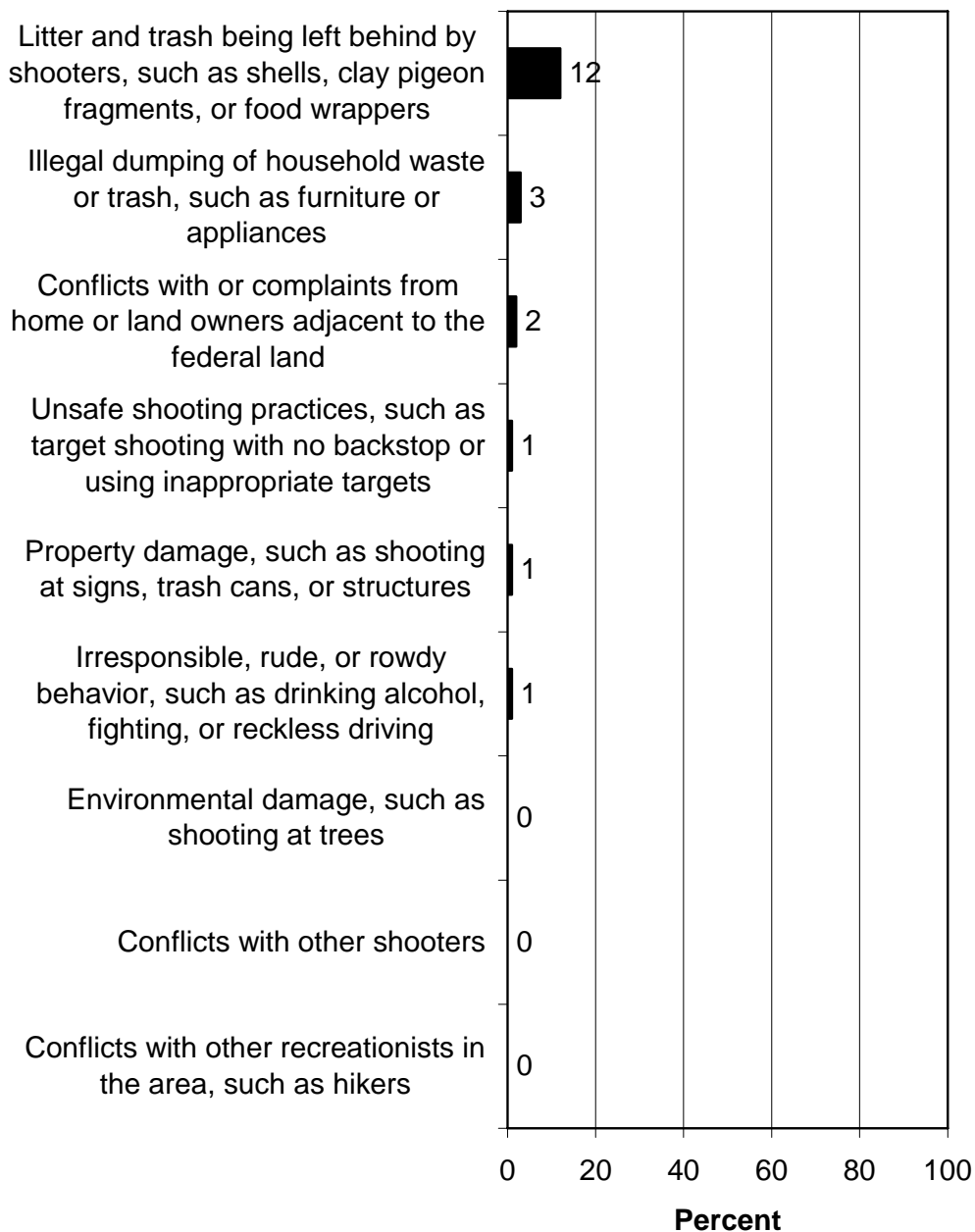
**Percent who have always, often, sometimes, or rarely (i.e., *not* never) personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years.
(Arizona)**



Percent of those who have never personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years. (Arizona)



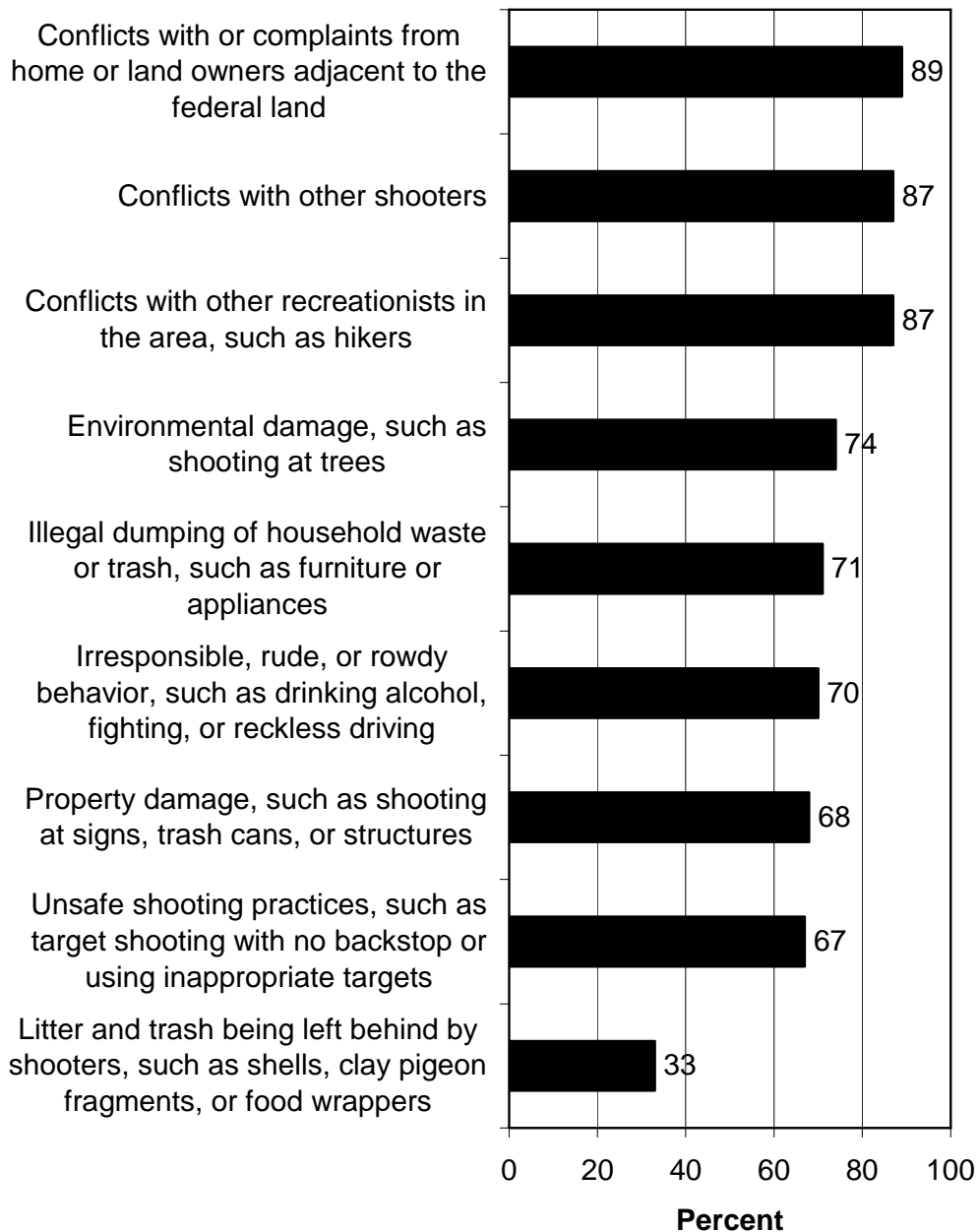
**Percent who have always personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years.
(Virginia)**



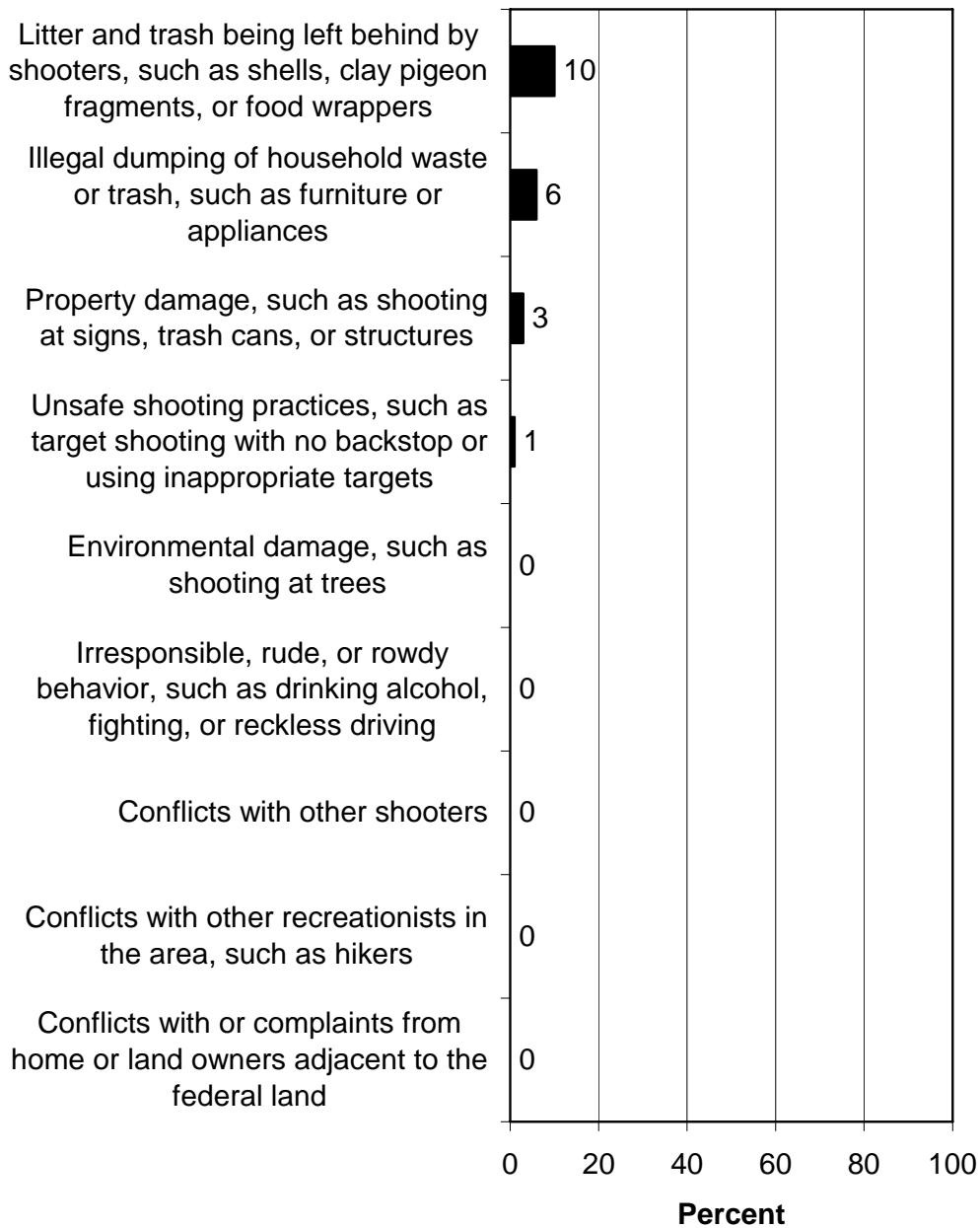
**Percent who have always, often, sometimes, or rarely (i.e., not never) personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years.
(Virginia)**



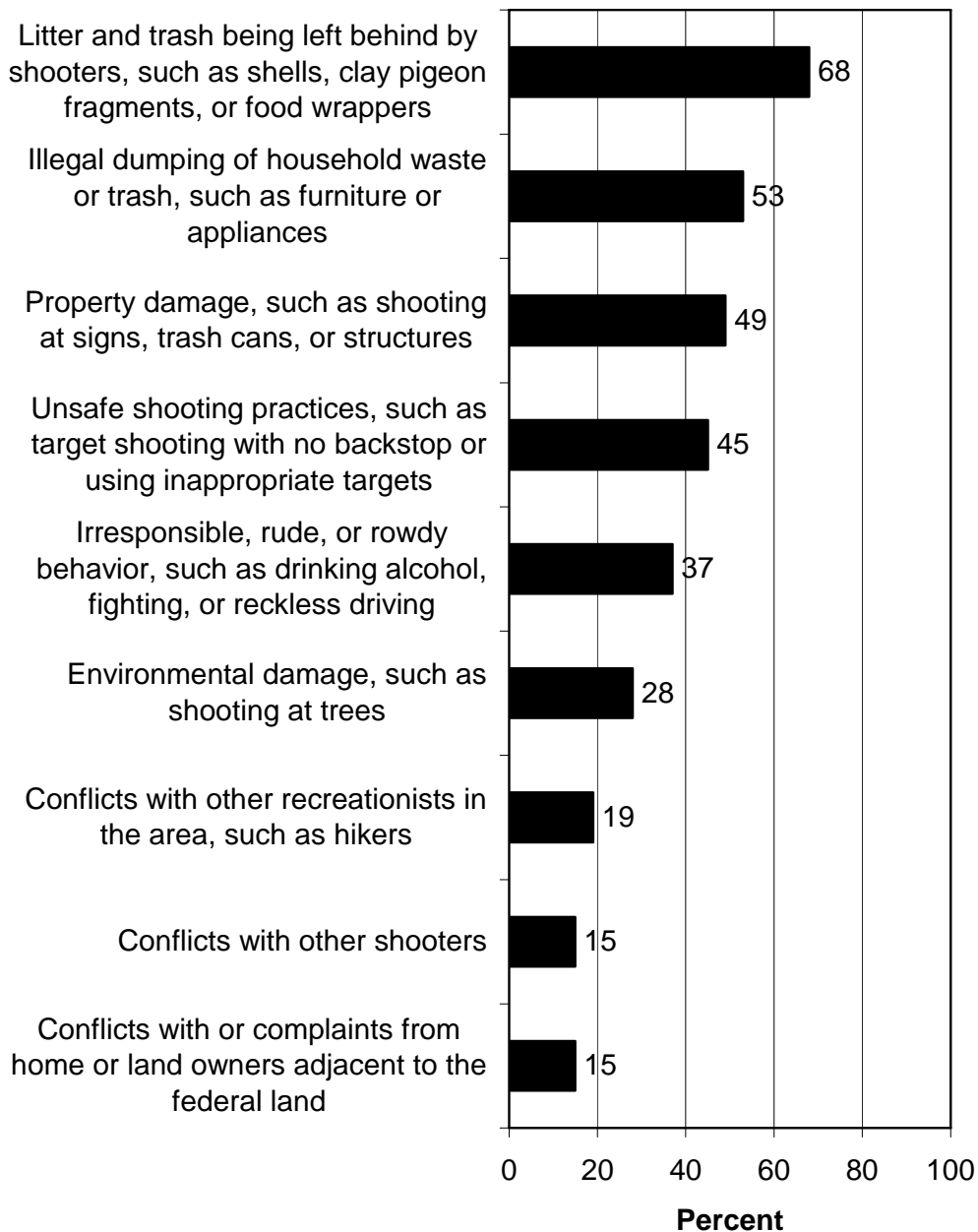
Percent of those who have never personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years. (Virginia)



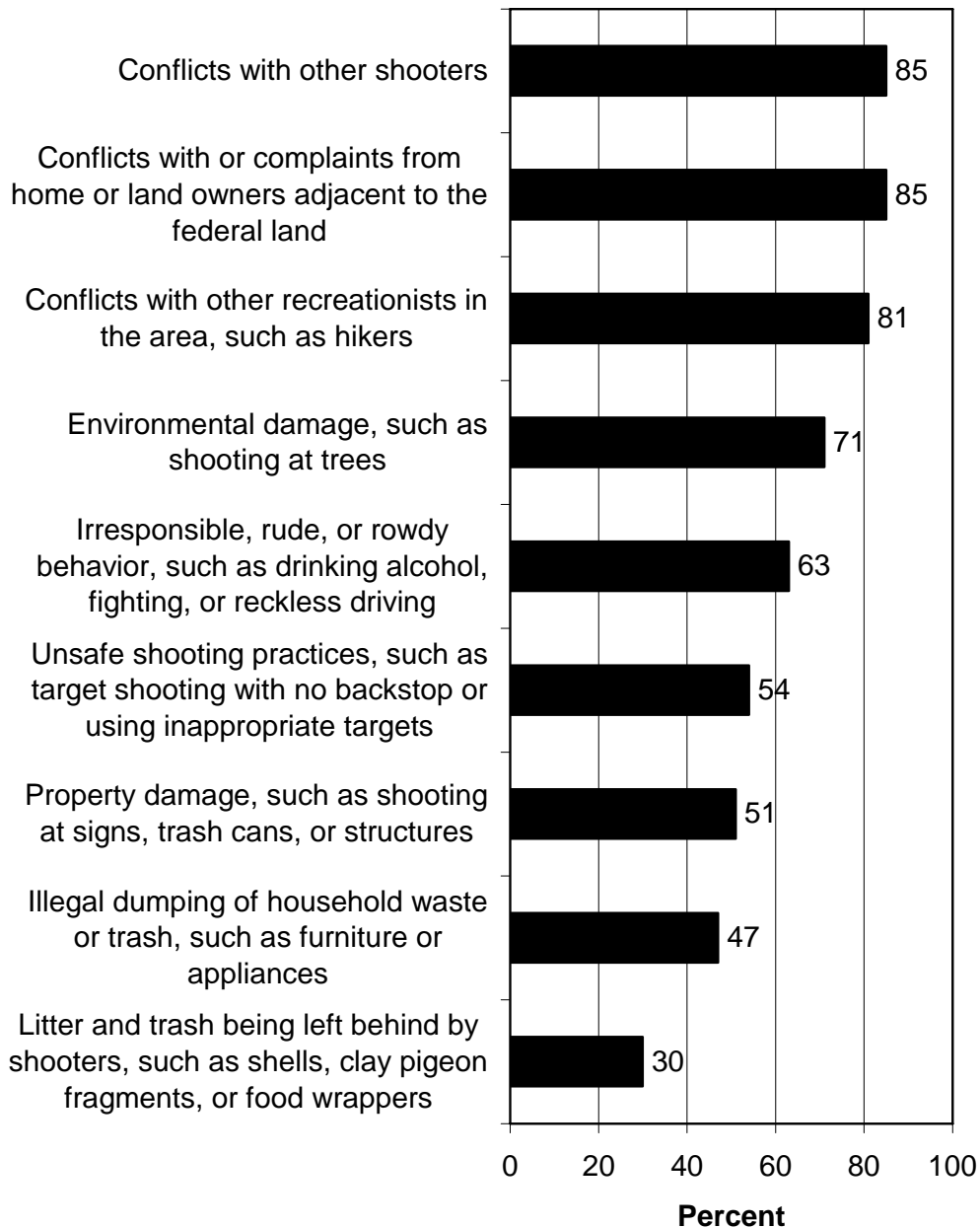
**Percent who have always personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years.
(Oregon)**



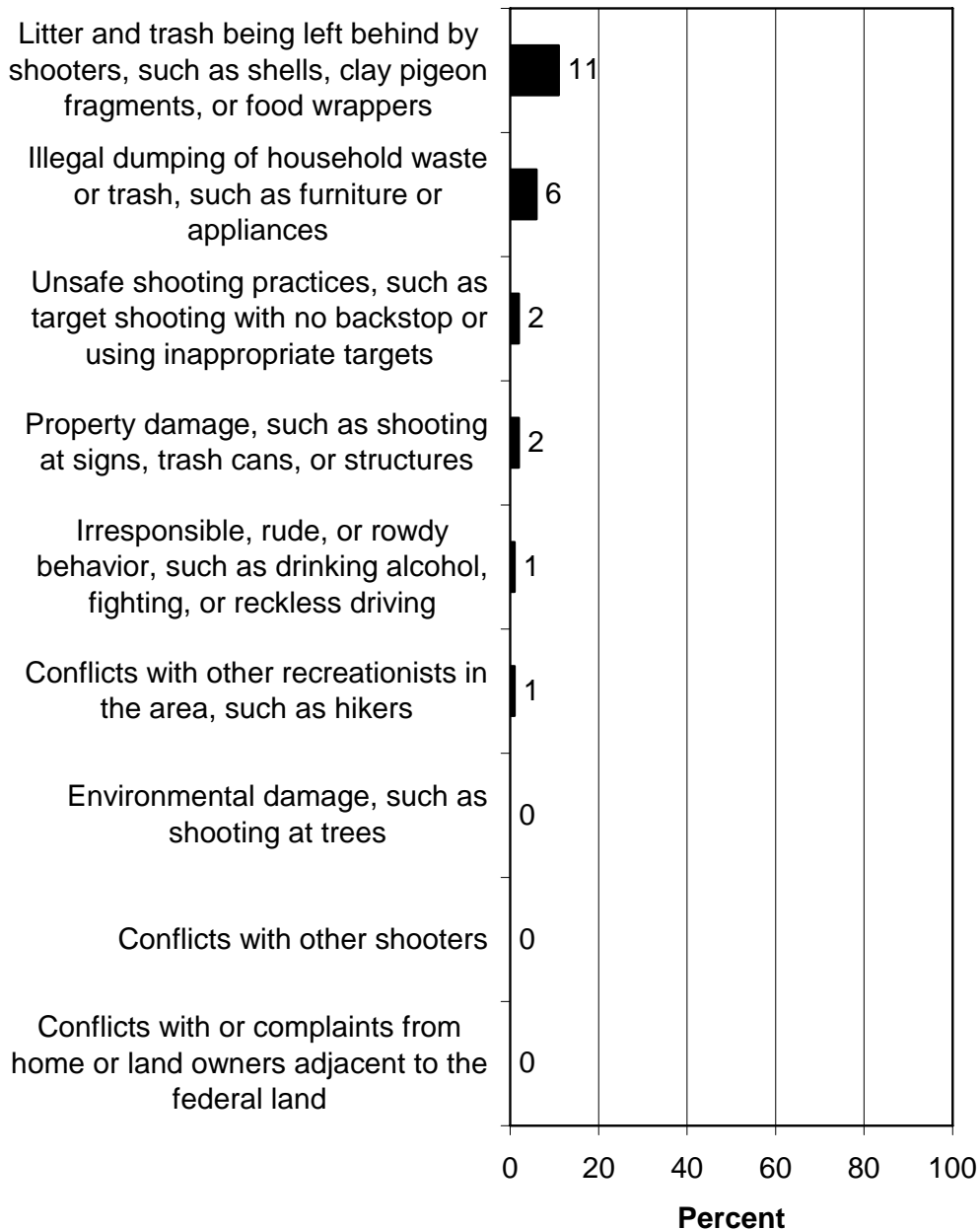
**Percent who have always, often, sometimes, or rarely (i.e., not never) personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years.
(Oregon)**



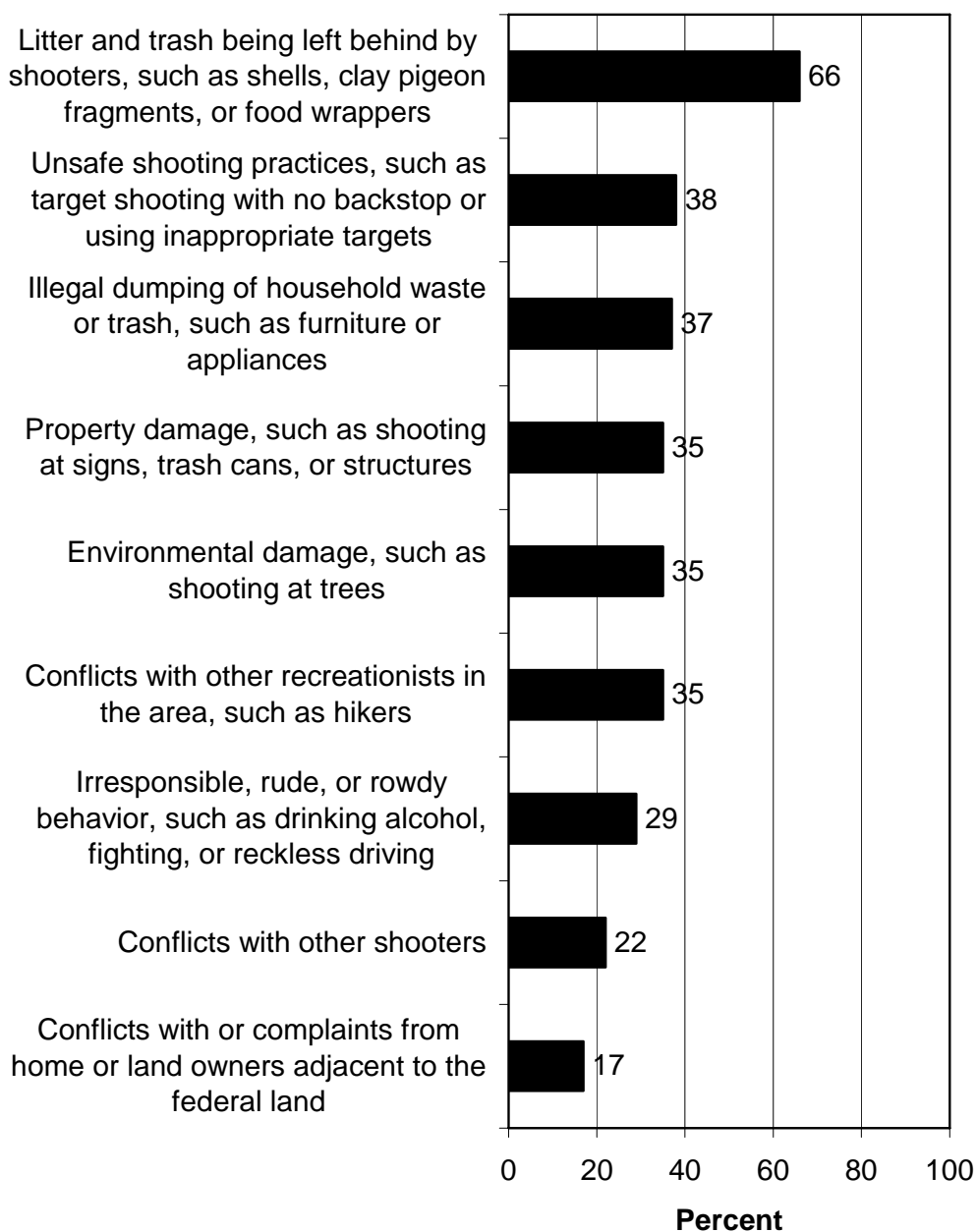
Percent of those who have never personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years. (Oregon)



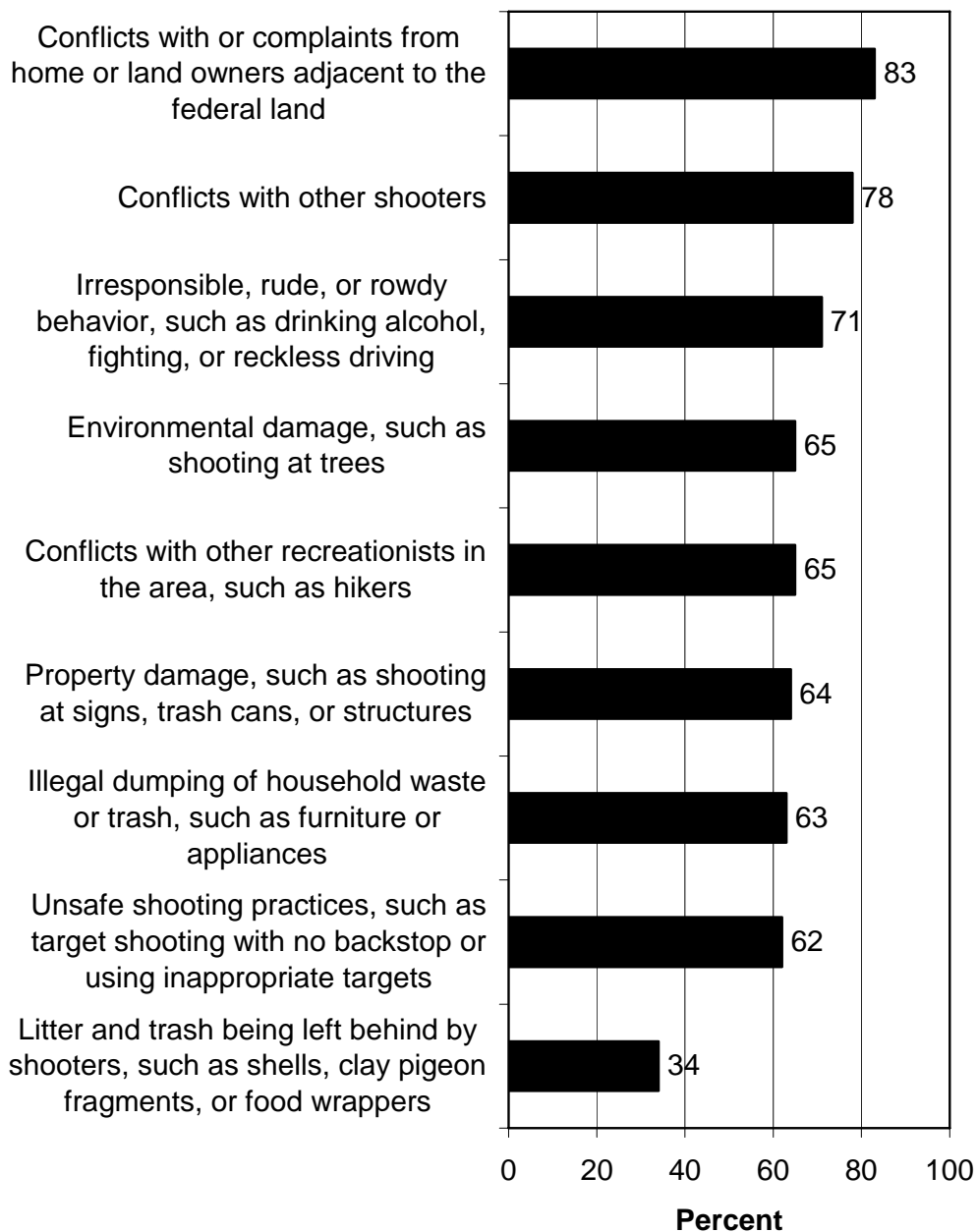
**Percent who have always personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years.
(Colorado)**



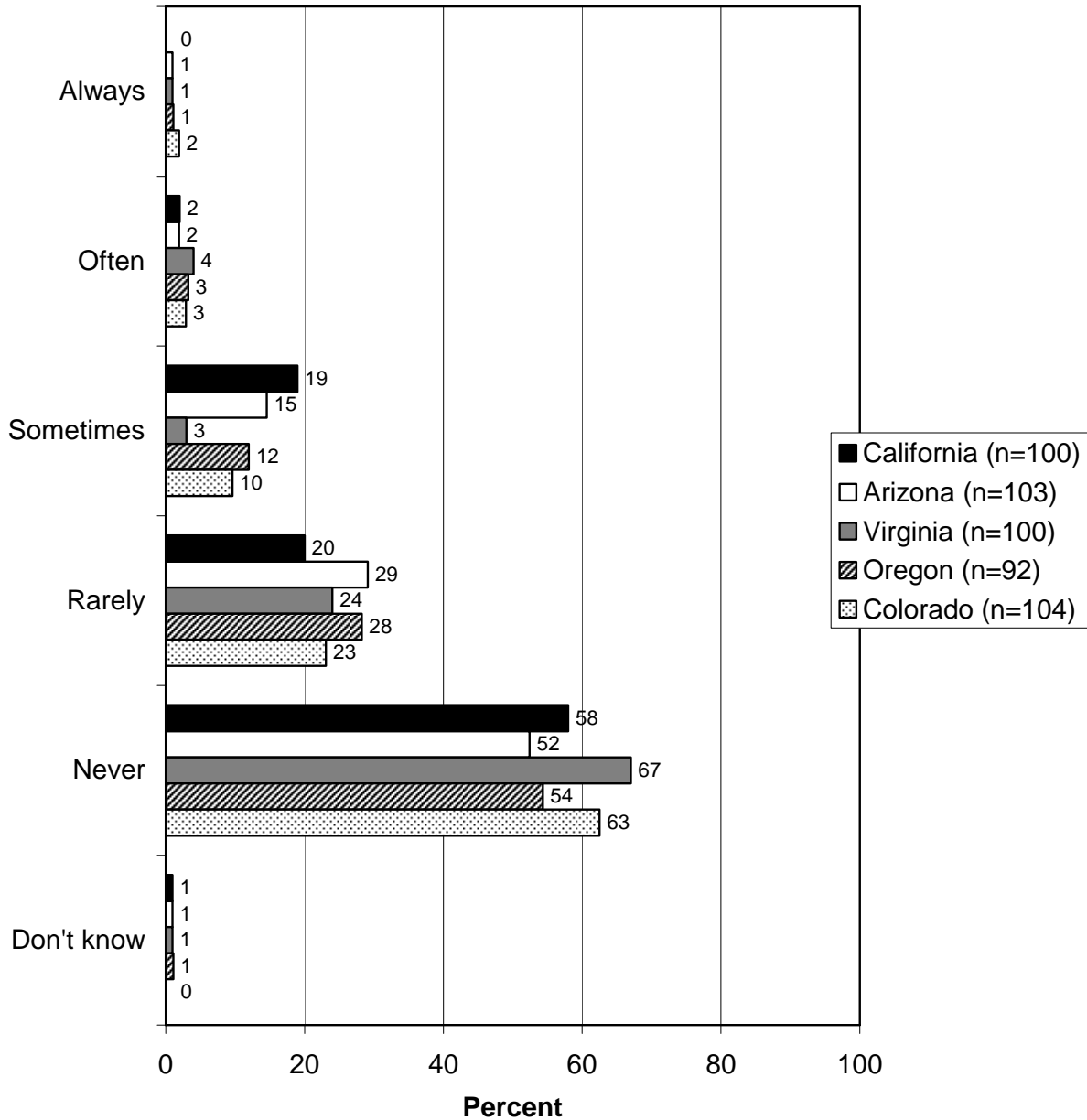
**Percent who have always, often, sometimes, or rarely (i.e., not never) personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years.
(Colorado)**



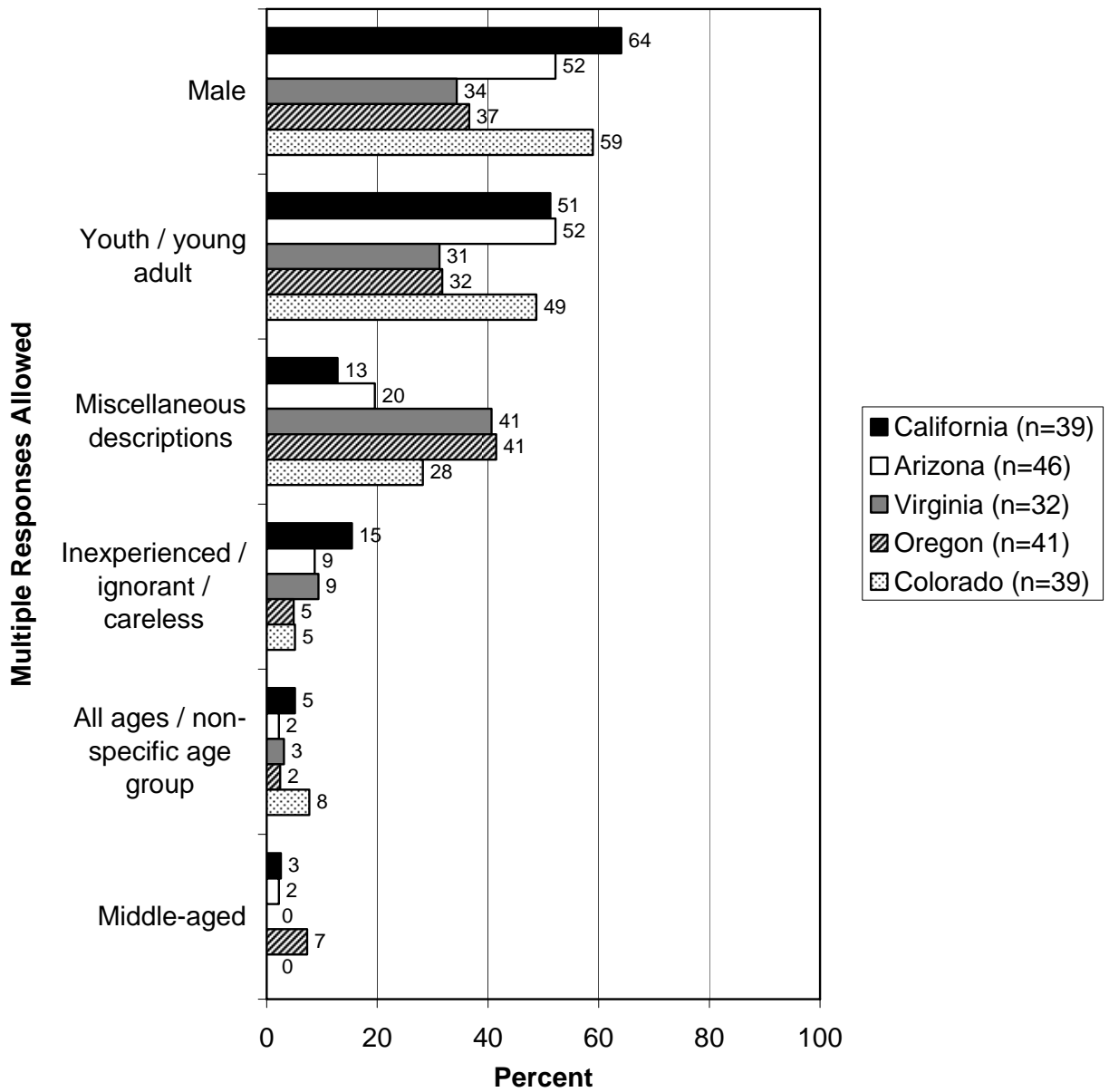
Percent of those who have never personally witnessed or experienced the following issues while shooting on federal lands in the past 5 years. (Colorado)



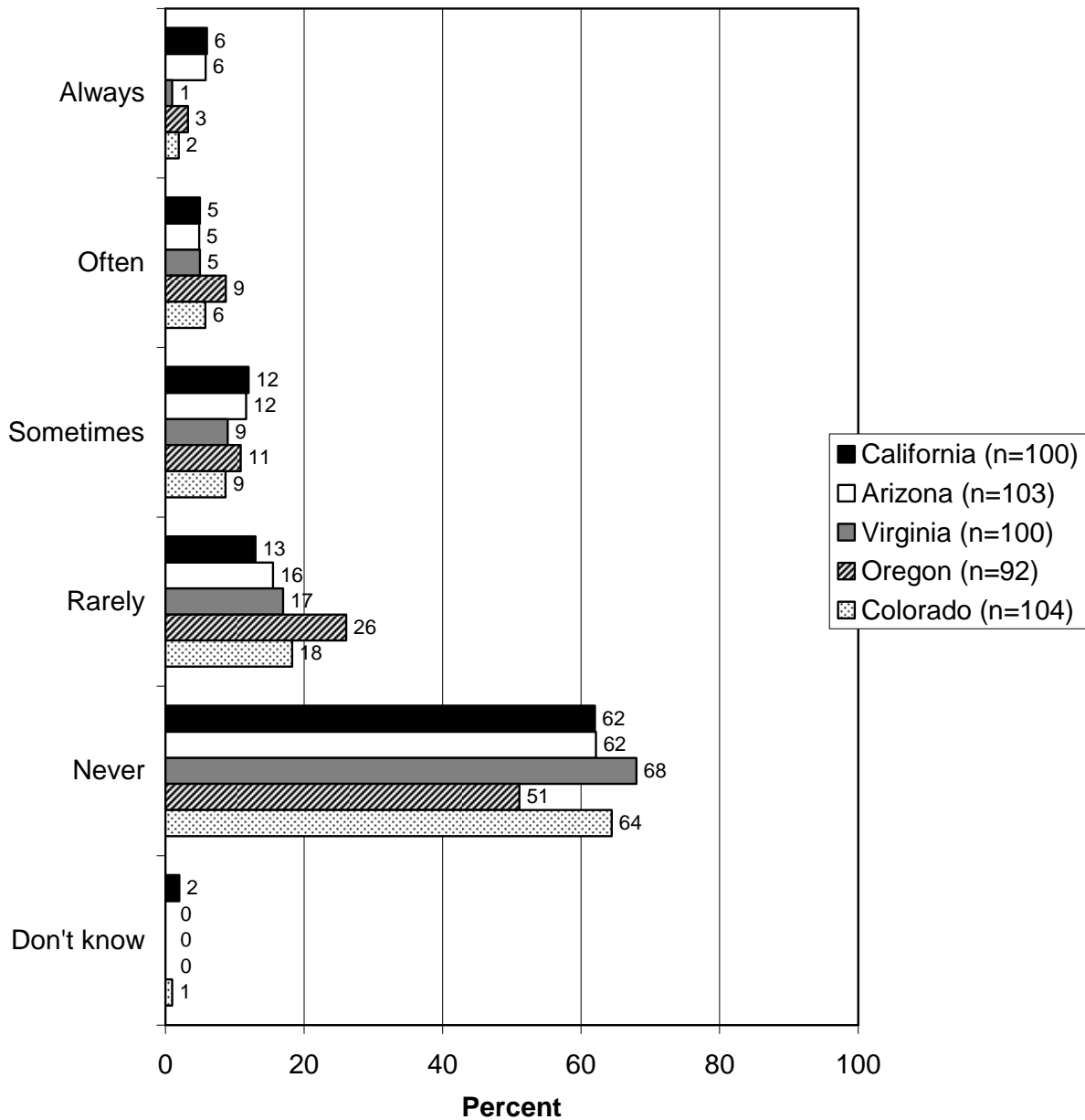
**Q104. How about unsafe shooting practices?
 Would you say you have personally witnessed or
 experienced it always, often, sometimes, rarely, or
 never while shooting on federal lands in the past 5
 years?**



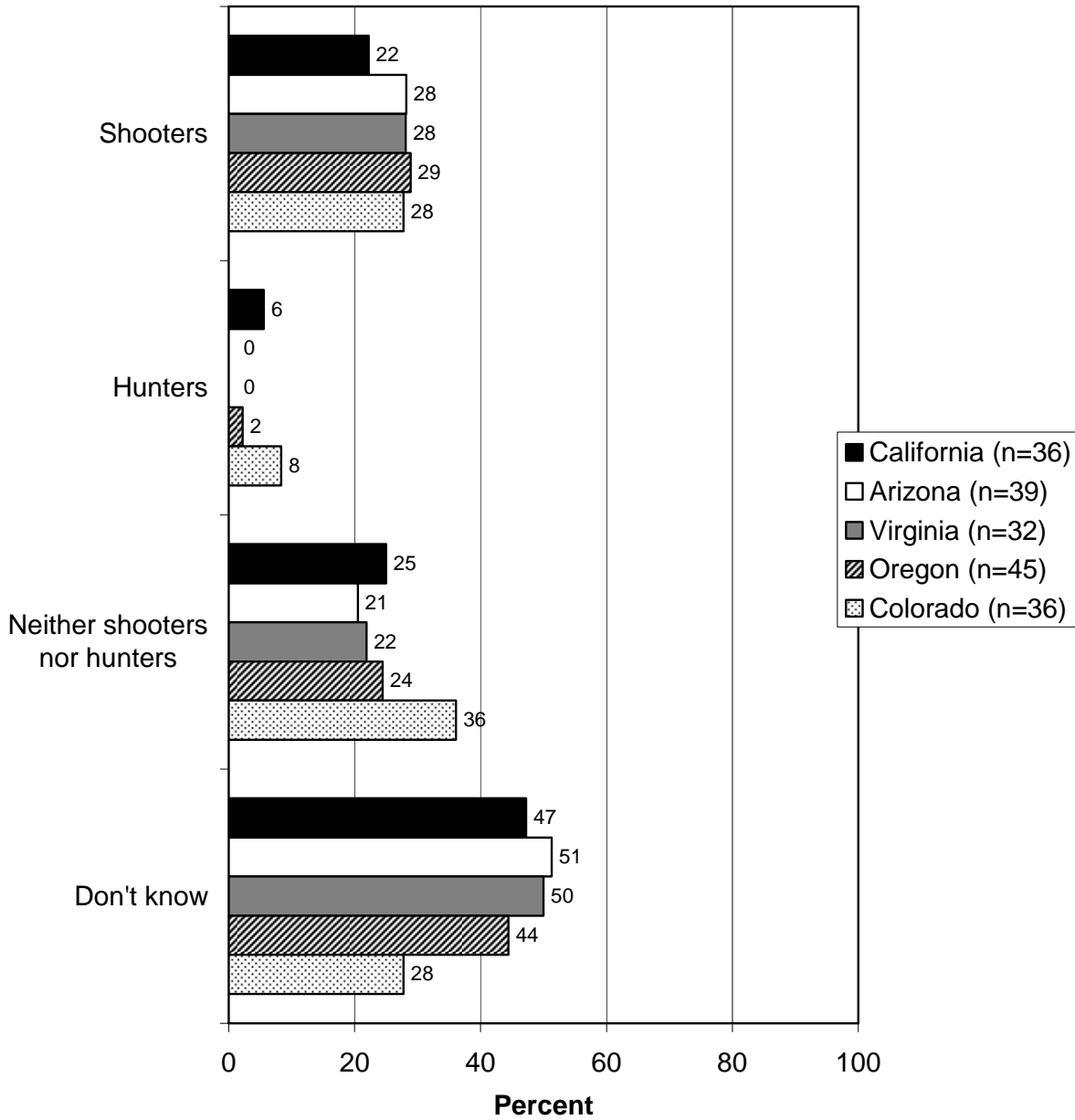
Q106. How would you describe the people you observed participating in or causing unsafe shooting practices? (Asked of those who have personally witnessed or experienced unsafe shooting practices while shooting on federal lands in the past 5 years.)



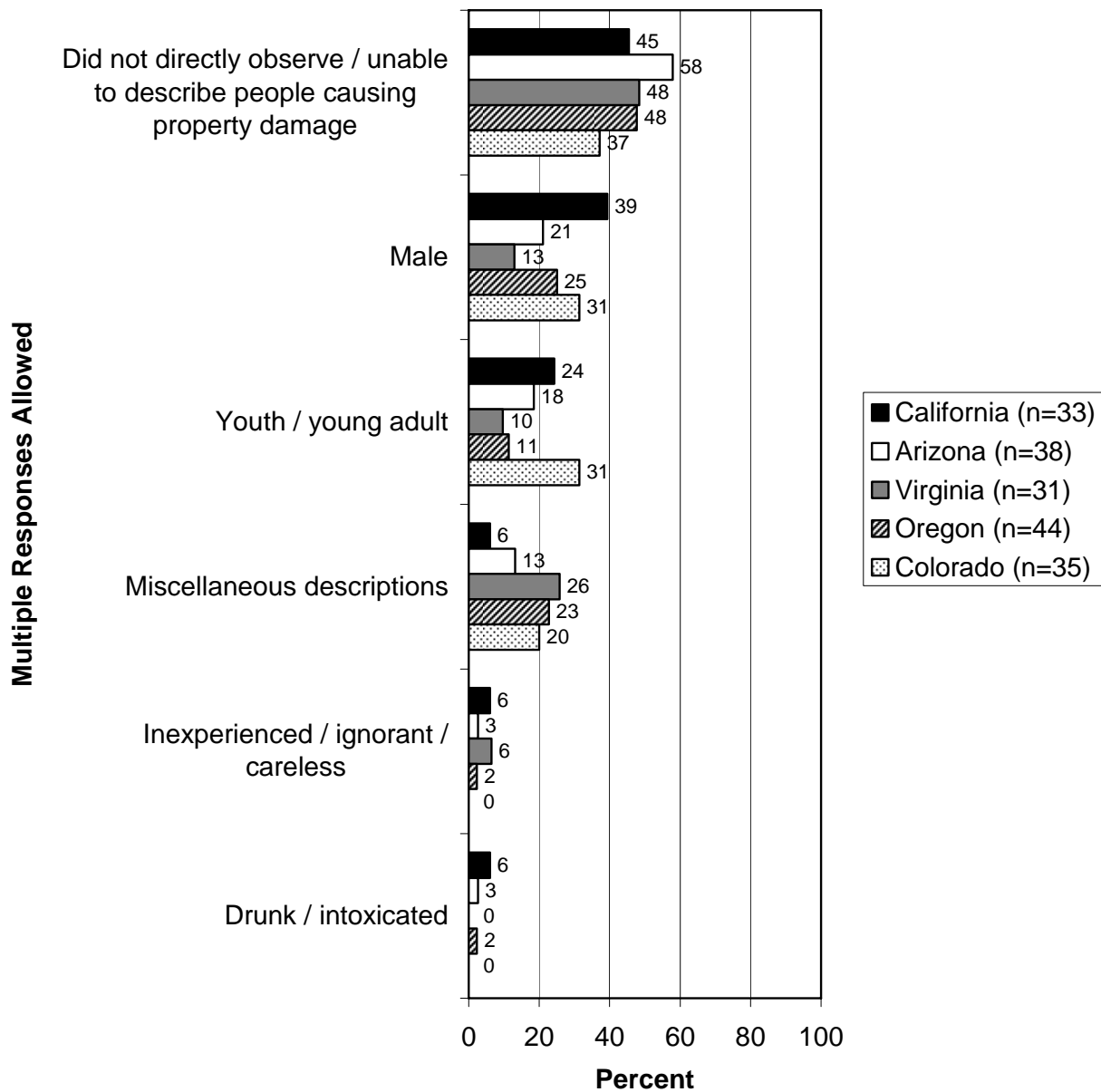
Q107. How about property damage? Would you say you have personally witnessed or experienced it always, often, sometimes, rarely, or never while shooting on federal lands in the past 5 years?



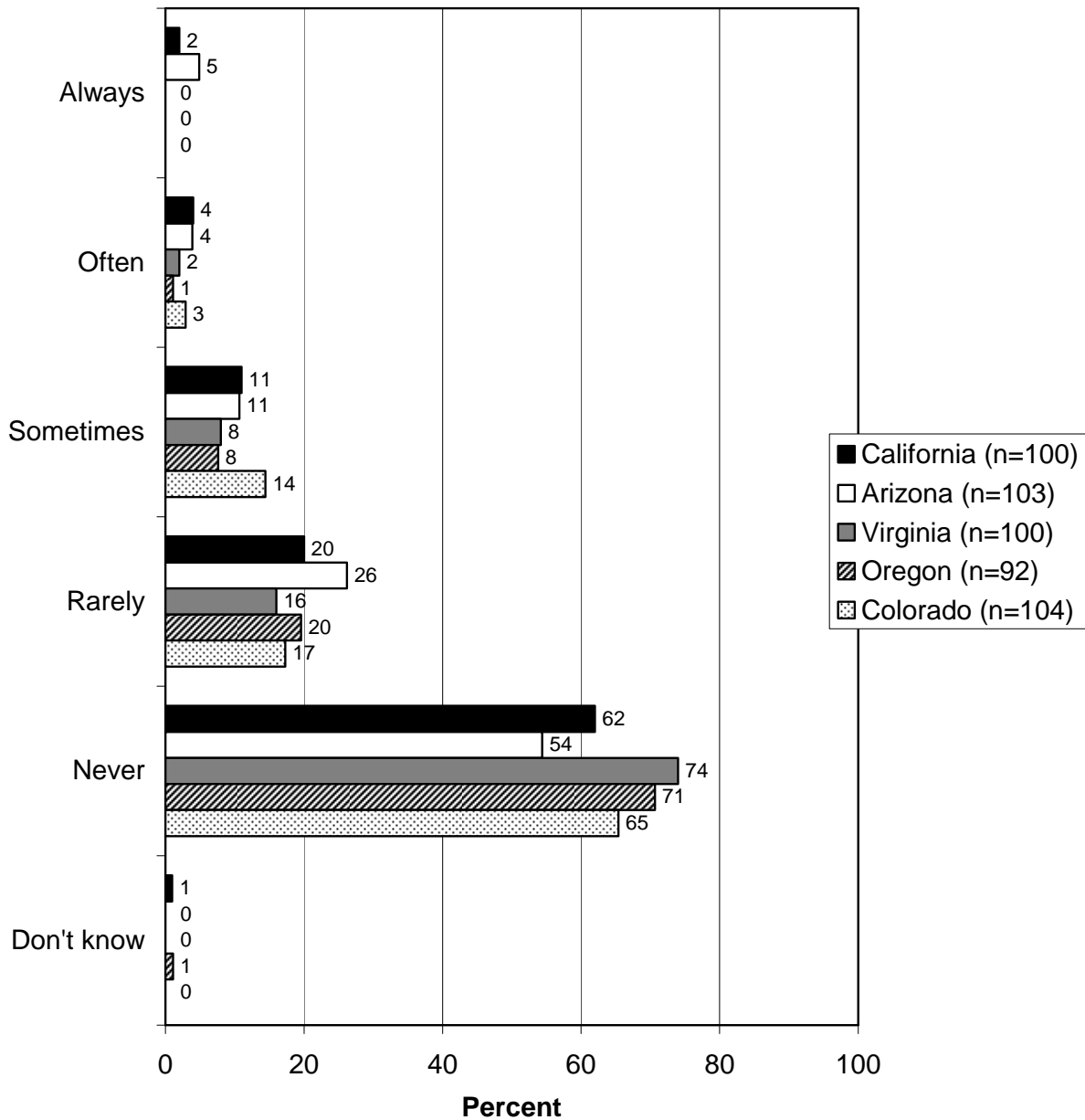
Q108. Were the people you observed shooters, hunters, or neither shooters nor hunters? (Asked of those who have personally witnessed or experienced property damage while shooting on federal lands in the past 5 years.)



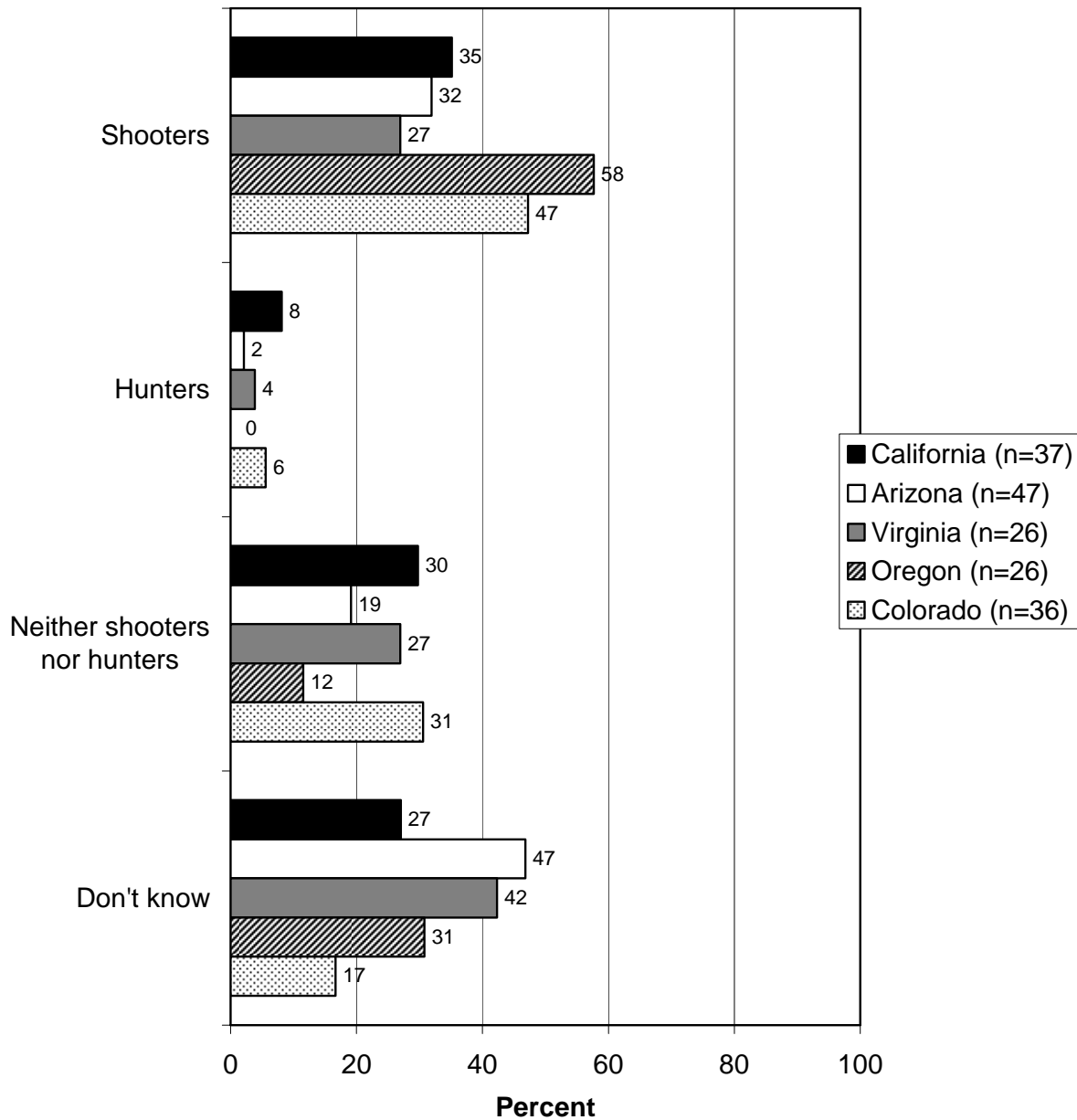
Q109. How would you describe the people you observed participating in or causing property damage? (Asked of those who have personally witnessed or experienced property damage while shooting on federal lands in the past 5 years.)



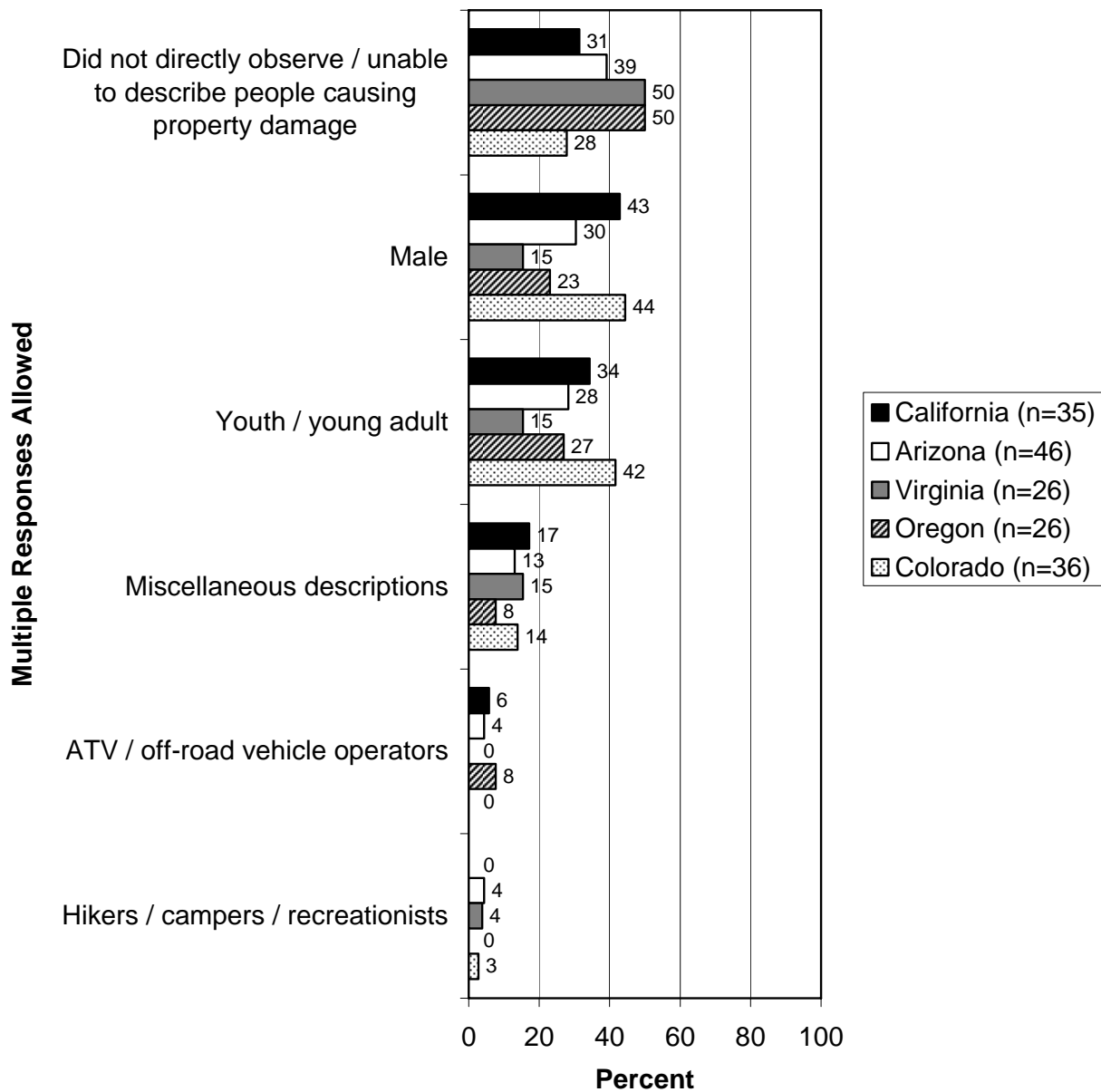
Q110. How about environmental damage? Would you say you have personally witnessed or experienced it always, often, sometimes, rarely, or never while shooting on federal lands in the past 5 years?



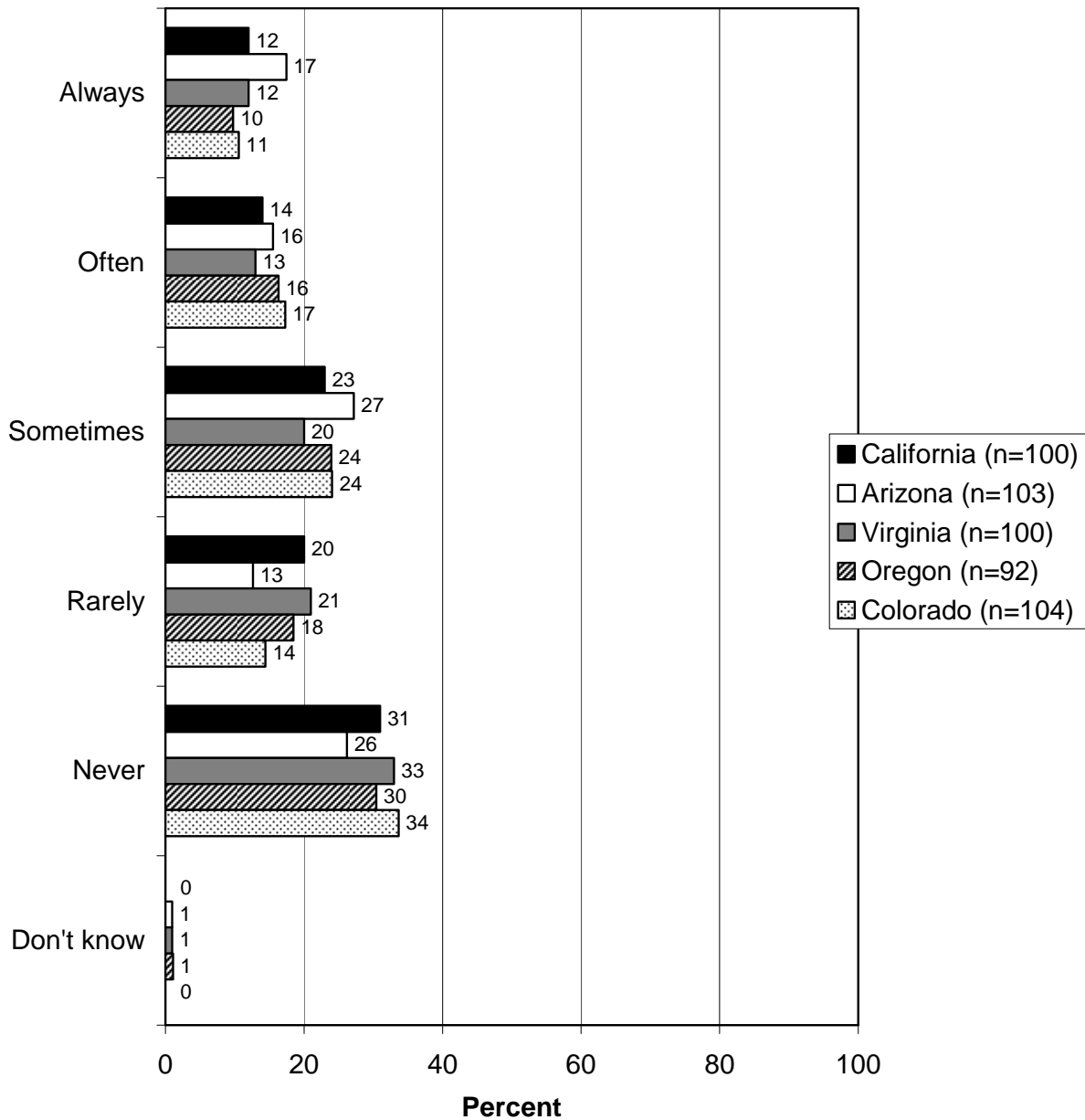
Q111. Were the people you observed shooters, hunters, or neither shooters nor hunters? (Asked of those who have personally witnessed or experienced environmental damage while shooting on federal lands in the past 5 years.)



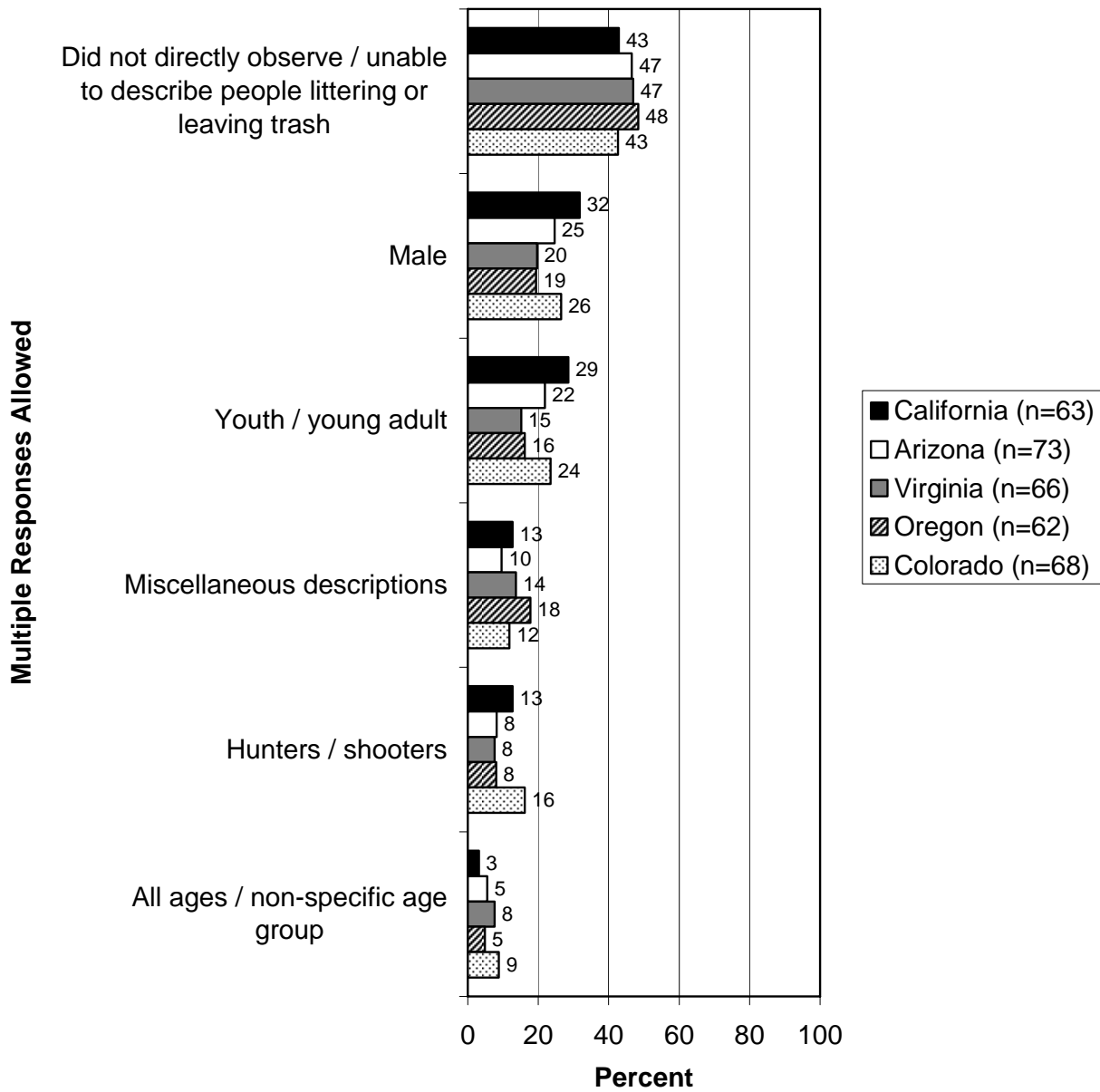
Q112. How would you describe the people you observed participating in or causing environmental damage? (Asked of those who have personally witnessed or experienced environmental damage while shooting on federal lands in the past 5 years.)



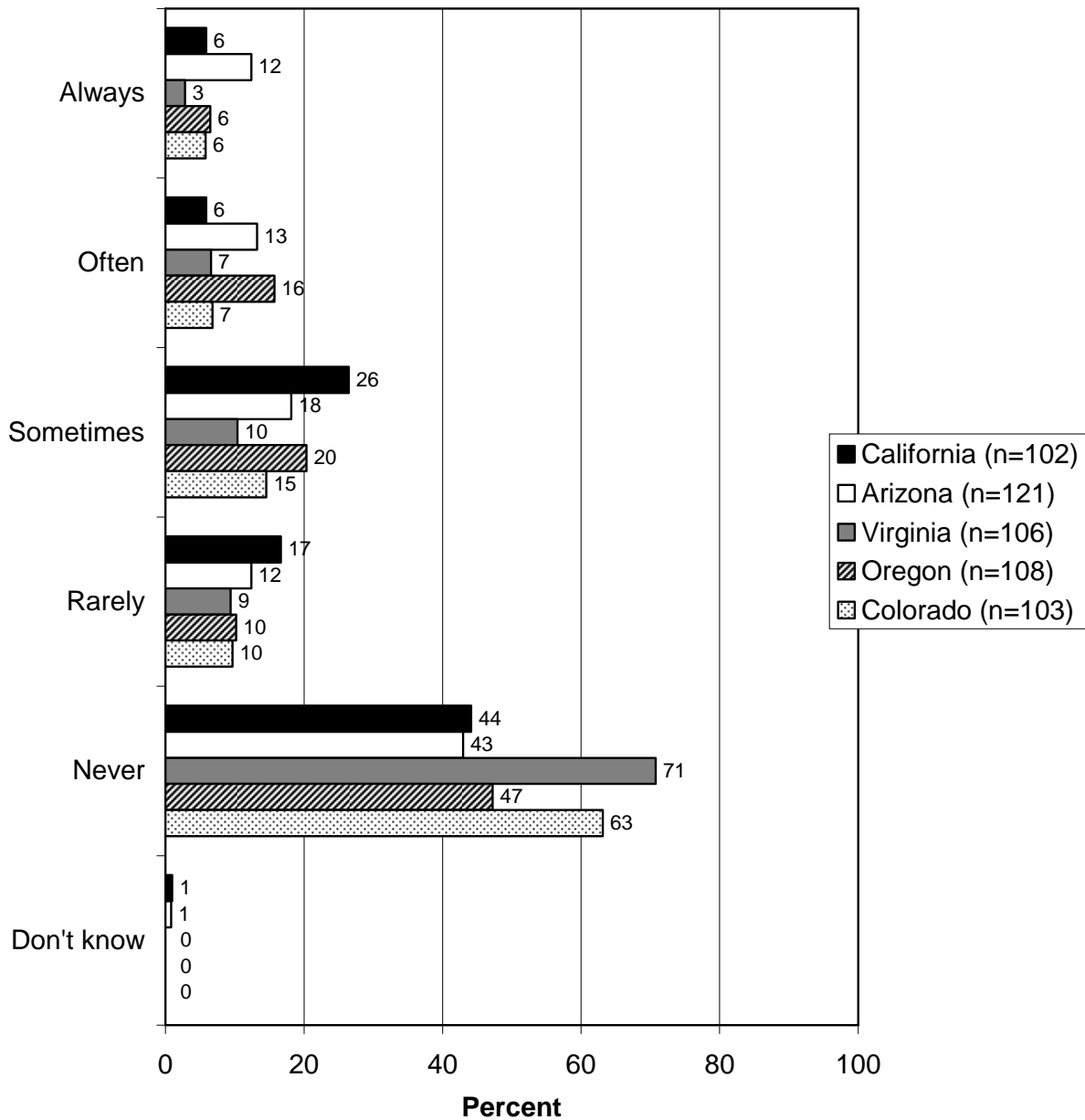
Q113. How about litter and trash being left behind by shooters? Would you say you have personally witnessed or experienced it always, often, sometimes, rarely, or never while shooting on federal lands in the past 5 years?



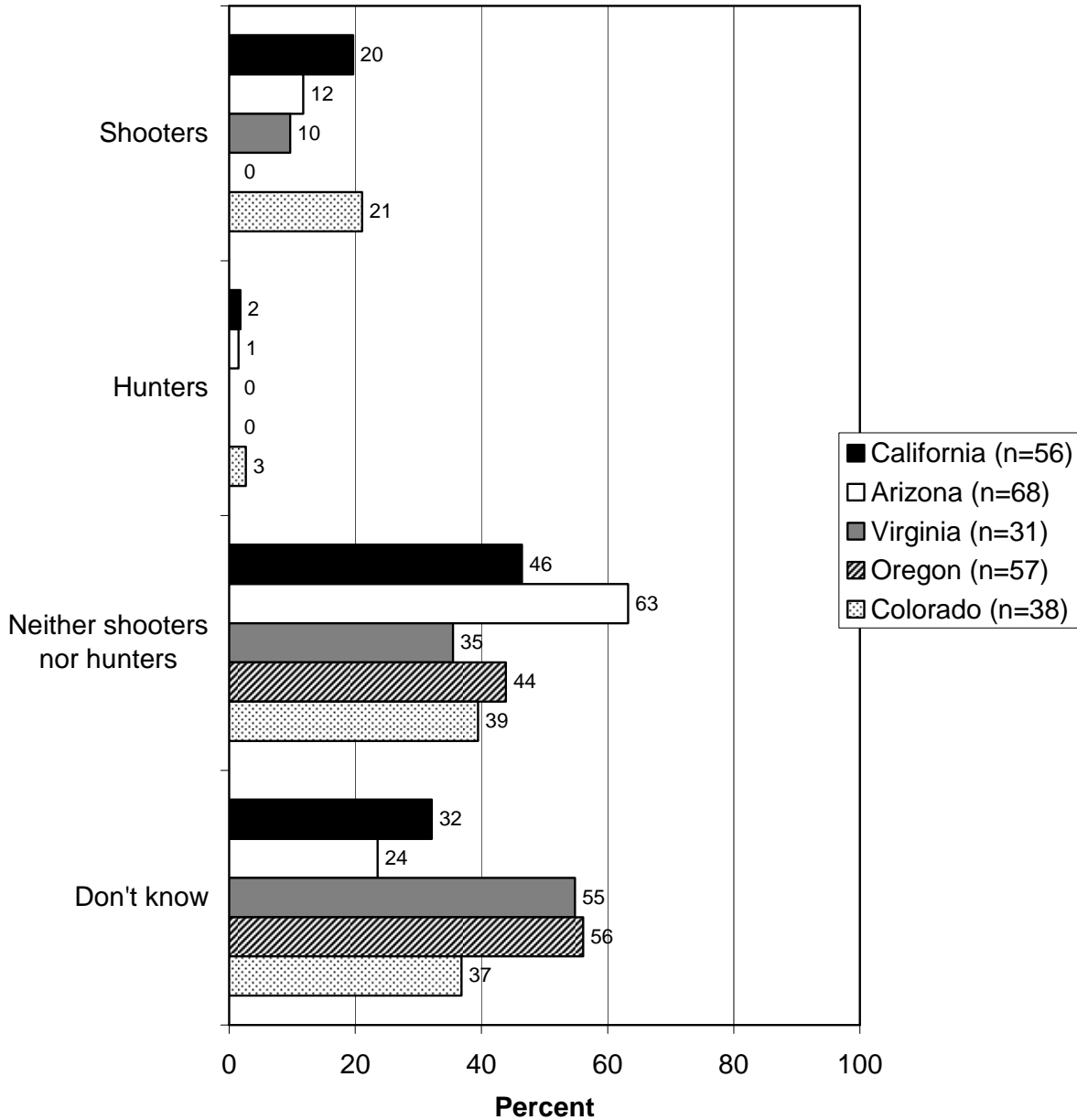
Q115. How would you describe the people you observed participating in or causing litter and trash being left behind by shooters? (Asked of those who have personally witnessed or experienced litter and trash being left behind by shooters while shooting on federal lands in the past 5 years.)



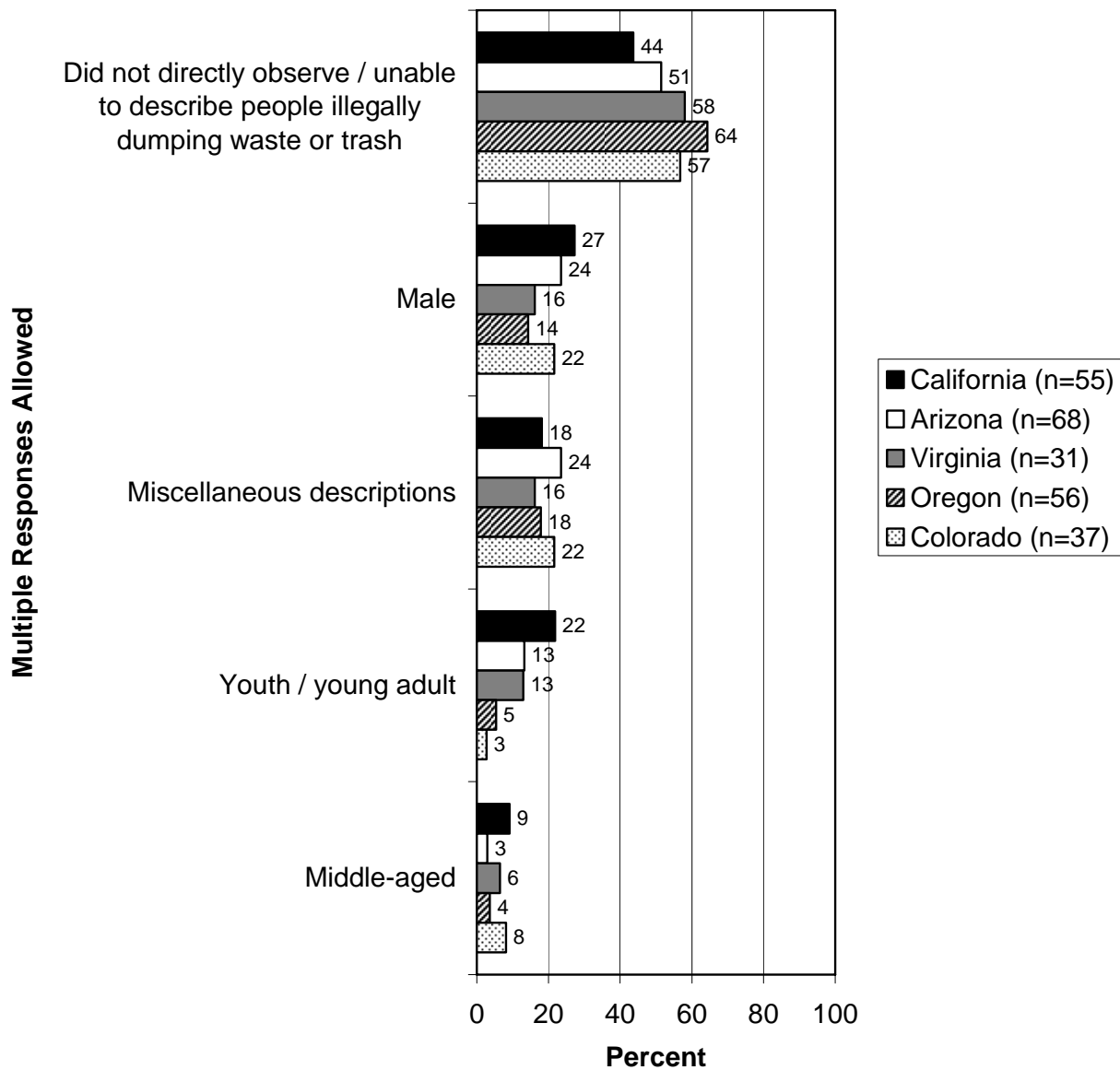
Q116. How about illegal dumping of household waste or trash, such as furniture or appliances? Would you say you have personally witnessed or experienced it always, often, sometimes, rarely, or never while shooting on federal lands in the past 5 years?



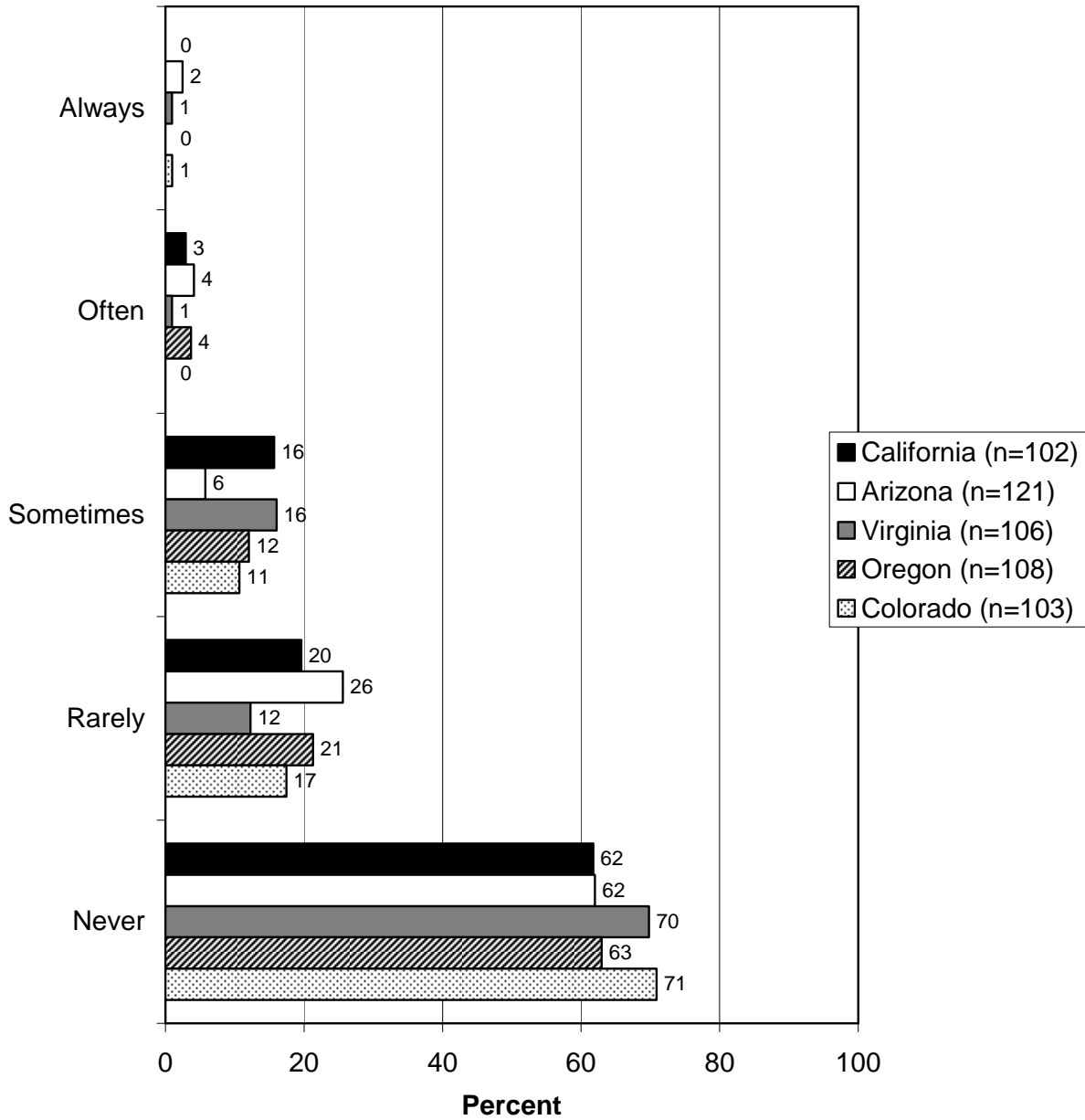
Q117. Were the people you observed shooters, hunters, or neither shooters nor hunters? (Asked of those who have personally witnessed or experienced illegal dumping of household waste or trash, such as furniture or appliances while shooting on federal lands in the past 5 years.)



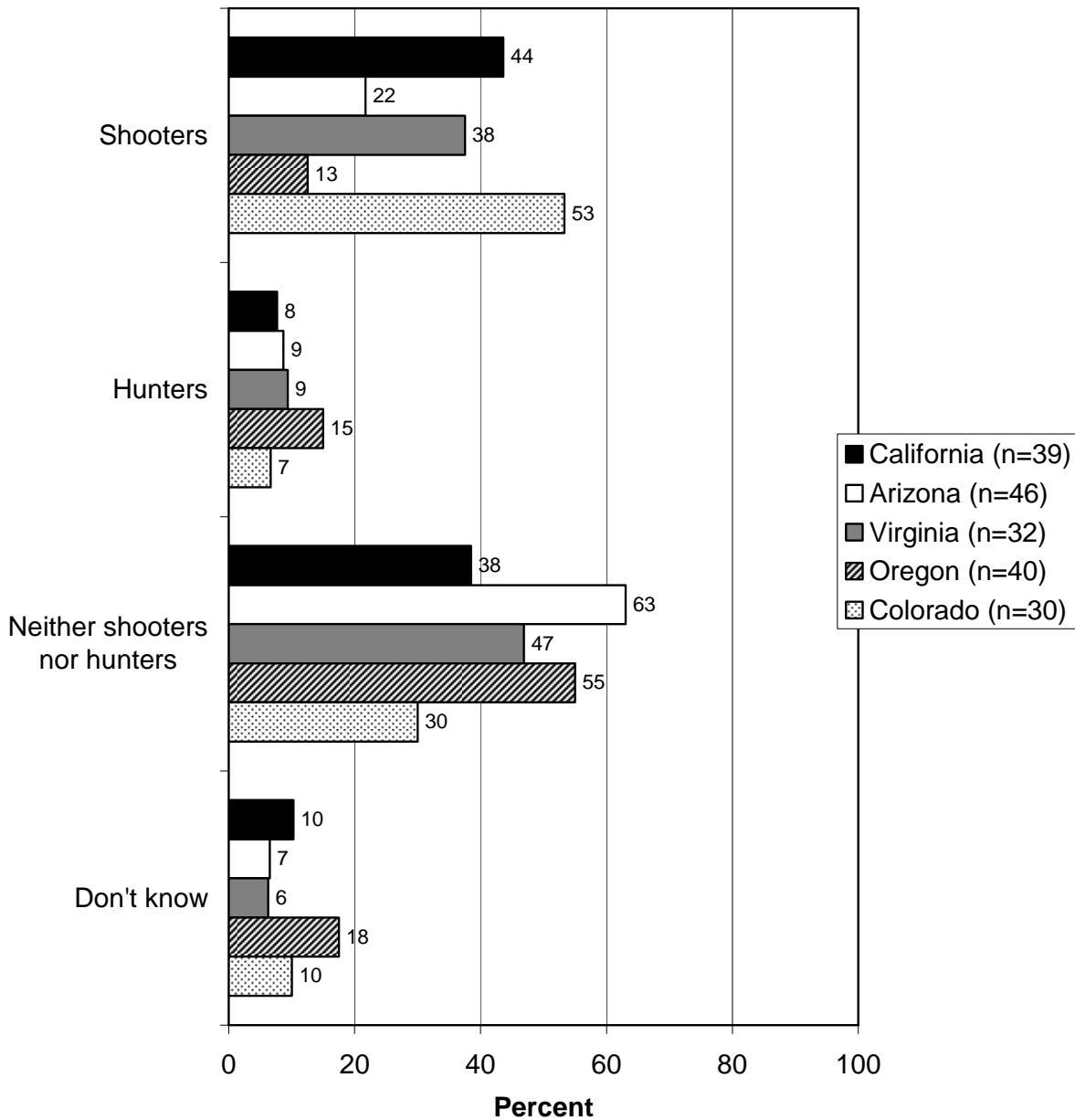
Q118. How would you describe the people you observed participating in or causing illegal dumping of household waste or trash, such as furniture or appliances? (Asked of those who have personally witnessed or experienced illegal dumping of household waste or trash while shooting on federal lands in the past 5 years.)



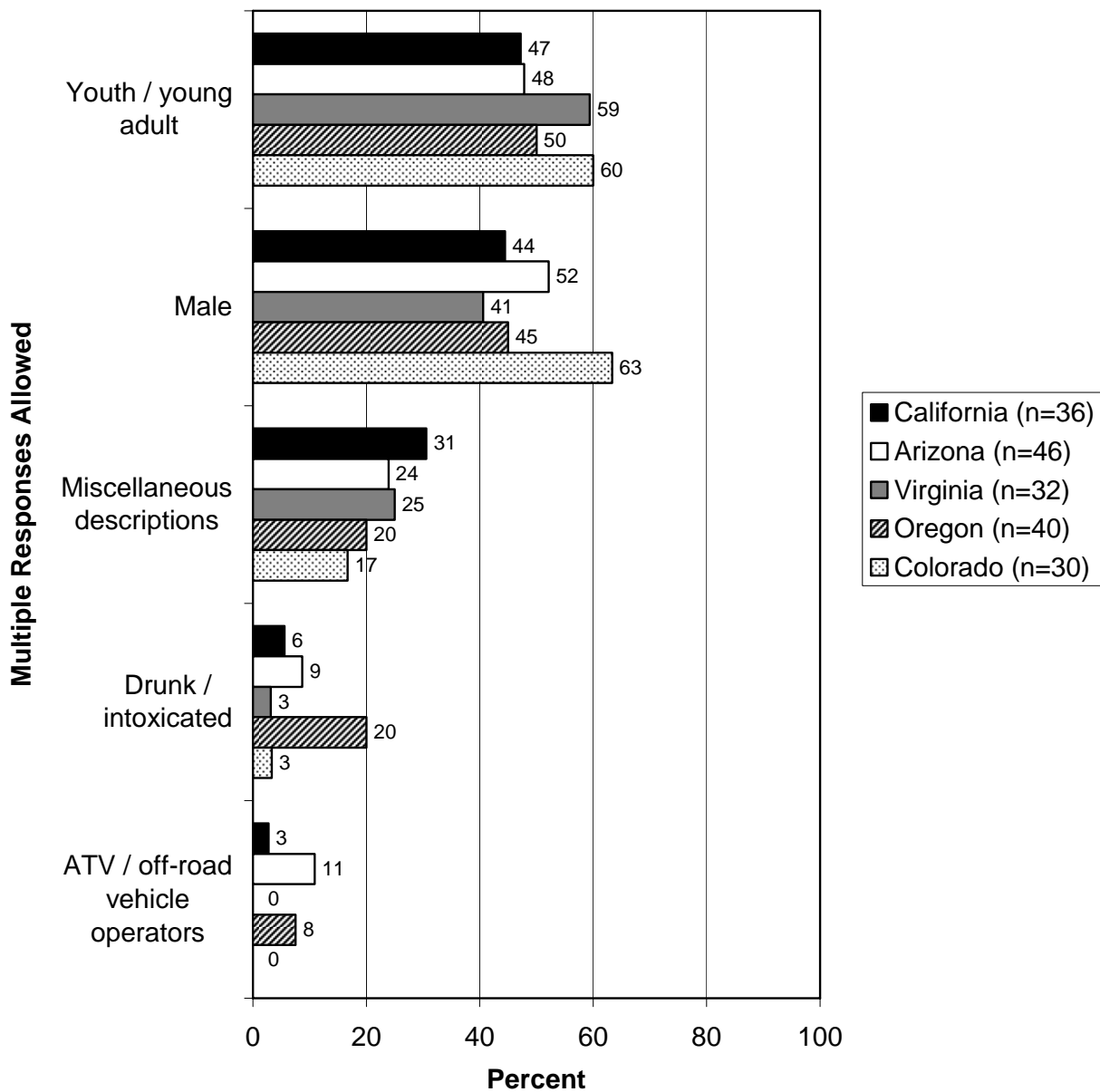
Q119. How about irresponsible, rude, or rowdy behavior? Would you say you have personally witnessed or experienced it always, often, sometimes, rarely, or never while shooting on federal lands in the past 5 years?



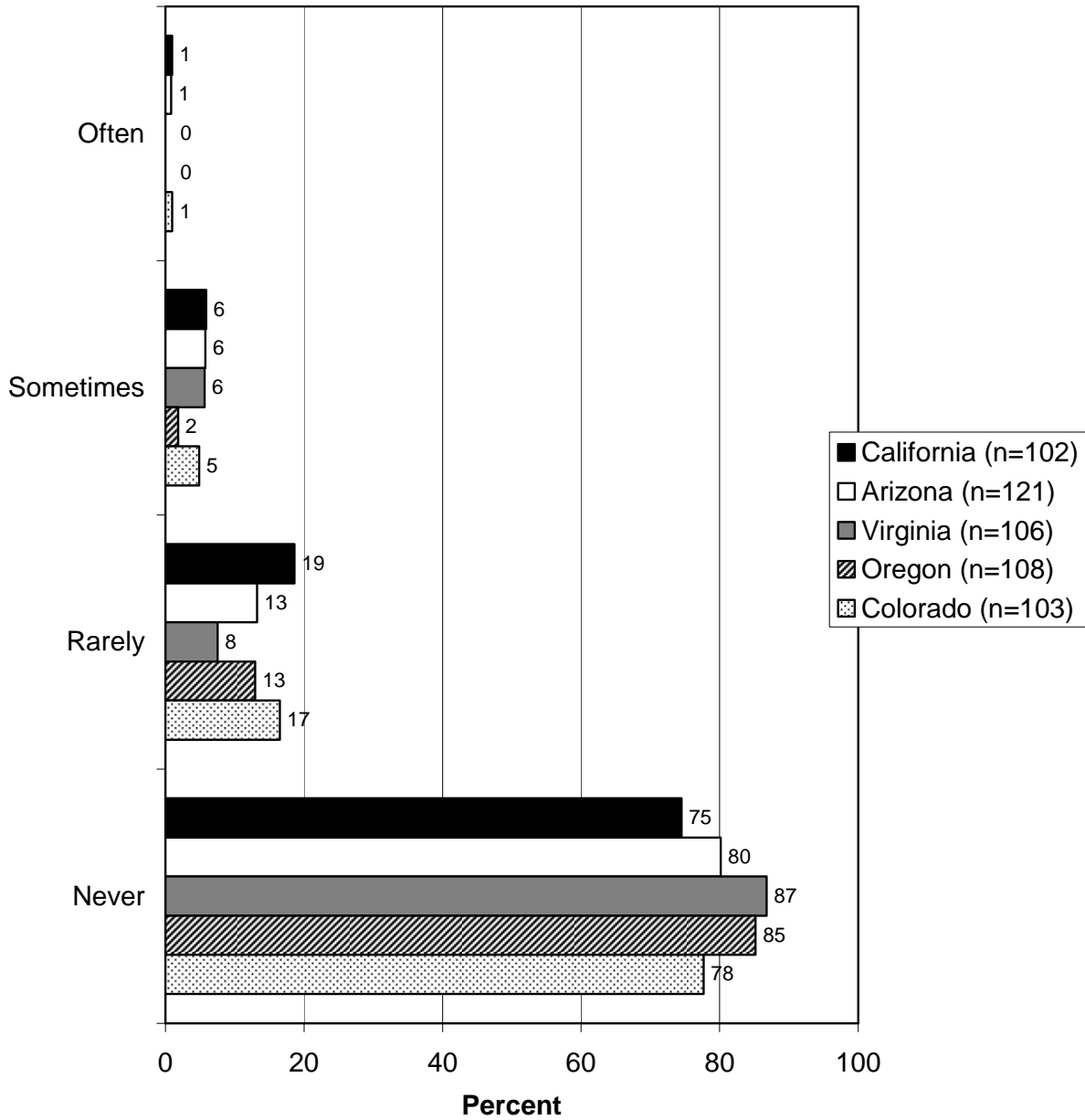
Q120. Were the people you observed shooters, hunters, or neither shooters nor hunters? (Asked of those who have personally witnessed or experienced irresponsible, rude, or rowdy behavior while shooting on federal lands in the past 5 years.)



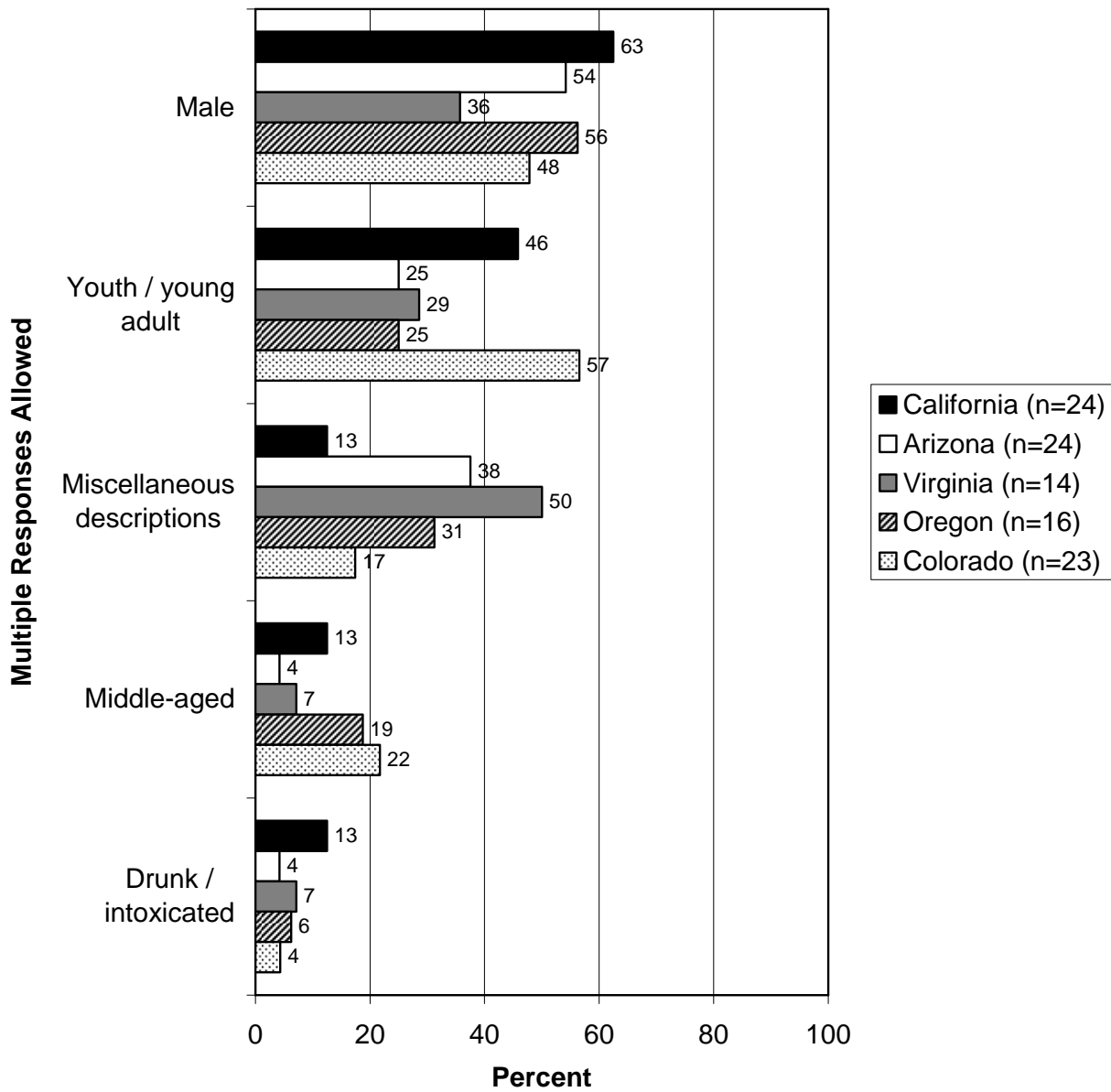
Q121. How would you describe the people you observed participating in or causing irresponsible, rude, or rowdy behavior? (Asked of those who have personally witnessed or experienced irresponsible, rude, or rowdy behavior while shooting on federal lands in the past 5 years.)



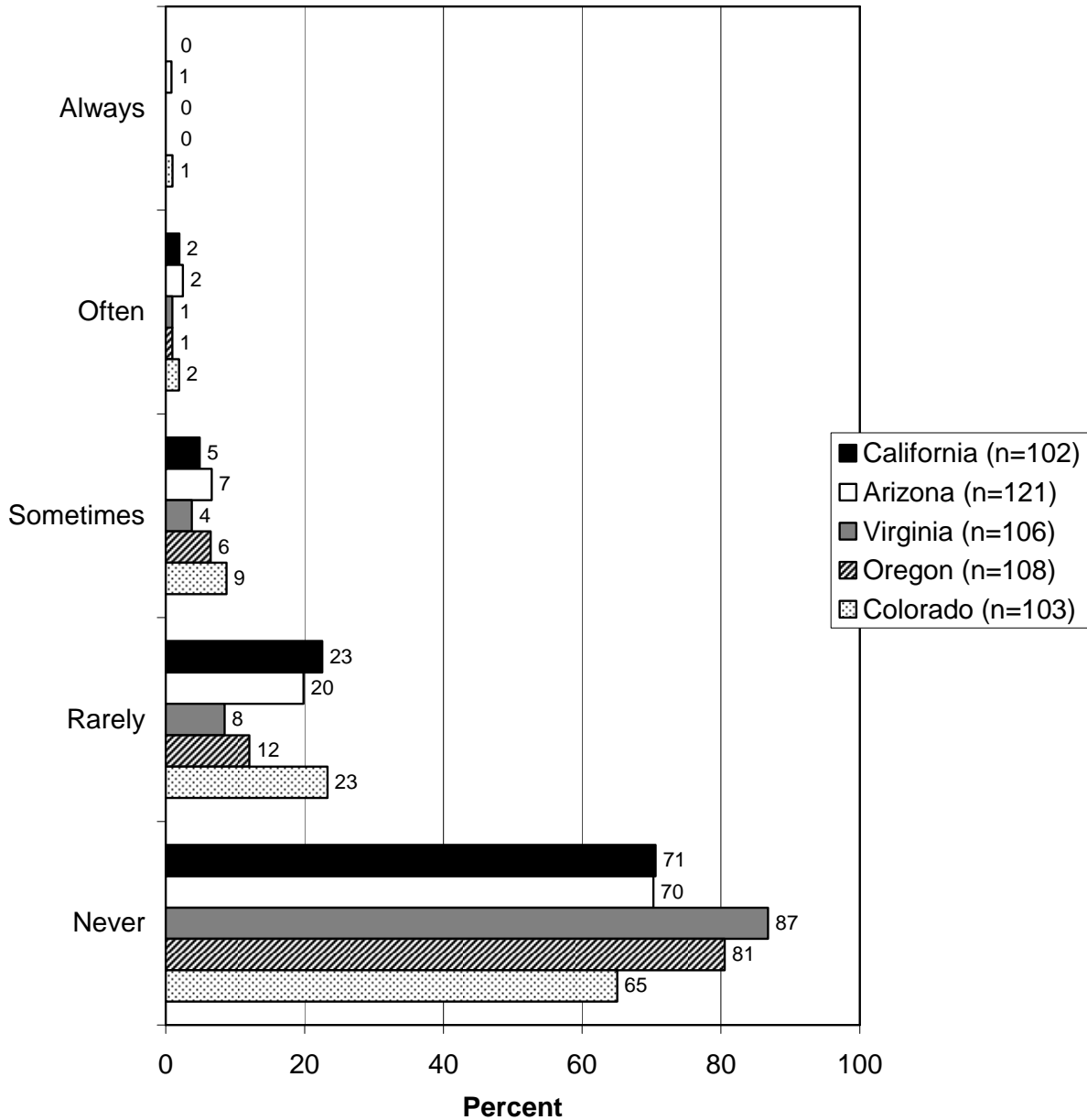
**Q122. How about conflicts with other shooters?
Would you say you have personally witnessed or
experienced it always, often, sometimes, rarely, or
never while shooting on federal lands in the past 5
years?**



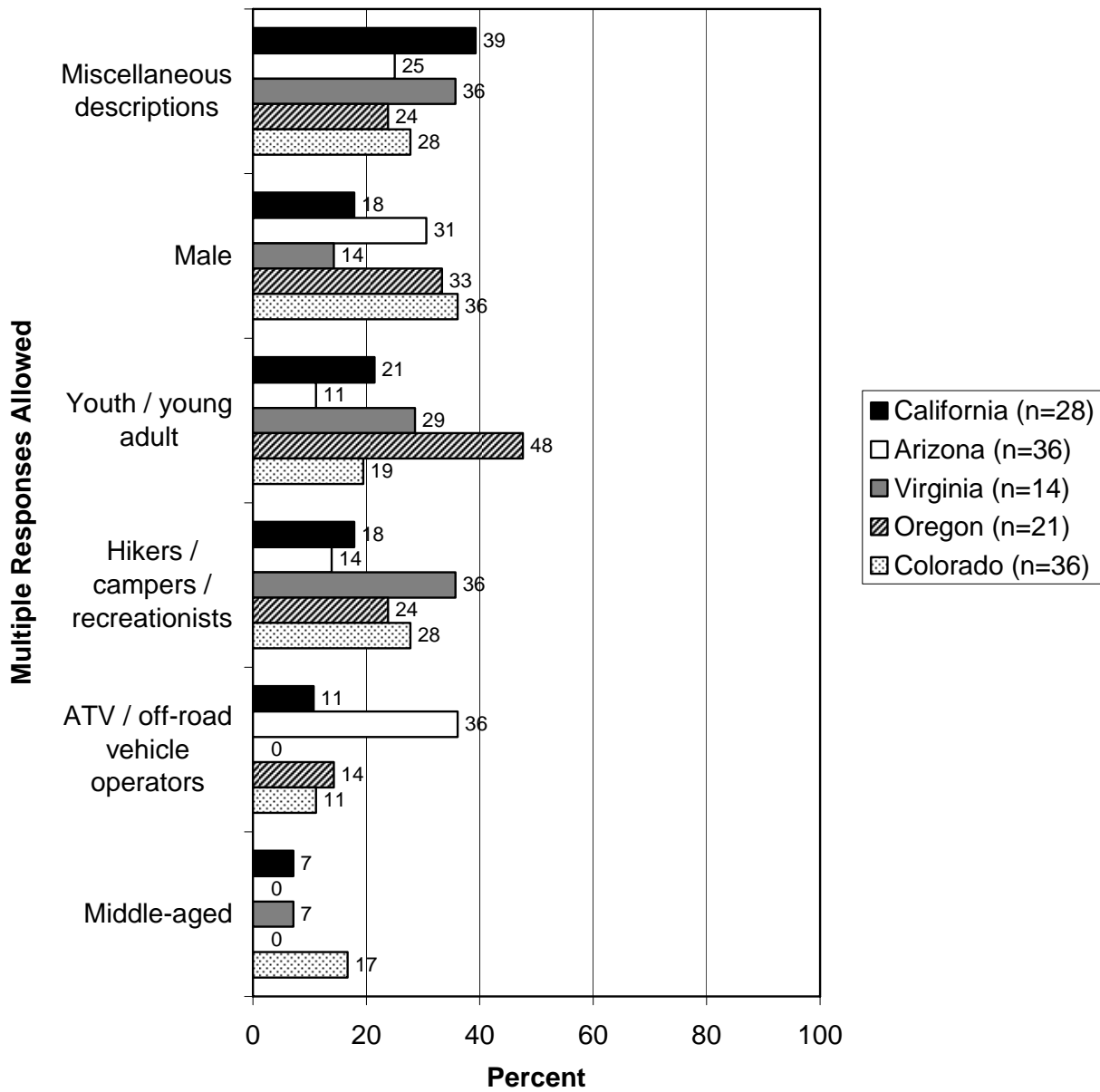
**Q124. How would you describe the people you observed participating in or causing conflicts with other shooters?
(Asked of those who have personally witnessed or experienced conflicts with other shooters while shooting on federal lands in the past 5 years.)**



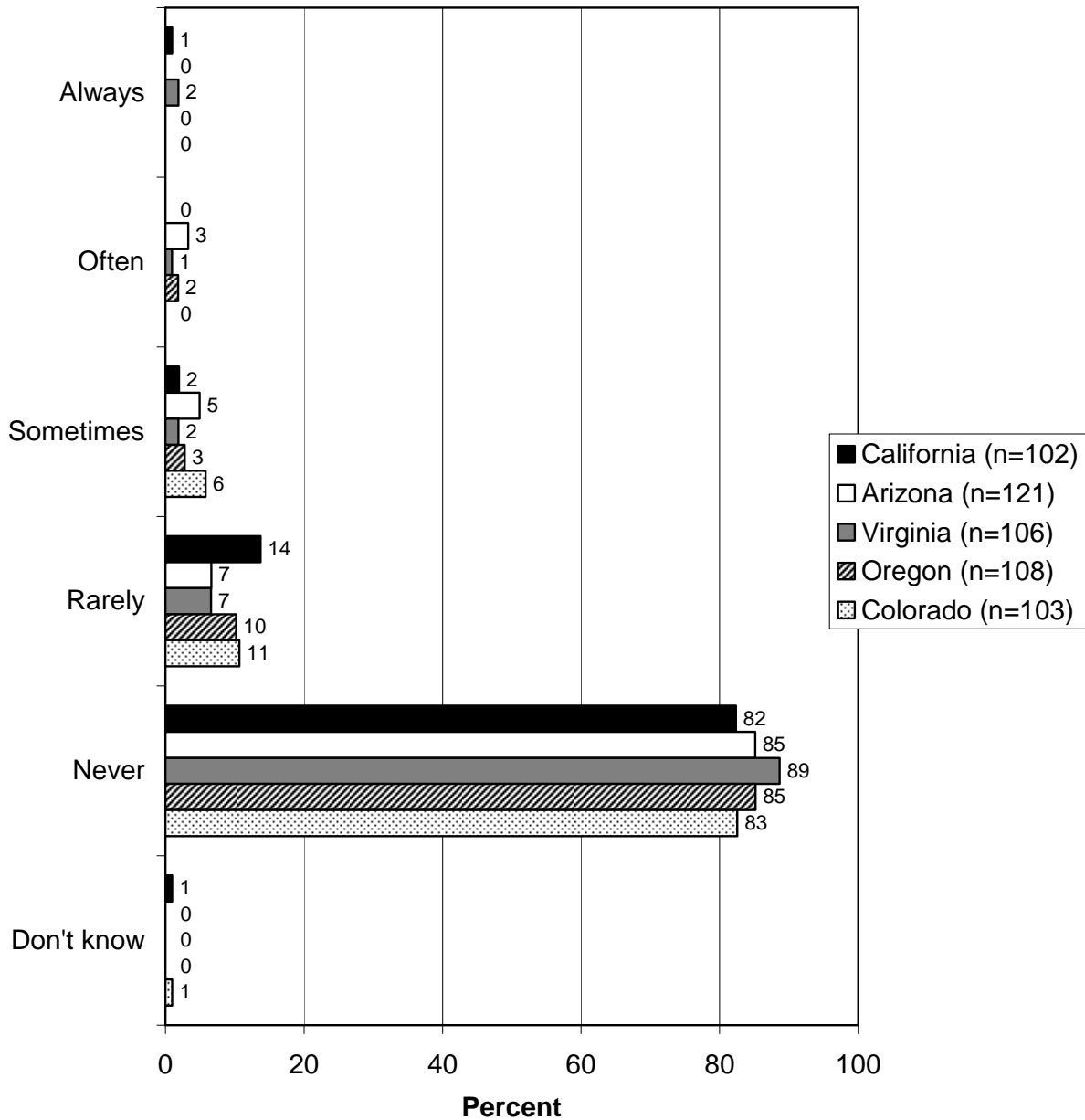
Q125. How about conflicts with other recreationists in the area? Would you say you have personally witnessed or experienced it always, often, sometimes, rarely, or never while shooting on federal lands in the past 5 years?



Q127. How would you describe the people you observed participating in or causing conflicts with other recreationists in the area? (Asked of those who have personally witnessed or experienced conflicts with other recreationists in the area while shooting on federal lands in the past 5 years.)



Q128. How about conflicts with or complaints from home or land owners adjacent to the federal land? Would you say you have personally witnessed or experienced it always, often, sometimes, rarely, or never while shooting on federal lands in the past 5 years?



POTENTIAL REASONS FOR UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR AND OPINIONS ON DETERRENCE

- When asked for their opinion regarding why people participate in unsafe shooting practices, the most commonly given reason in each state is that such people were not raised the right way (and other prominent reasons given include that such people do not care that they are being unsafe and that they are rude). Ignorance is also to blame, as the second and third most common answers are that people do *not* know that the behavior in question is unsafe and that people do not learn shooting safety.

- Similar to the above question, the survey asked respondents to indicate why they think that people leave shooting debris in an area after recreational shooting. The most common reason by far is that such people are lazy. Lack of caring and not being raised the right way are also common reasons. Ignorance is *not* a commonly given reason (unlike the above question in which ignorance is a commonly attributed cause). The survey also asked about litter in general (as opposed to specifically shooting debris), with similar results: laziness is the most commonly given reason why respondents think people litter.
 - The survey asked respondents what would encourage them to pick up all their shooting debris after using federal recreational land. Responses are well distributed into three categories of answers: having trash and recycling receptacles around, having reminder signs posted, and stepped up law enforcement.

- Most commonly, respondents indicate that having another shooter approach somebody practicing unsafe shooting would be *somewhat* effective at stopping the unsafe behavior (ranging from 43% to 50%). Another 18% to 31% say it would be *very* effective at stopping the unsafe behavior. Nonetheless, about a quarter (18% to 29%) say it would be not at all effective. The same question was asked about approaching another shooter who is leaving shooting debris or litter in an area, with

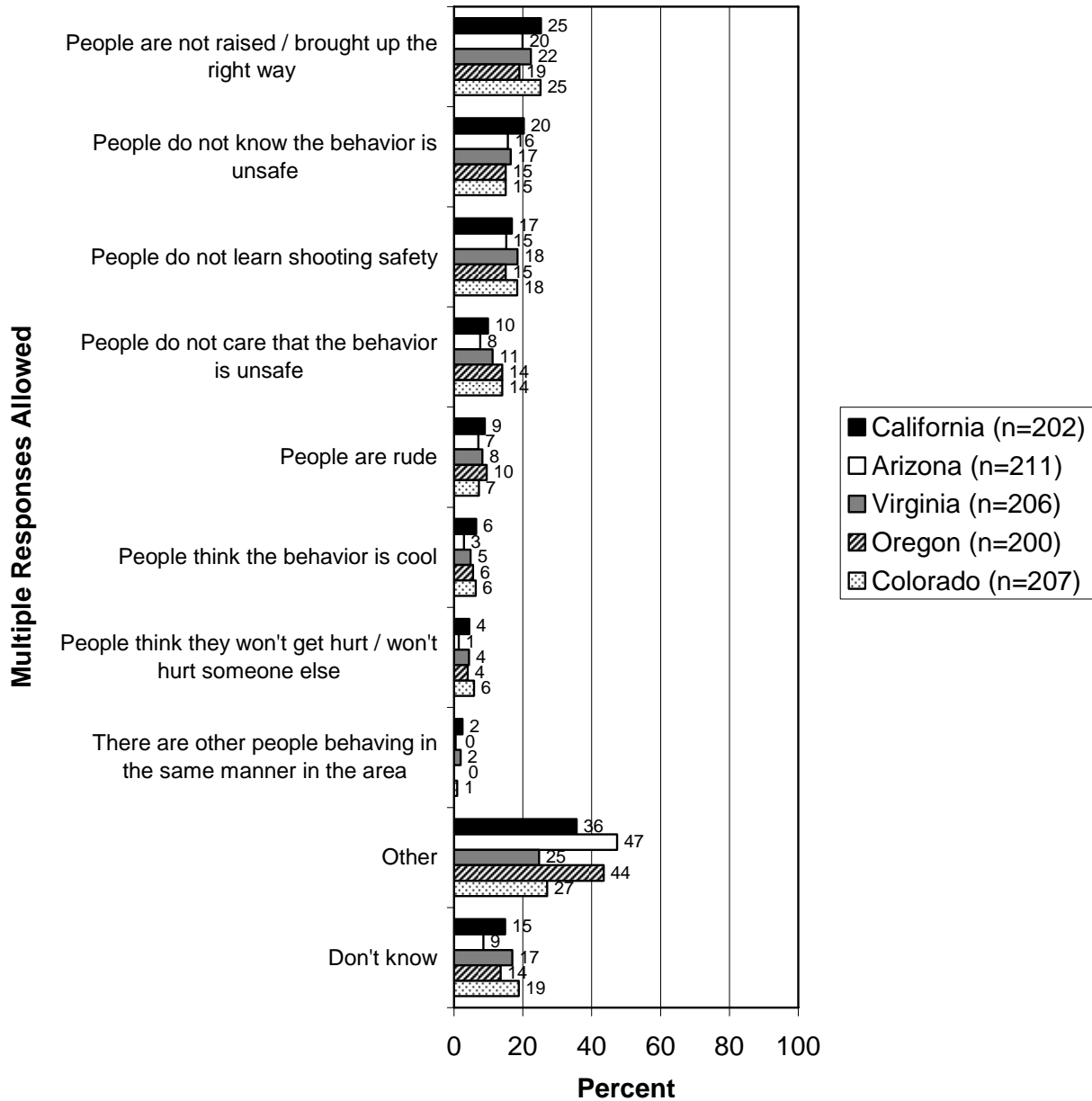
similar results. (These questions, however, do not address how comfortable the respondent would be approaching another armed person about unsafe or unethical behavior.)

- Self-policing is the role that respondents overwhelmingly thought that hunters and shooters should have in keeping recreational shooting lands and ranges clean on federal lands. Large percentages also indicated that hunters and shooters should participate in volunteer clean-up days. Almost none abdicated any role in keeping the shooting areas on federal lands clean (i.e., almost none said that hunters and shooters should have *no* role).
- The survey asked a series of six questions regarding the likelihood that respondents would do certain things if they knew doing so would help prevent some areas from being closed to recreational shooting. Of the six things, one stands out with an overwhelming majority (ranging from 69% to 79%) of each state saying that they would be *very* likely to do it: reporting unsafe or irresponsible behavior to authorities. Just about half (ranging from 49% to 59%) would directly approach those practicing unsafe or irresponsible behavior. On the other hand, the item at the bottom of each state's ranking of these six things is paying a user-fee to shoot on federal public lands, with the fee being used to maintain those areas (ranging from only 20% to 35%). The results are tabulated below for easy comparison among states. The six things about which the survey asked were as follows:
 - Saying something to the people you see participating in unsafe behavior, irresponsible behavior, or littering at the shooting area or range?
 - Reporting unsafe behavior, irresponsible behavior, littering, and other problems to authorities?
 - Organized volunteer clean-up events?
 - Volunteer presence to discourage problems?
 - Meetings with the land manager about problems and solutions?
 - Paying a user fee to shoot on federal lands, which would be used to clean and maintain the areas and ranges as well as to repair property damage?

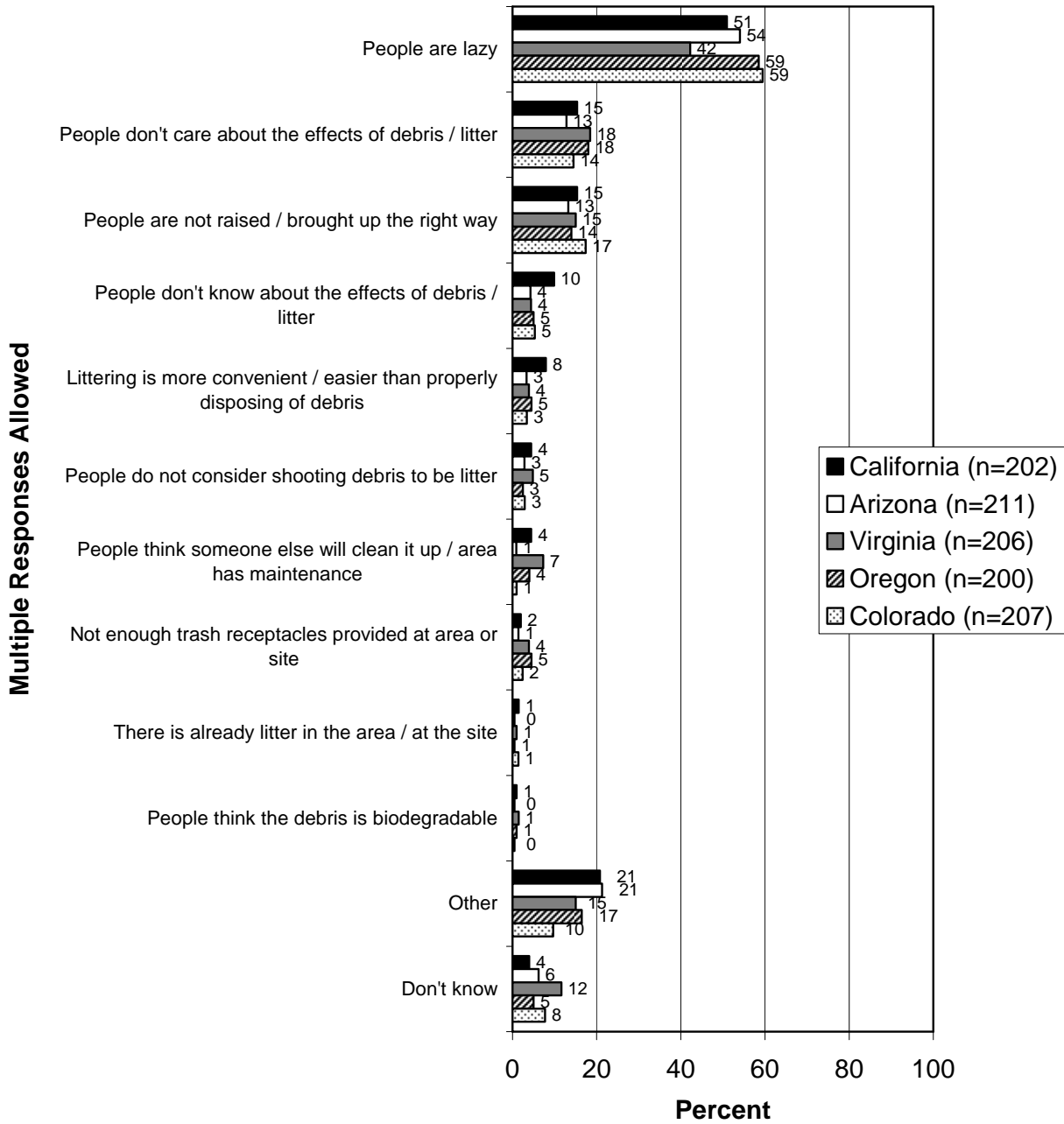
Comparison Among States of Series of Questions on Likelihood to Do Certain Things to Help Prevent the Closing of Shooting Areas on Federal Lands

Percent saying that they would be <i>very</i> likely to do the following, if they knew doing so would help prevent federal lands from being closed to shooting	CA	AZ	VA	OR	CO
60% or more	Reporting unsafe / irresponsible behavior	Reporting unsafe / irresponsible behavior Organized volunteer clean-up events	Reporting unsafe / irresponsible behavior Organized volunteer clean-up events	Reporting unsafe / irresponsible behavior	Reporting unsafe / irresponsible behavior
50% to 59%	Organized volunteer clean-up events	Saying something to the people	Saying something to the people Meetings with land manager about problems	Saying something to the people	Saying something to the people
40% to 49%	Saying something to the people Meetings with land manager about problems	Meetings with land manager about problems	Volunteer presence to discourage problems	Organized volunteer clean-up events Meetings with land manager about problems	Organized volunteer clean-up events Meetings with land manager about problems
30% to 39%	Volunteer presence to discourage problems	Volunteer presence to discourage problems	Paying a user fee	Volunteer presence to discourage problems	NONE
Less than 30%	Paying a user fee	Paying a user fee	NONE	Paying a user fee	Volunteer presence to discourage problems Paying a user fee

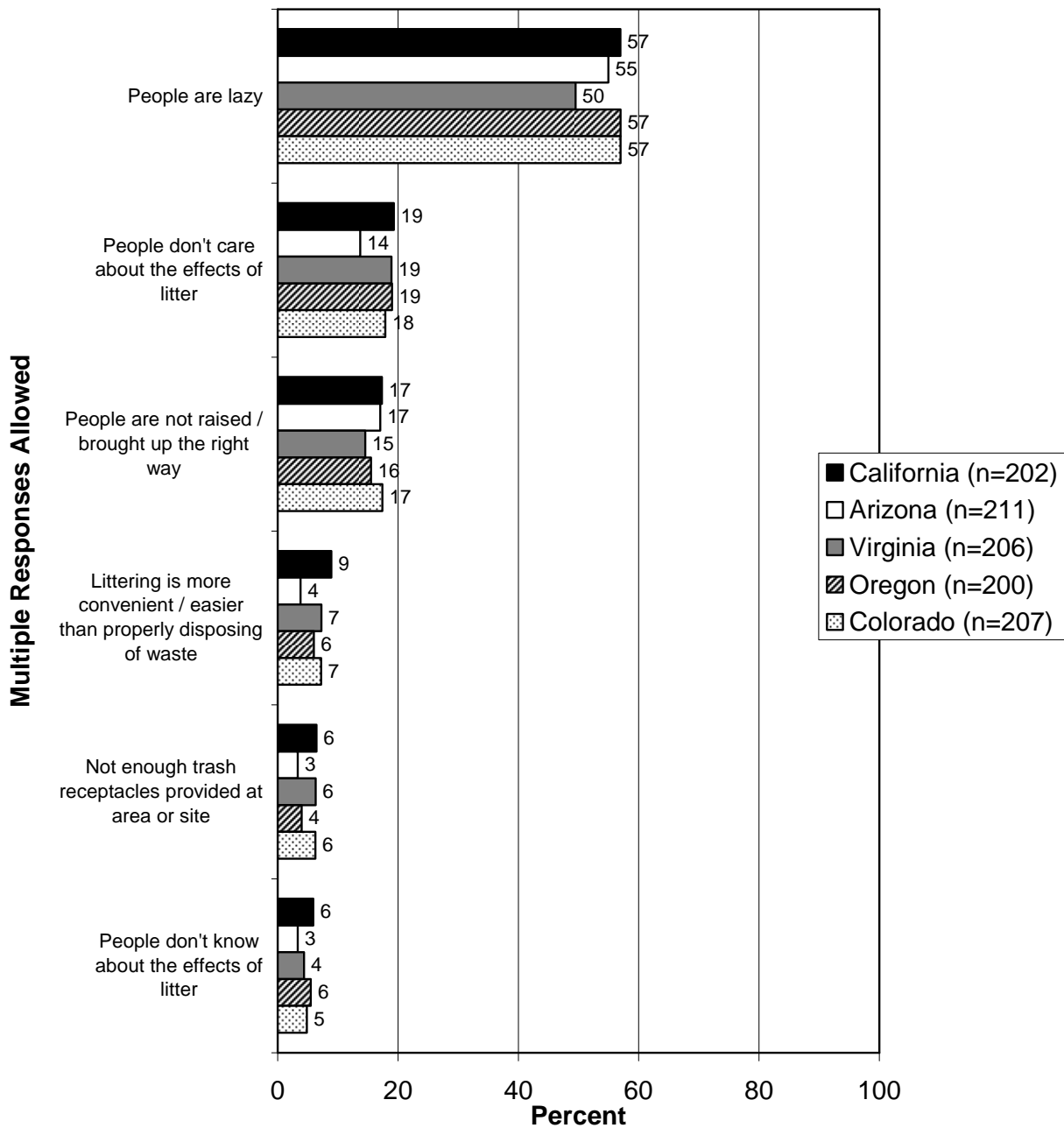
Q133. In your opinion, why do people participate in unsafe shooting practices or other irresponsible behavior at recreational shooting areas and ranges on federal lands?



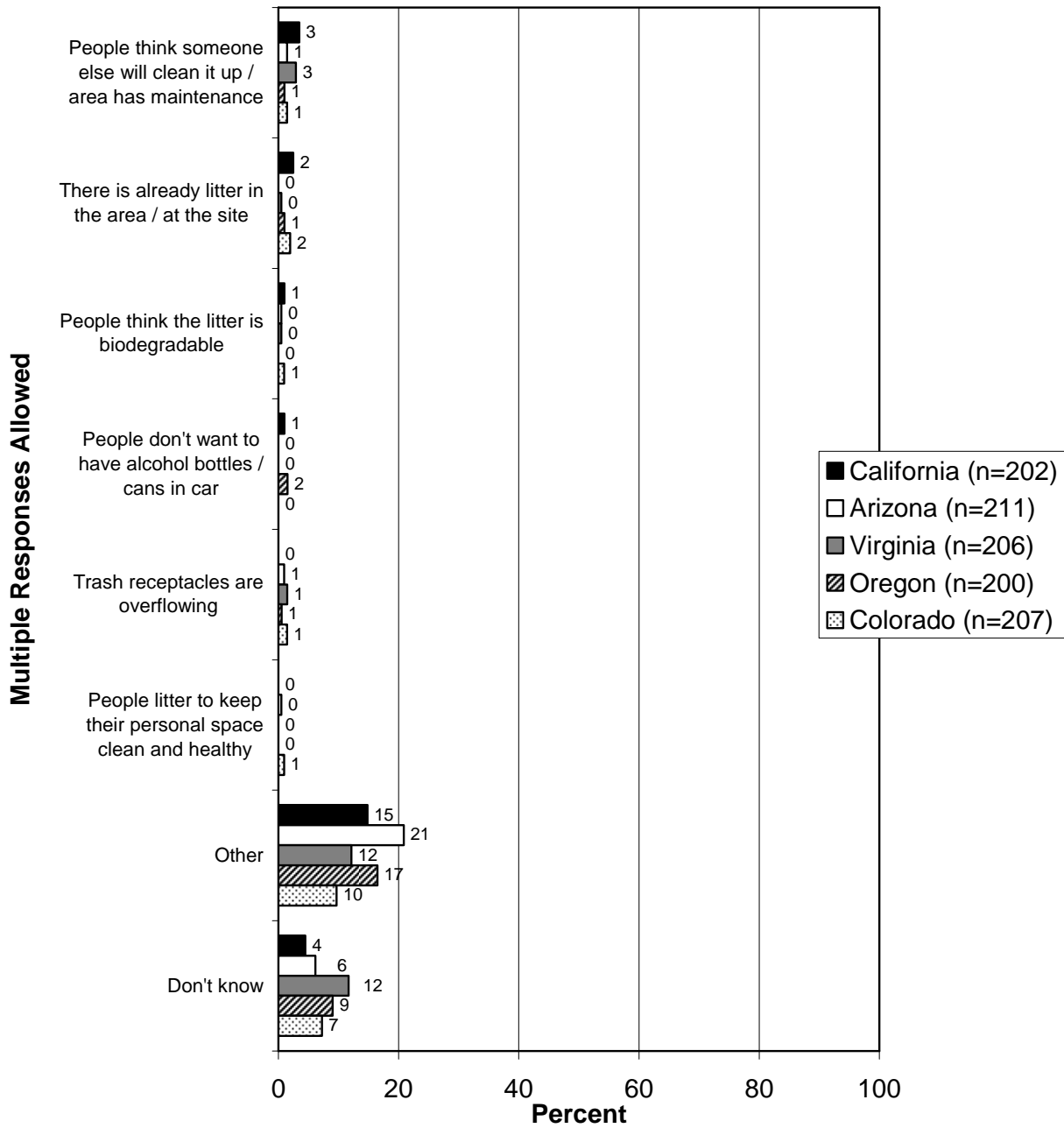
Q137. In your opinion, why do people leave shooting debris, such as shells and target fragments, in the area after using a recreational shooting site on federal lands?



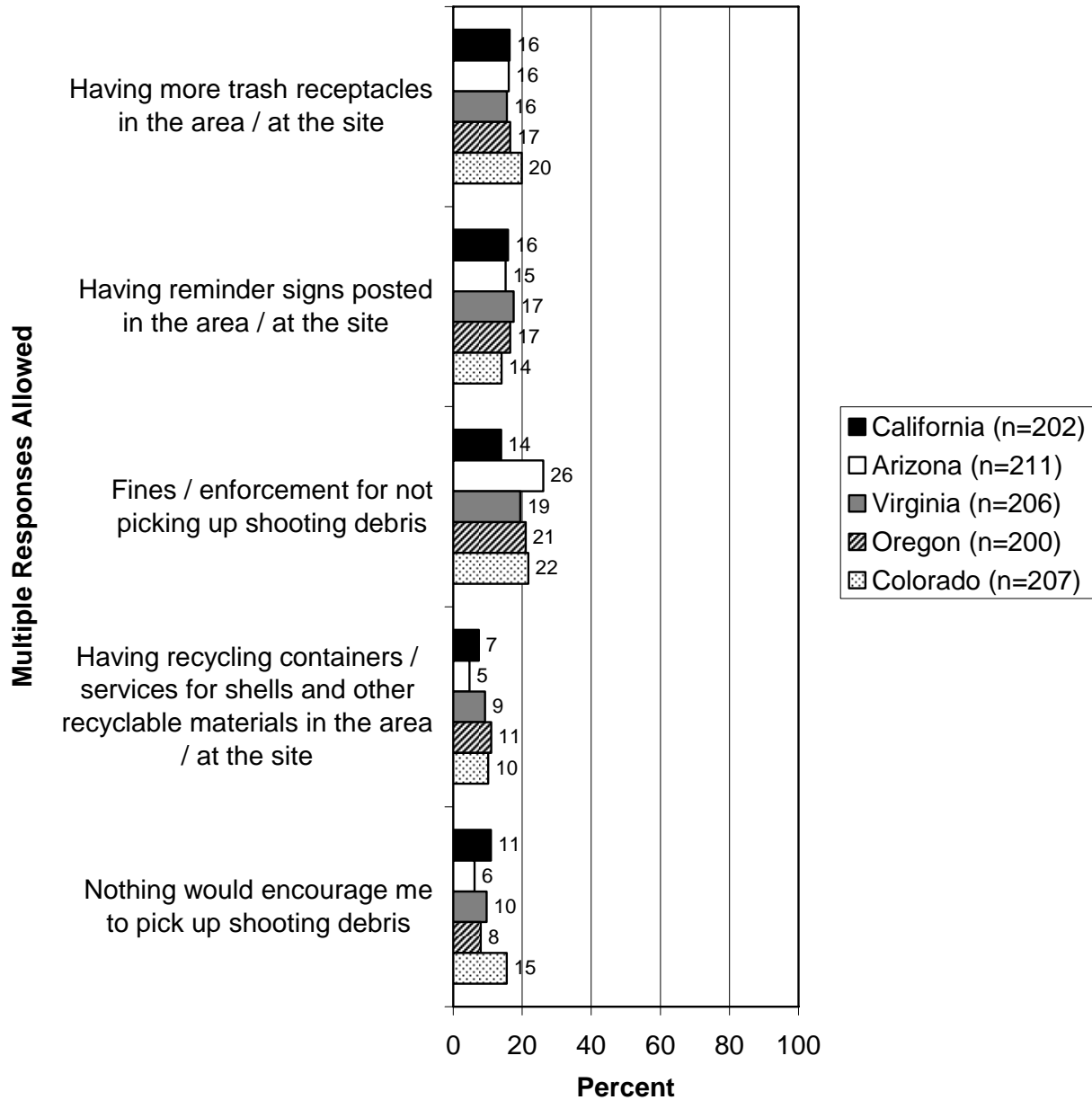
**Q145. In your opinion, why do people leave other types of litter, such as food wrappers and beverage containers, in the area after using a recreational shooting site on federal lands?
(Part 1.)**



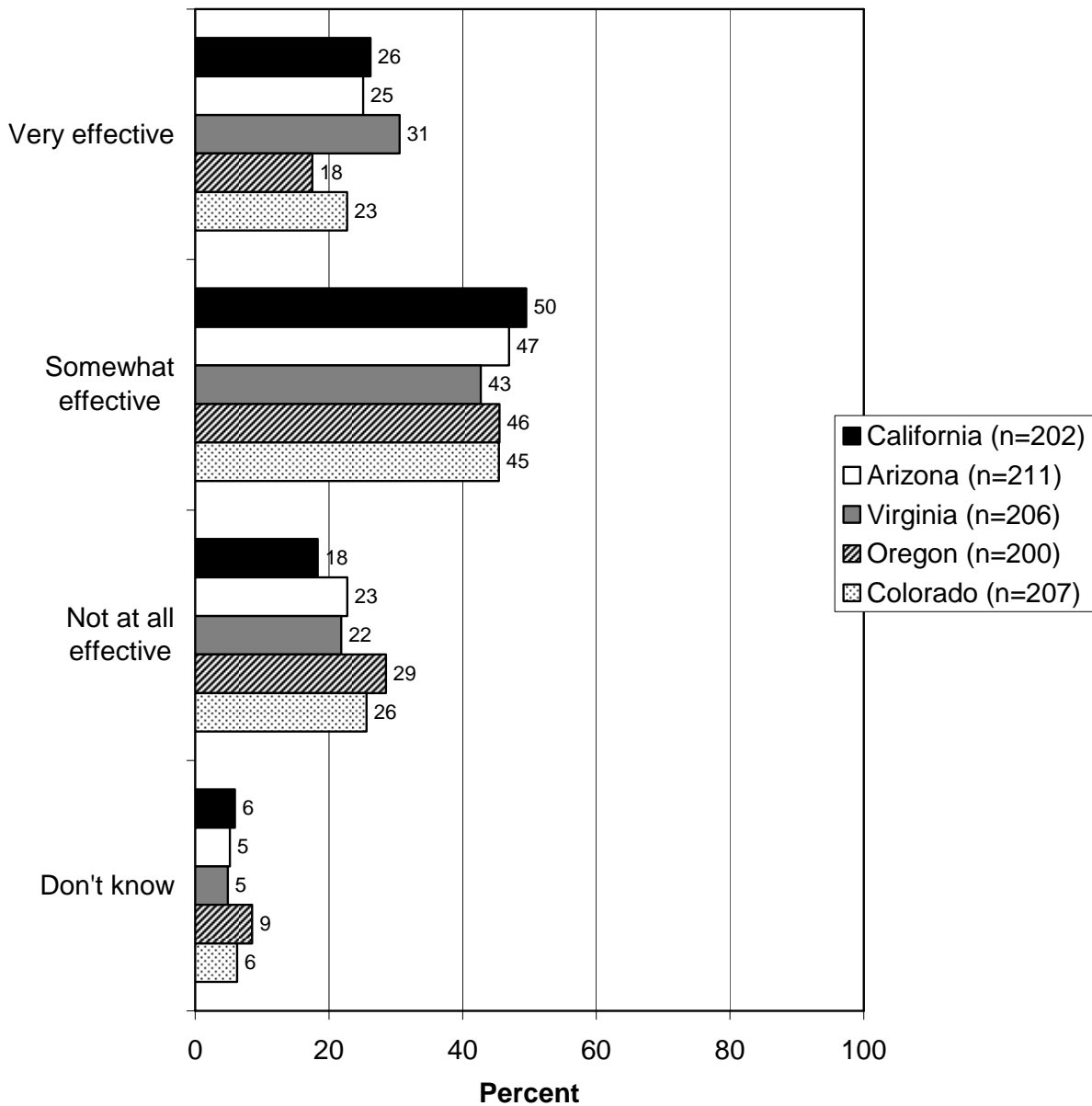
Q145. In your opinion, why do people leave other types of litter, such as food wrappers and beverage containers, in the area after using a recreational shooting site on federal lands?
(Part 2.)



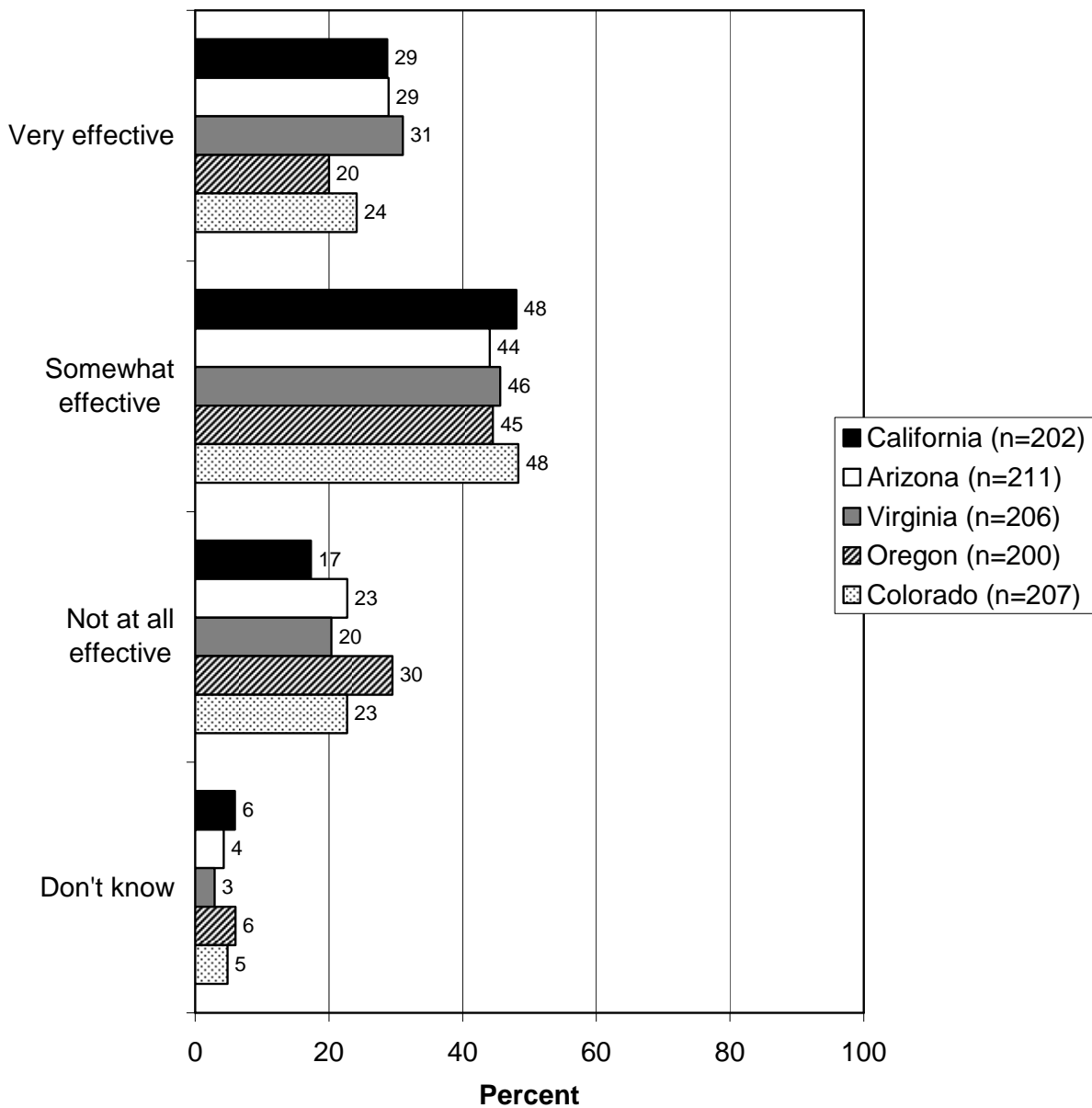
Q141. What would encourage you to pick up all your shooting debris, such as shells and target fragments, after using a recreational shooting site on federal lands?



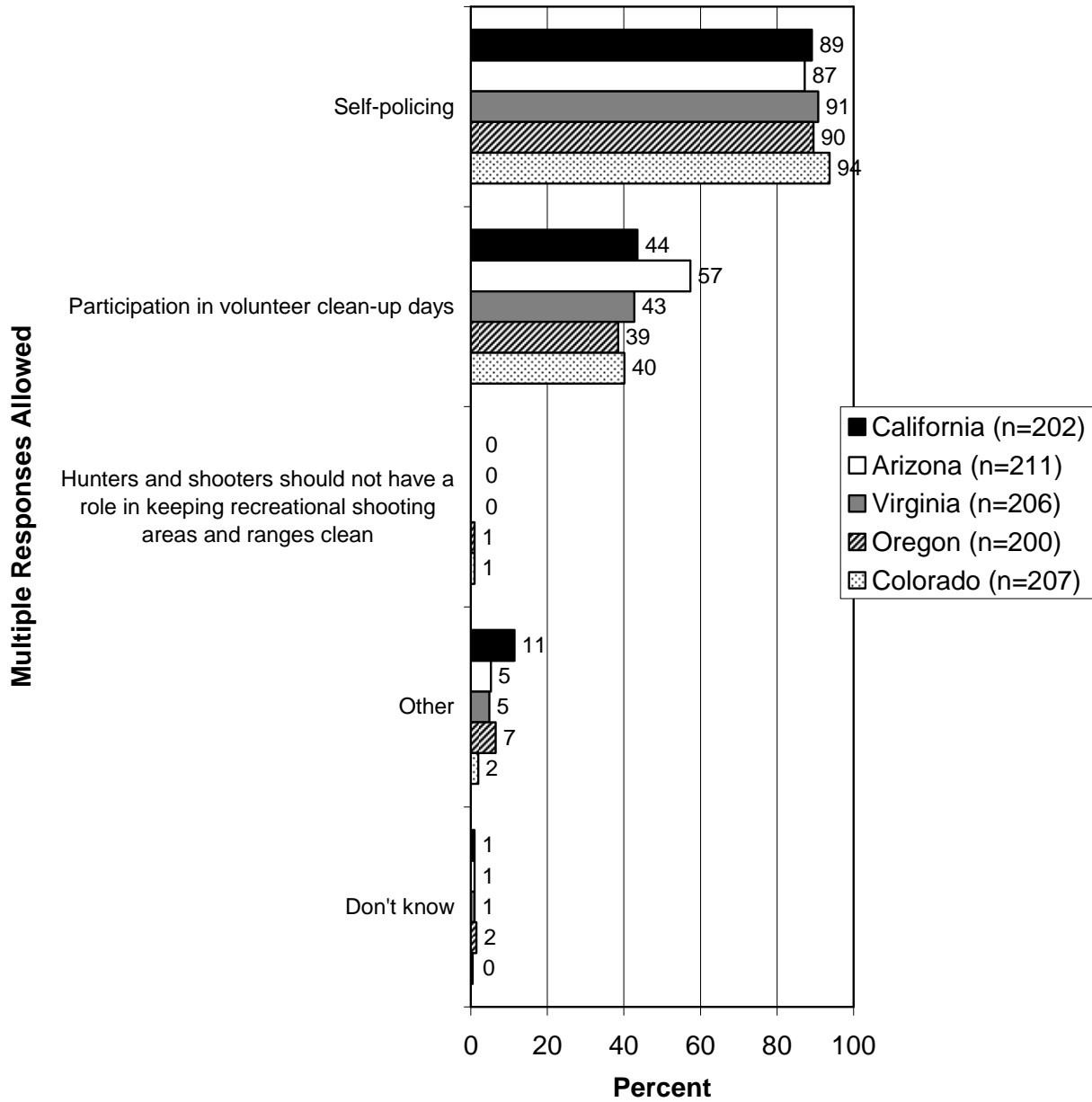
Q147. How effective do you think being approached by another shooter about unsafe shooting practices or other irresponsible behavior would be at stopping you or other people from participating in such behavior at recreational shooting sites on federal lands?



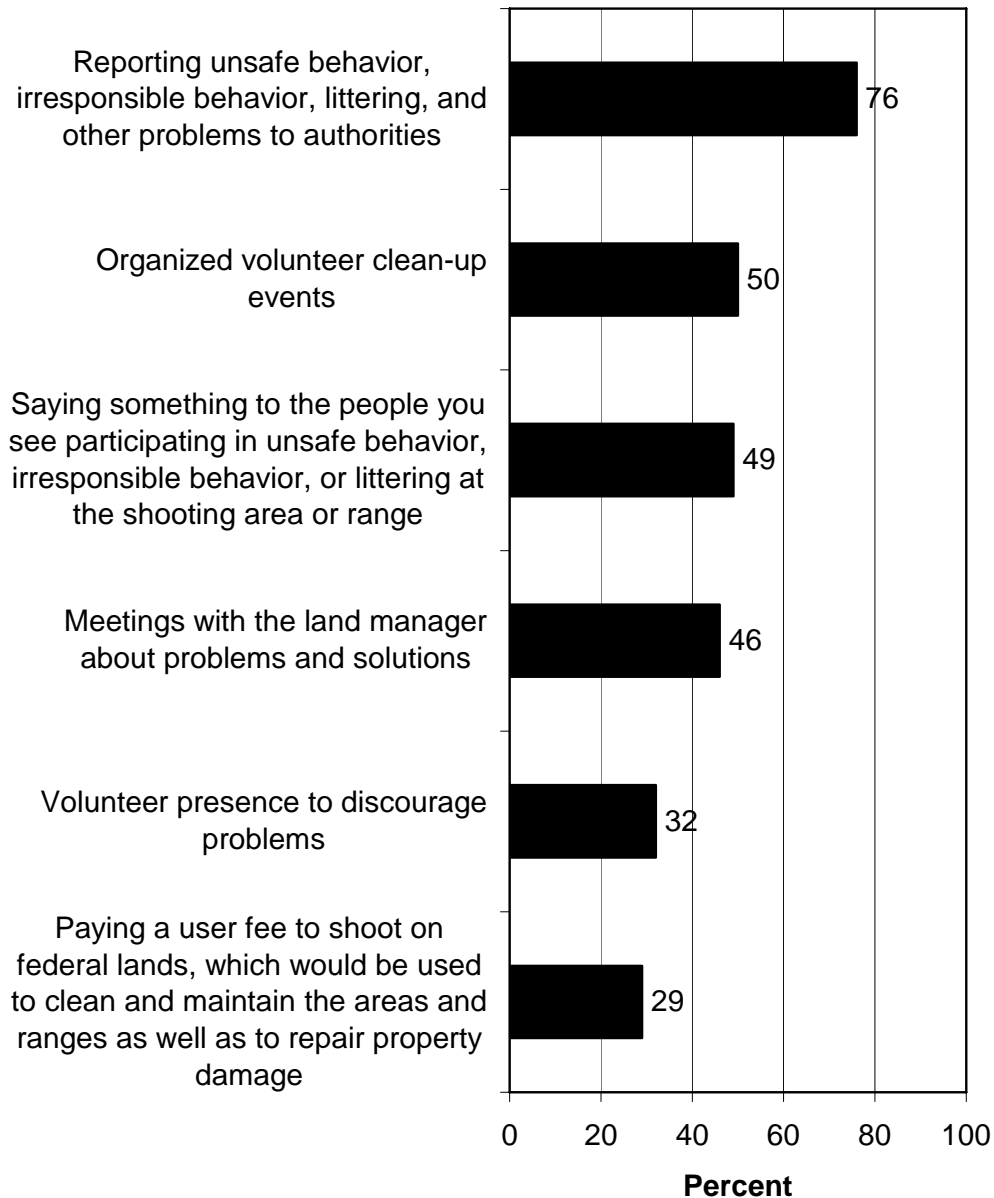
Q148. How effective do you think being approached by another shooter about leaving shooting debris or other litter in the area would be at stopping you or other people from leaving such debris or litter at recreational shooting sites on federal lands?



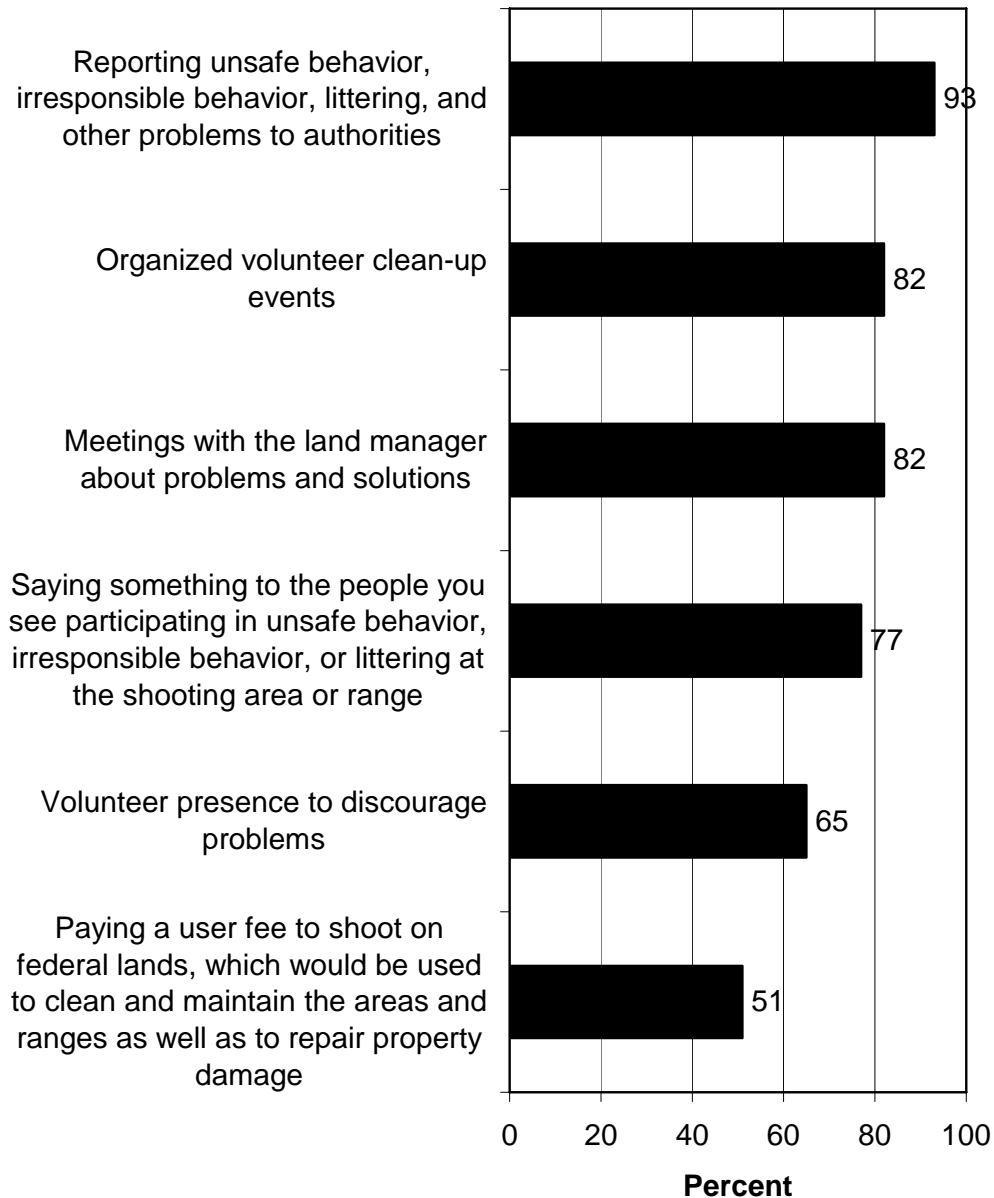
Q151. In your opinion, what role should hunters and shooters have in keeping recreational shooting areas and ranges clean on federal lands?



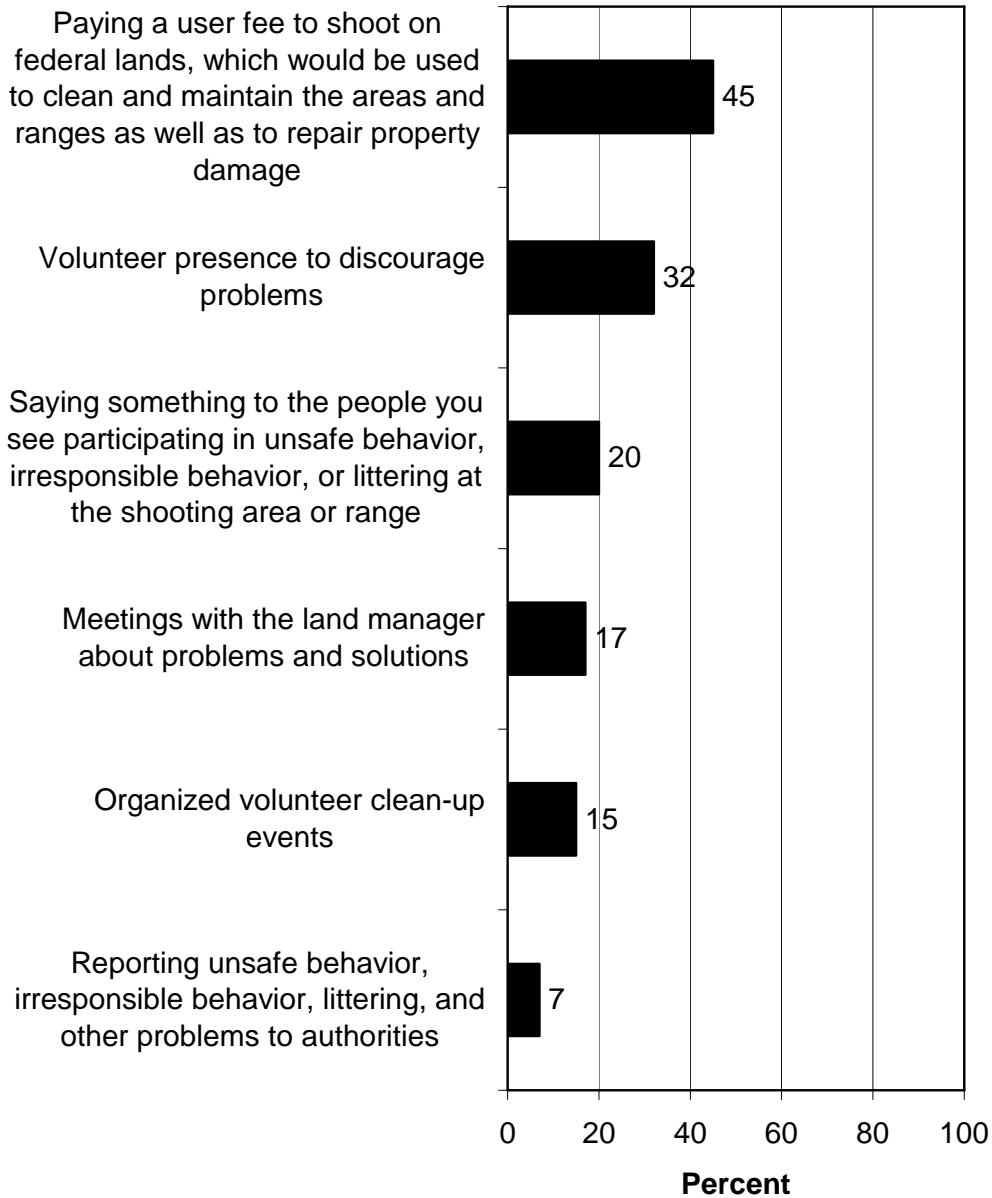
**Percent who would be very likely to participate in the following activities if he/she knew they would prevent some recreational shooting areas and ranges on federal lands from being closed.
(California)**



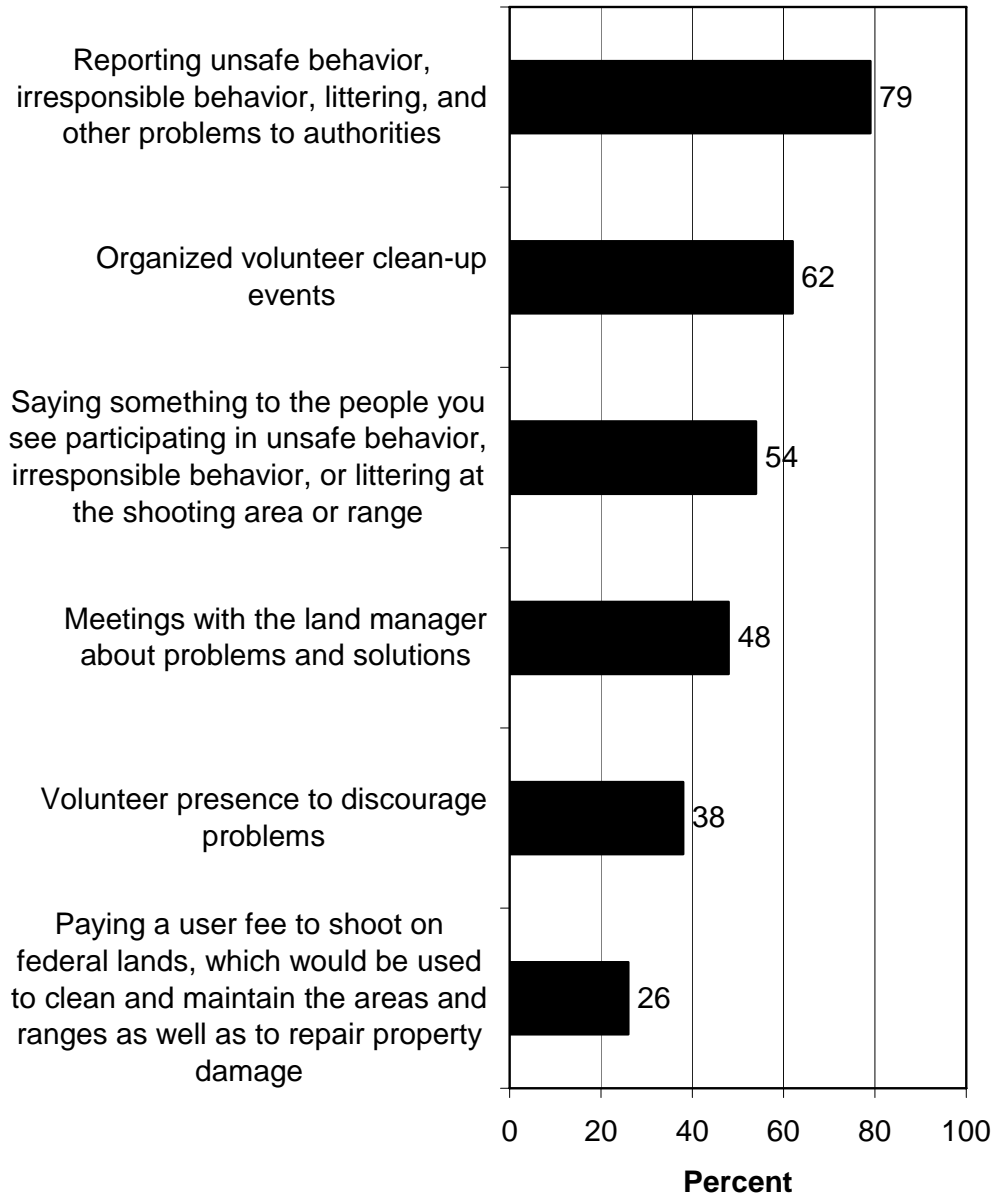
**Percent who would be very or somewhat likely to participate in the following activities if he/she knew they would prevent some recreational shooting areas and ranges on federal lands from being closed.
(California)**



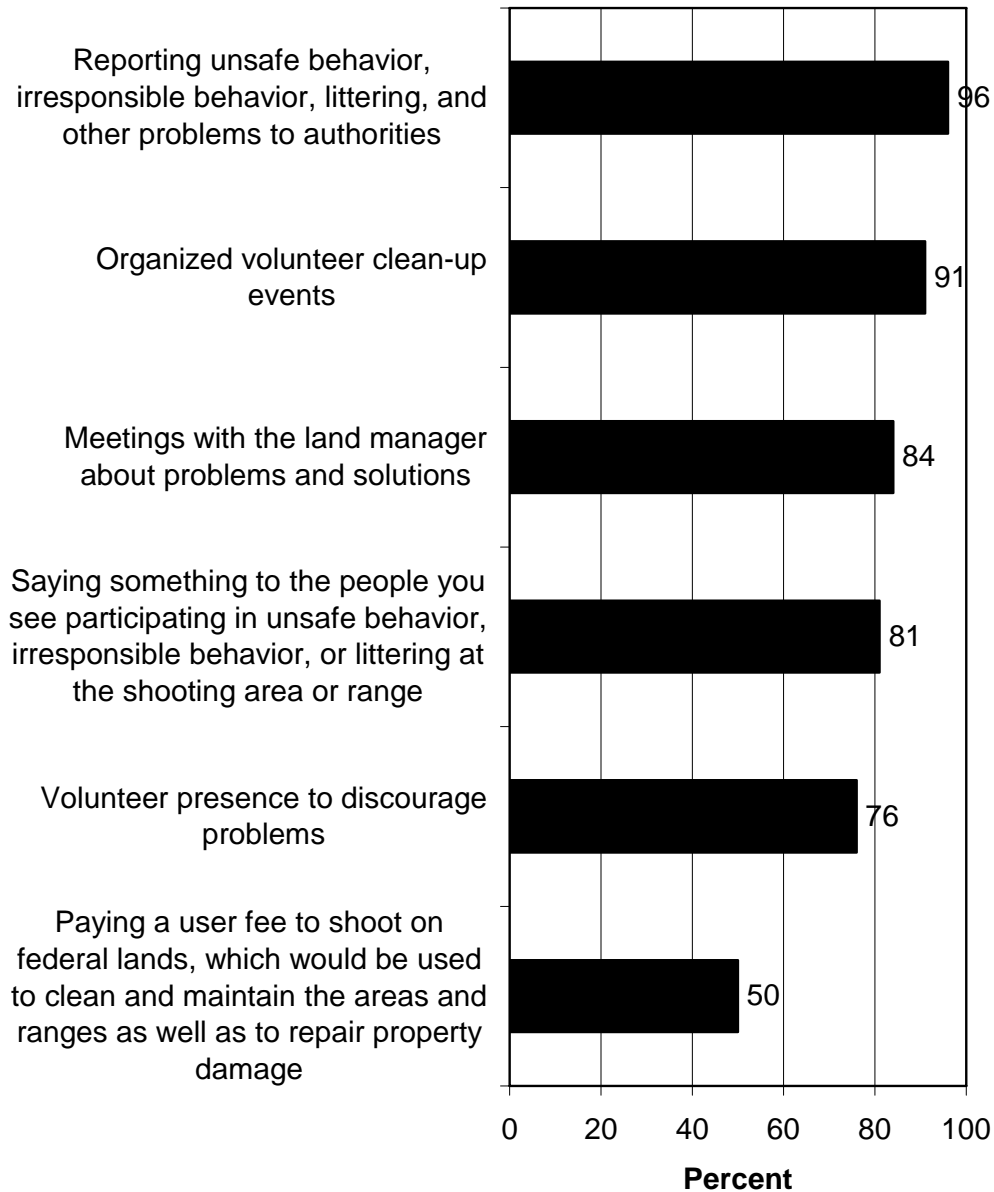
**Percent who would not be at all likely to participate in the following activities if he/she knew they would prevent some recreational shooting areas and ranges on federal lands from being closed.
(California)**



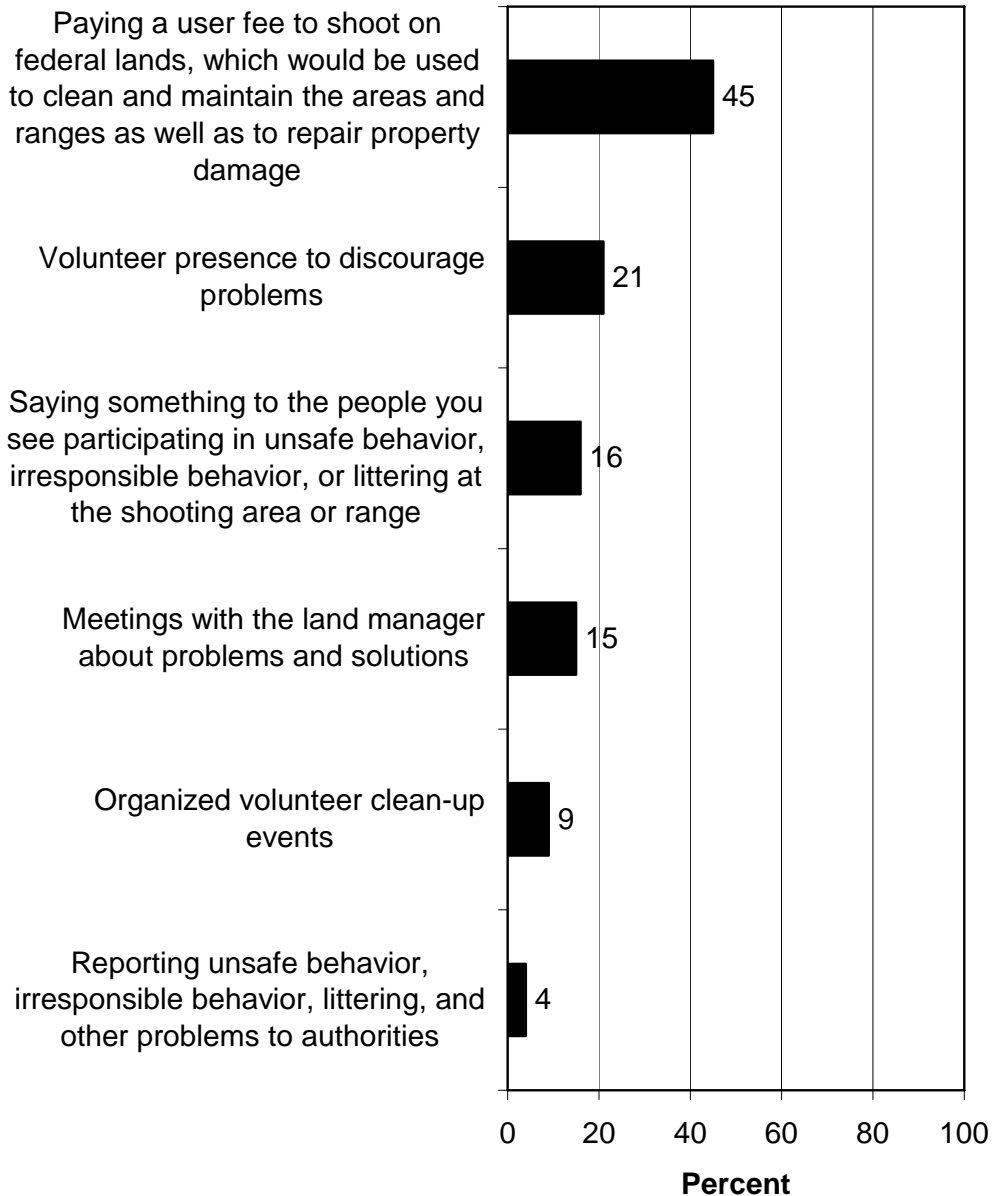
**Percent who would be very likely to participate in the following activities if he/she knew they would prevent some recreational shooting areas and ranges on federal lands from being closed.
(Arizona)**



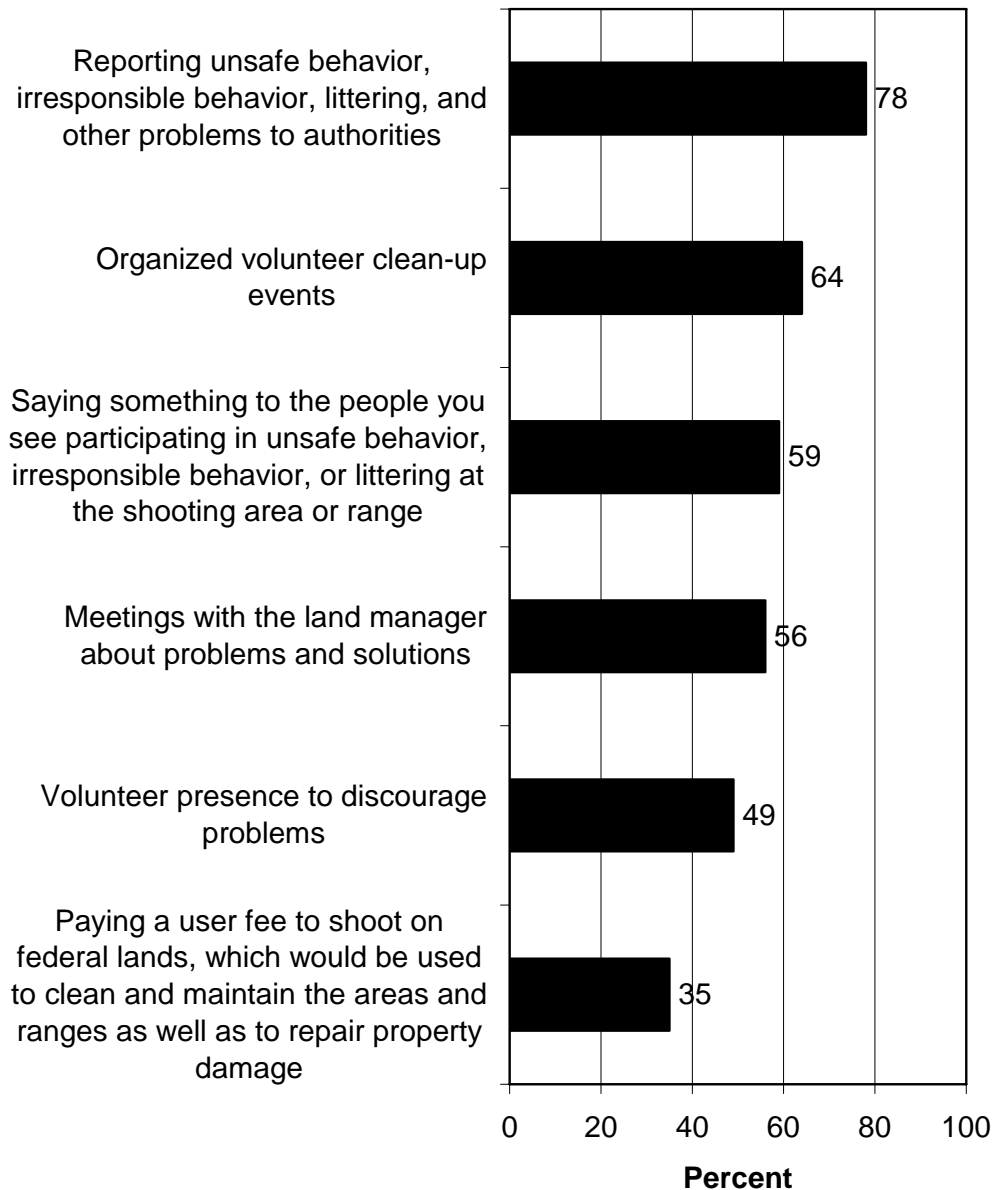
**Percent who would be very or somewhat likely to participate in the following activities if he/she knew they would prevent some recreational shooting areas and ranges on federal lands from being closed.
(Arizona)**



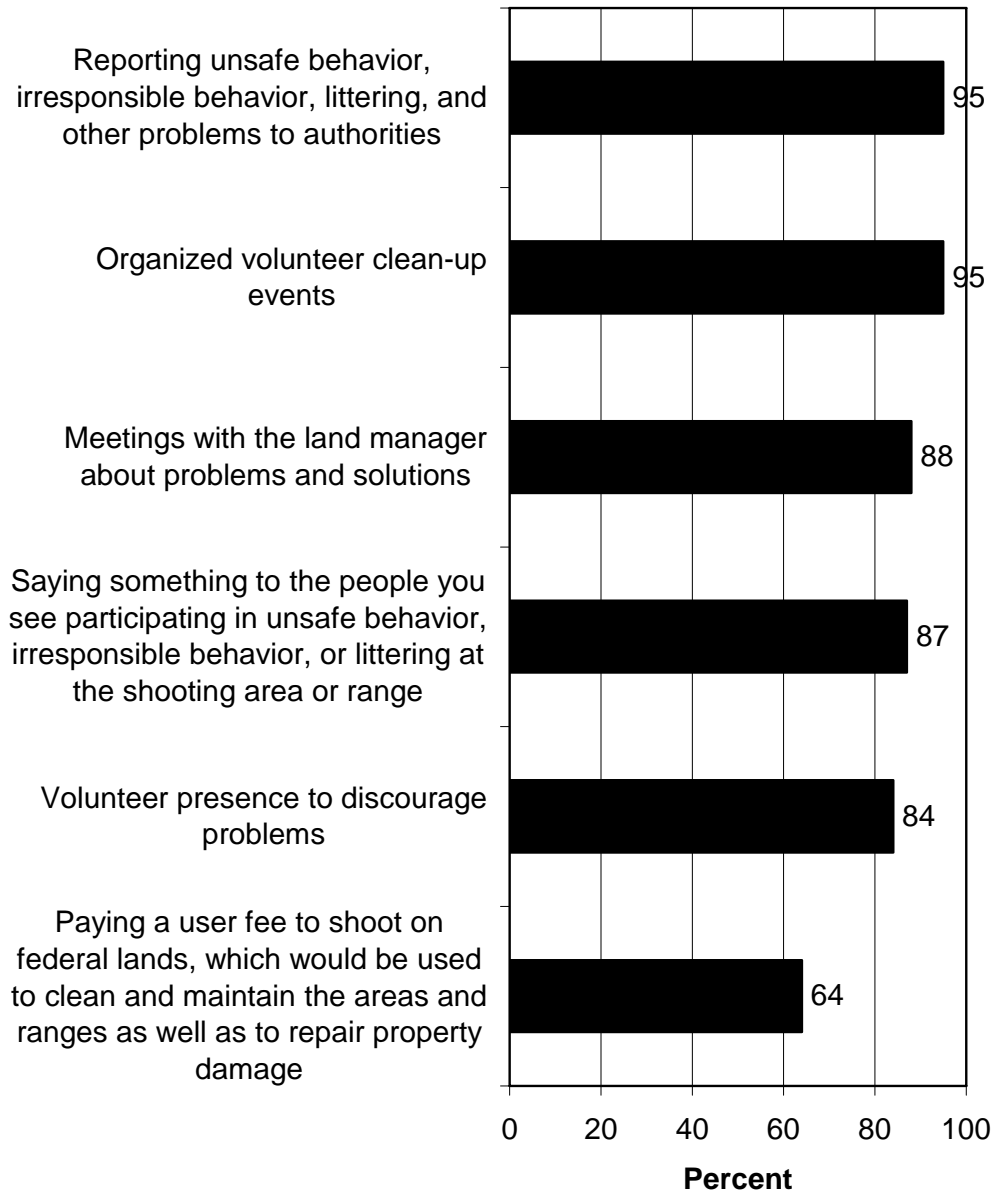
**Percent who would not be at all likely to participate
in the following activities if he/she knew they would
prevent some recreational shooting areas and
ranges on federal lands from being closed.
(Arizona)**



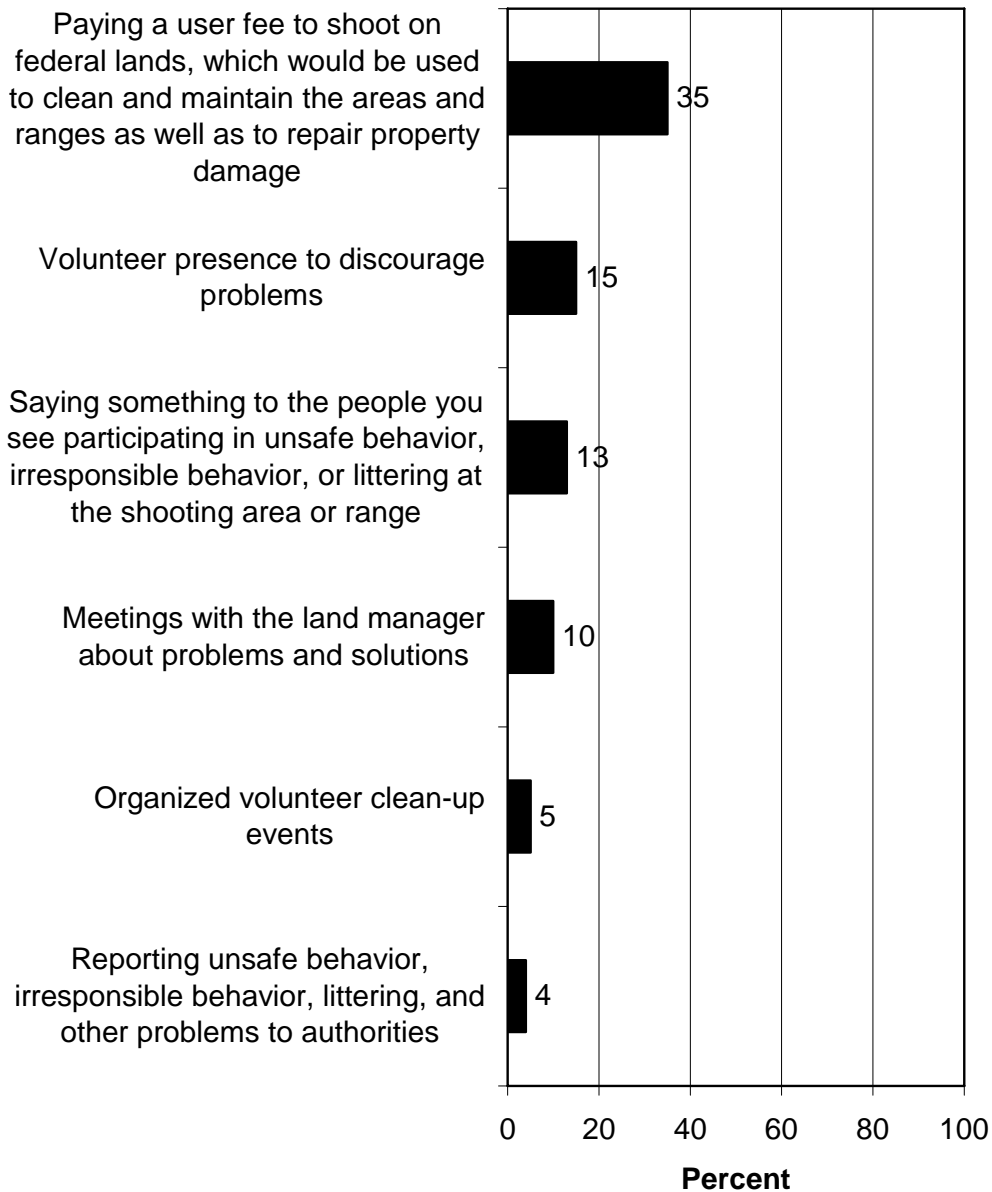
Percent who would be very likely to participate in the following activities if he/she knew they would prevent some recreational shooting areas and ranges on federal lands from being closed. (Virginia)



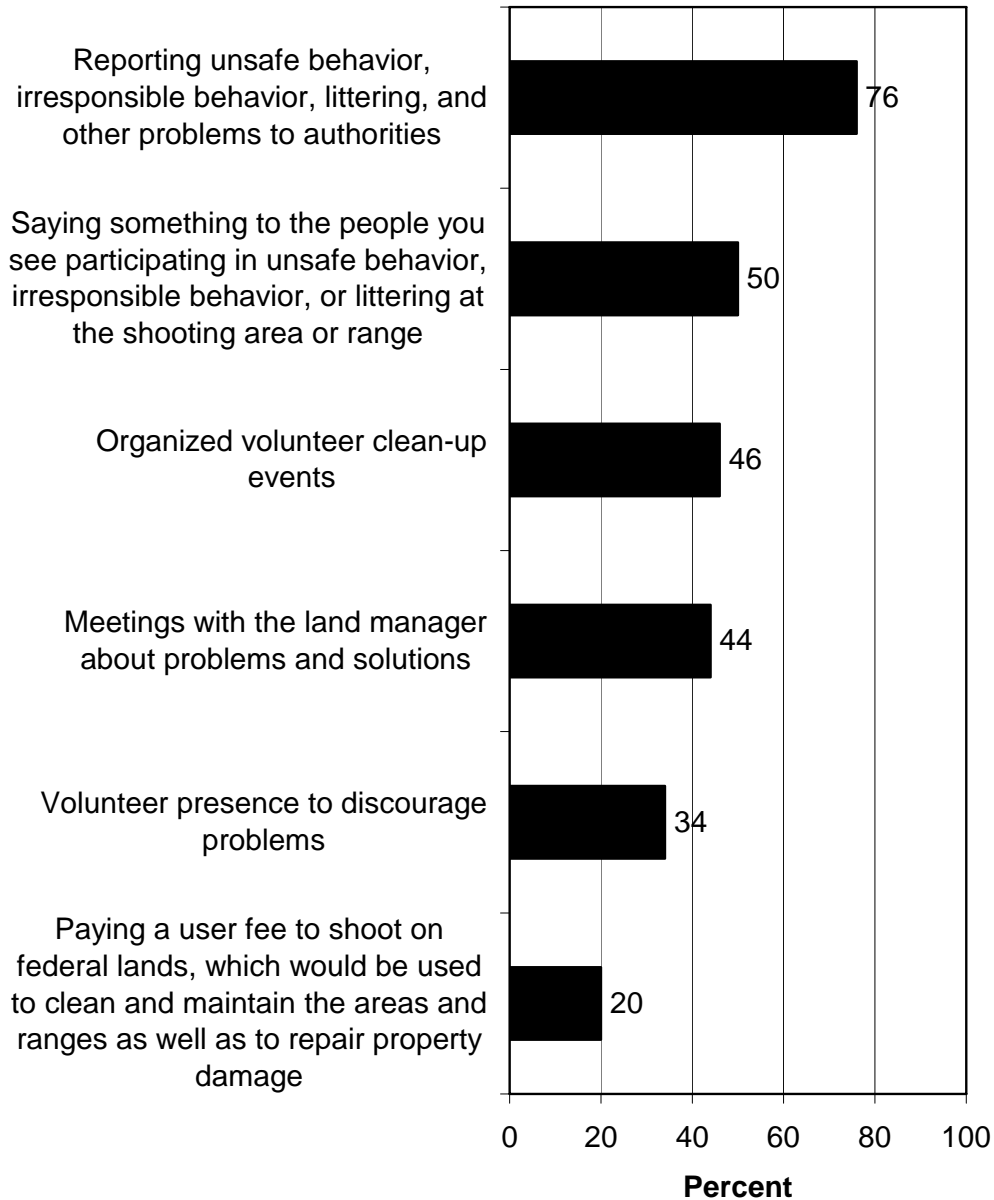
**Percent who would be very or somewhat likely to participate in the following activities if he/she knew they would prevent some recreational shooting areas and ranges on federal lands from being closed.
(Virginia)**



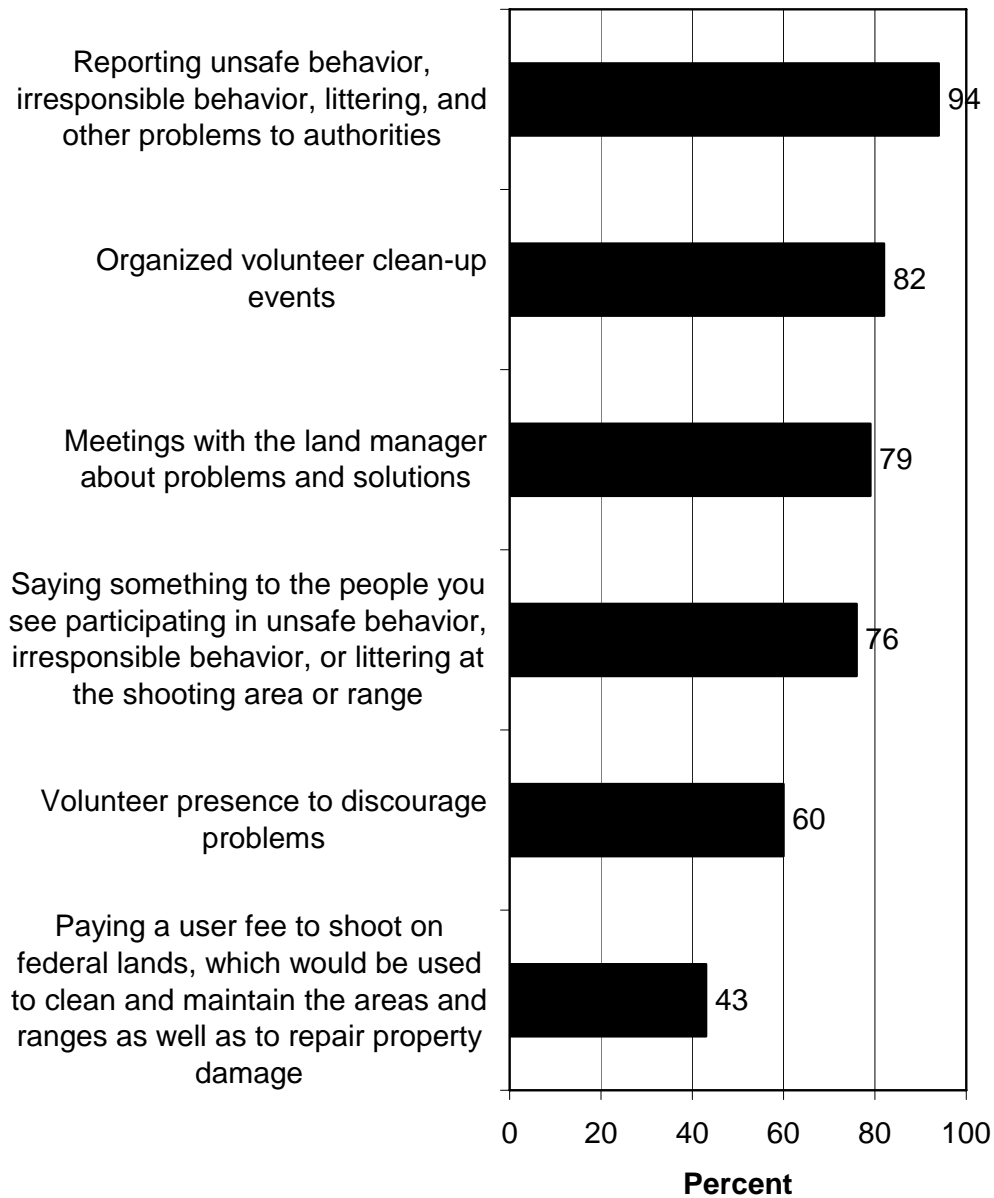
Percent who would not be at all likely to participate in the following activities if he/she knew they would prevent some recreational shooting areas and ranges on federal lands from being closed. (Virginia)



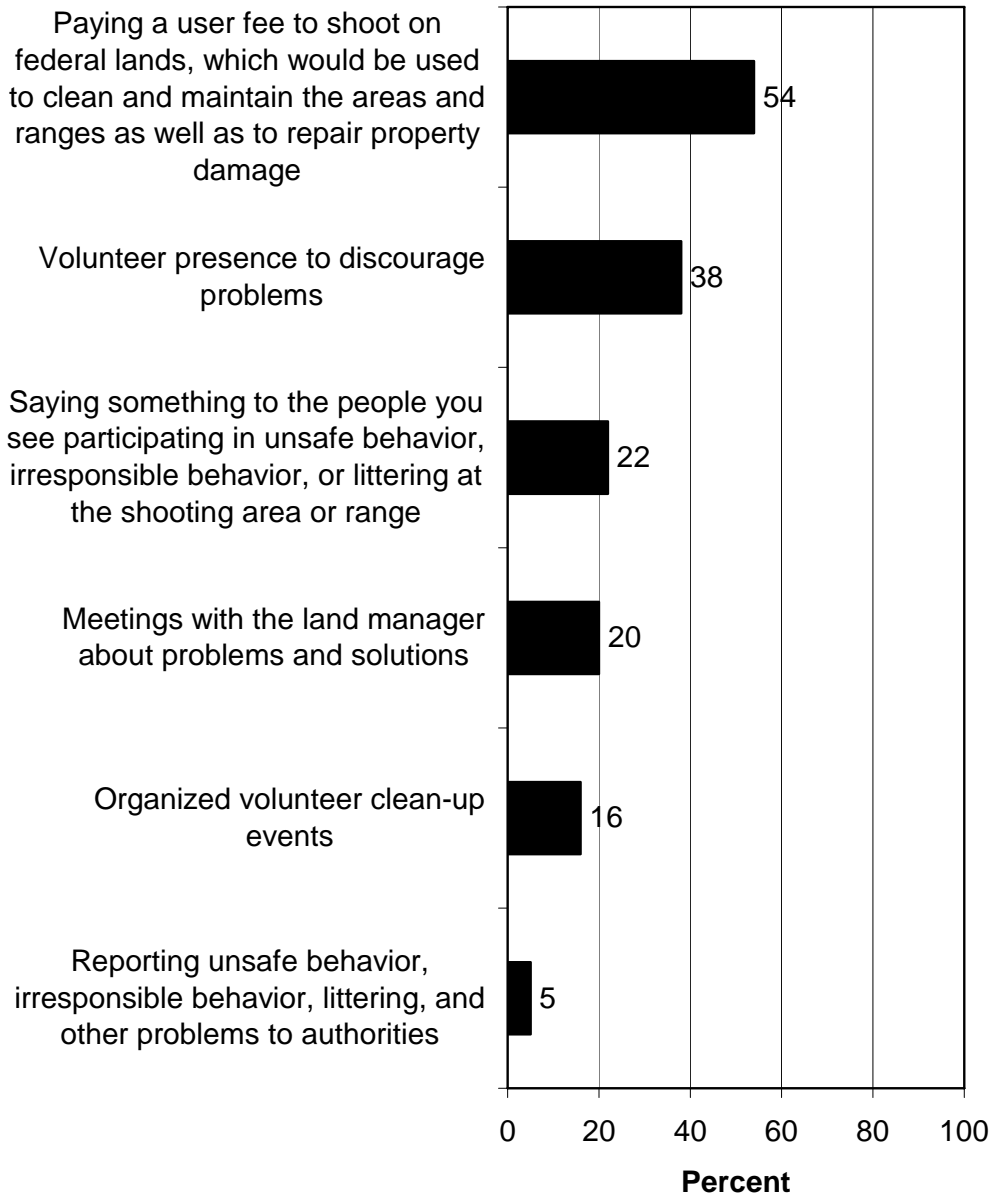
**Percent who would be very likely to participate in the following activities if he/she knew they would prevent some recreational shooting areas and ranges on federal lands from being closed.
(Oregon)**



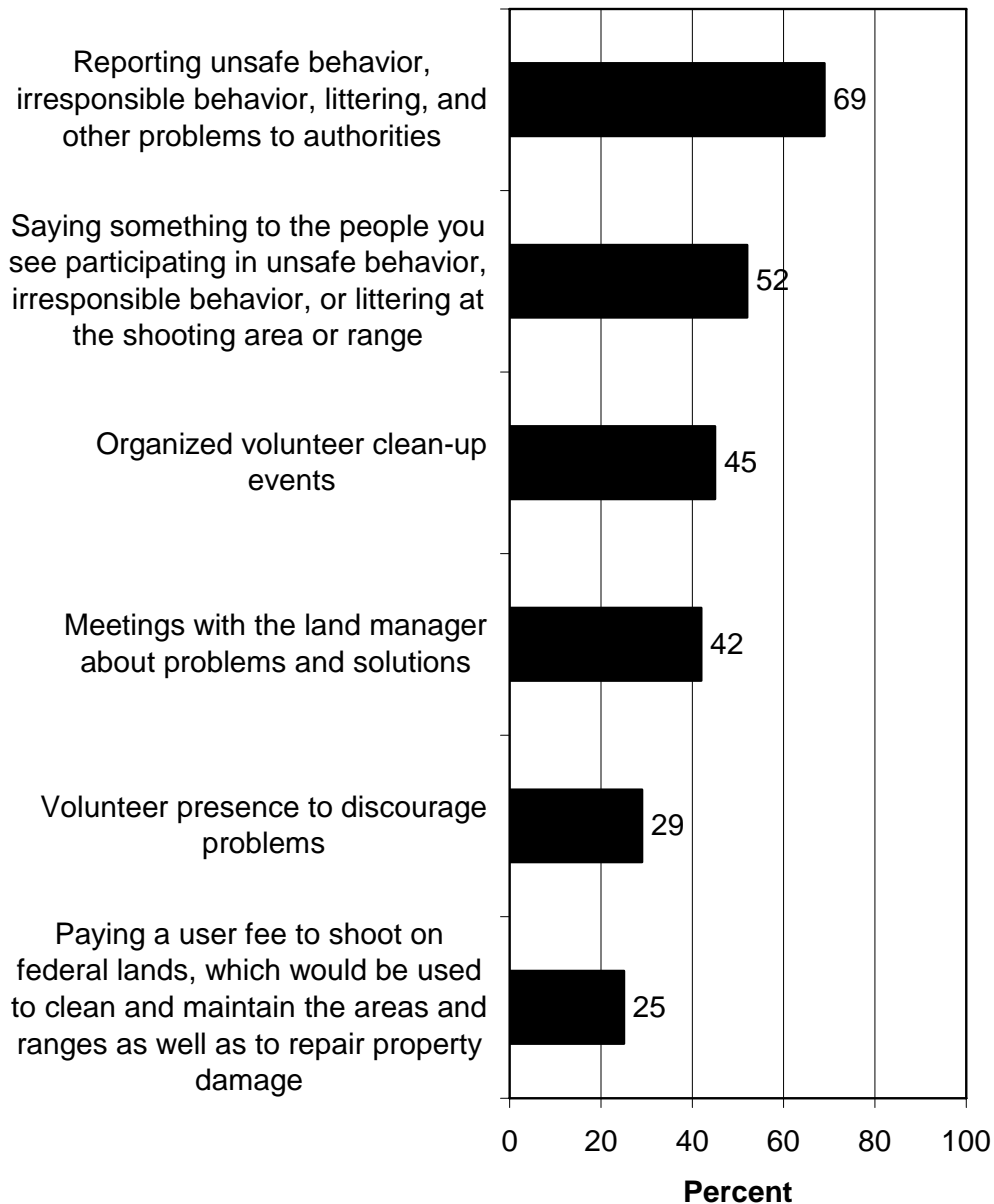
**Percent who would be very or somewhat likely to participate in the following activities if he/she knew they would prevent some recreational shooting areas and ranges on federal lands from being closed.
(Oregon)**



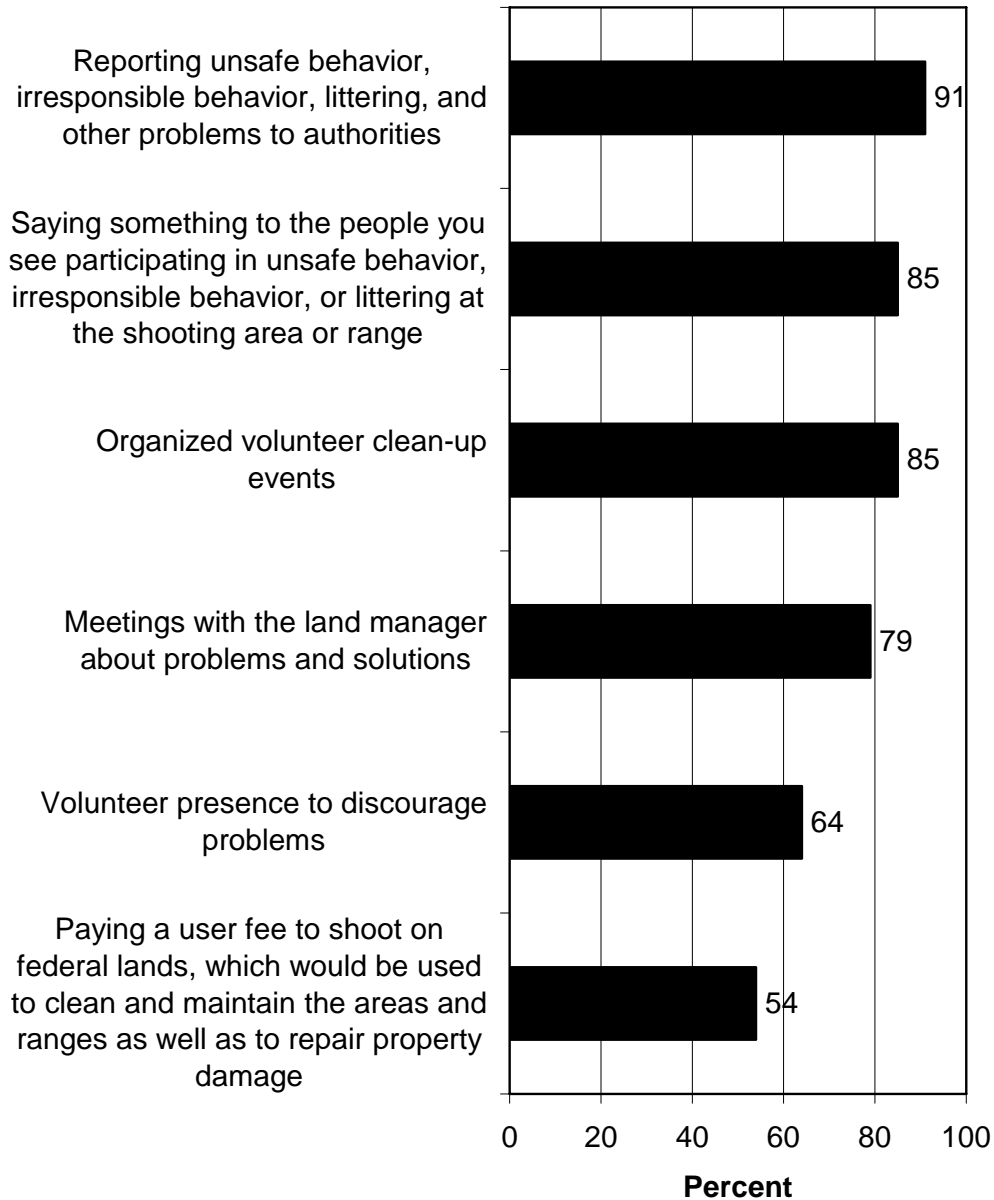
**Percent who would not be at all likely to participate
in the following activities if he/she knew they would
prevent some recreational shooting areas and
ranges on federal lands from being closed.
(Oregon)**



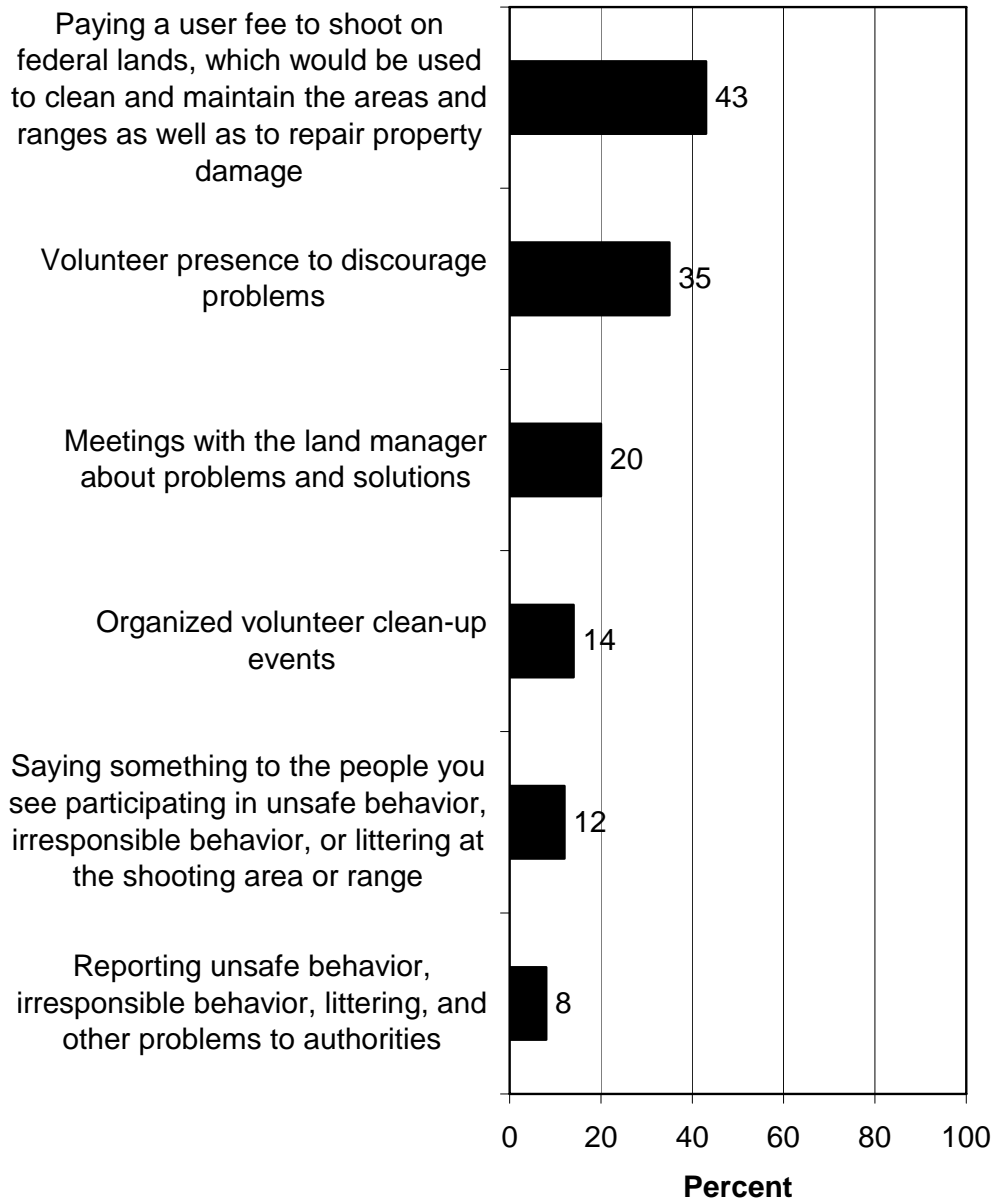
**Percent who would be very likely to participate in the following activities if he/she knew they would prevent some recreational shooting areas and ranges on federal lands from being closed.
(Colorado)**



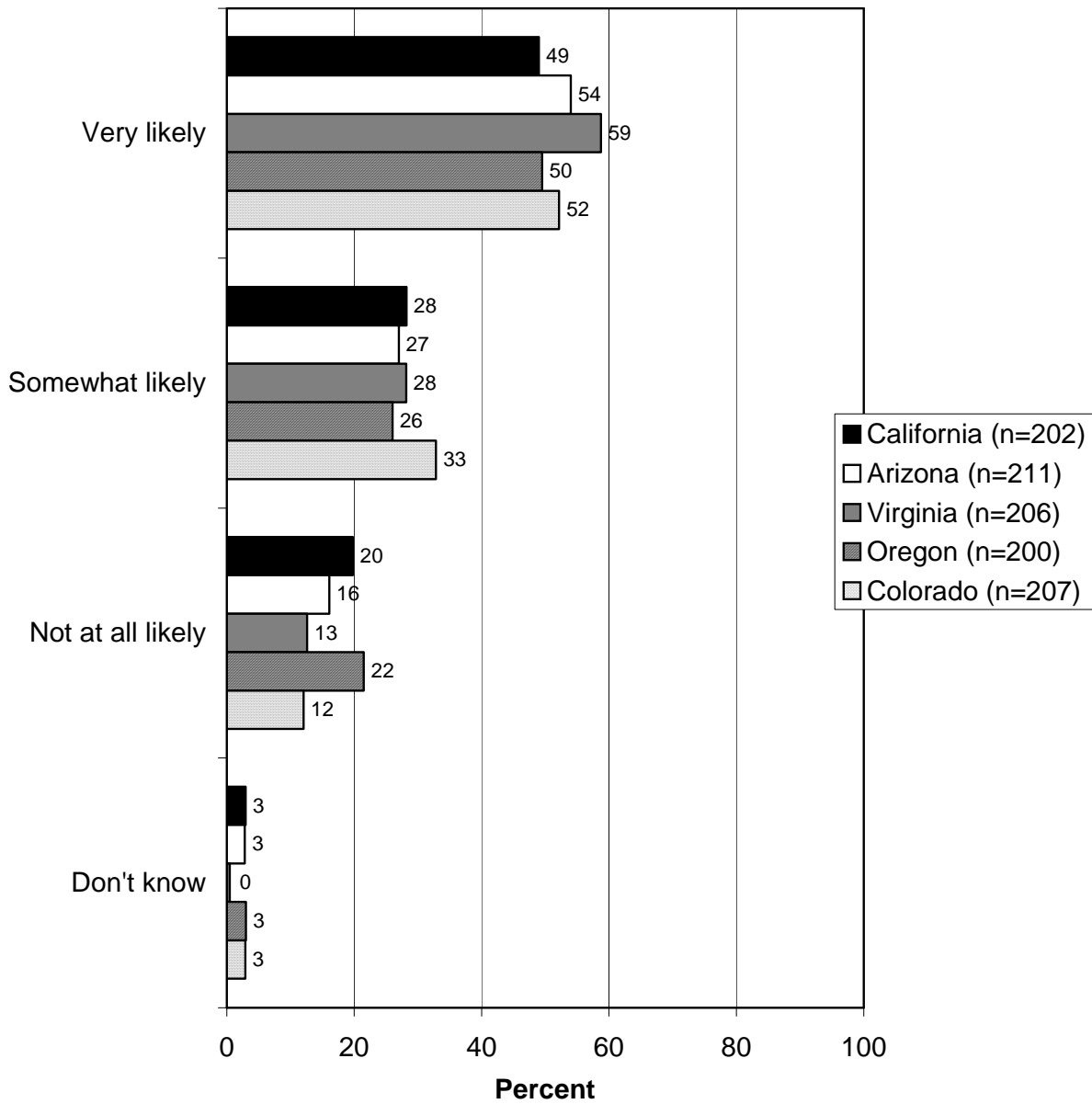
**Percent who would be very or somewhat likely to participate in the following activities if he/she knew they would prevent some recreational shooting areas and ranges on federal lands from being closed.
(Colorado)**



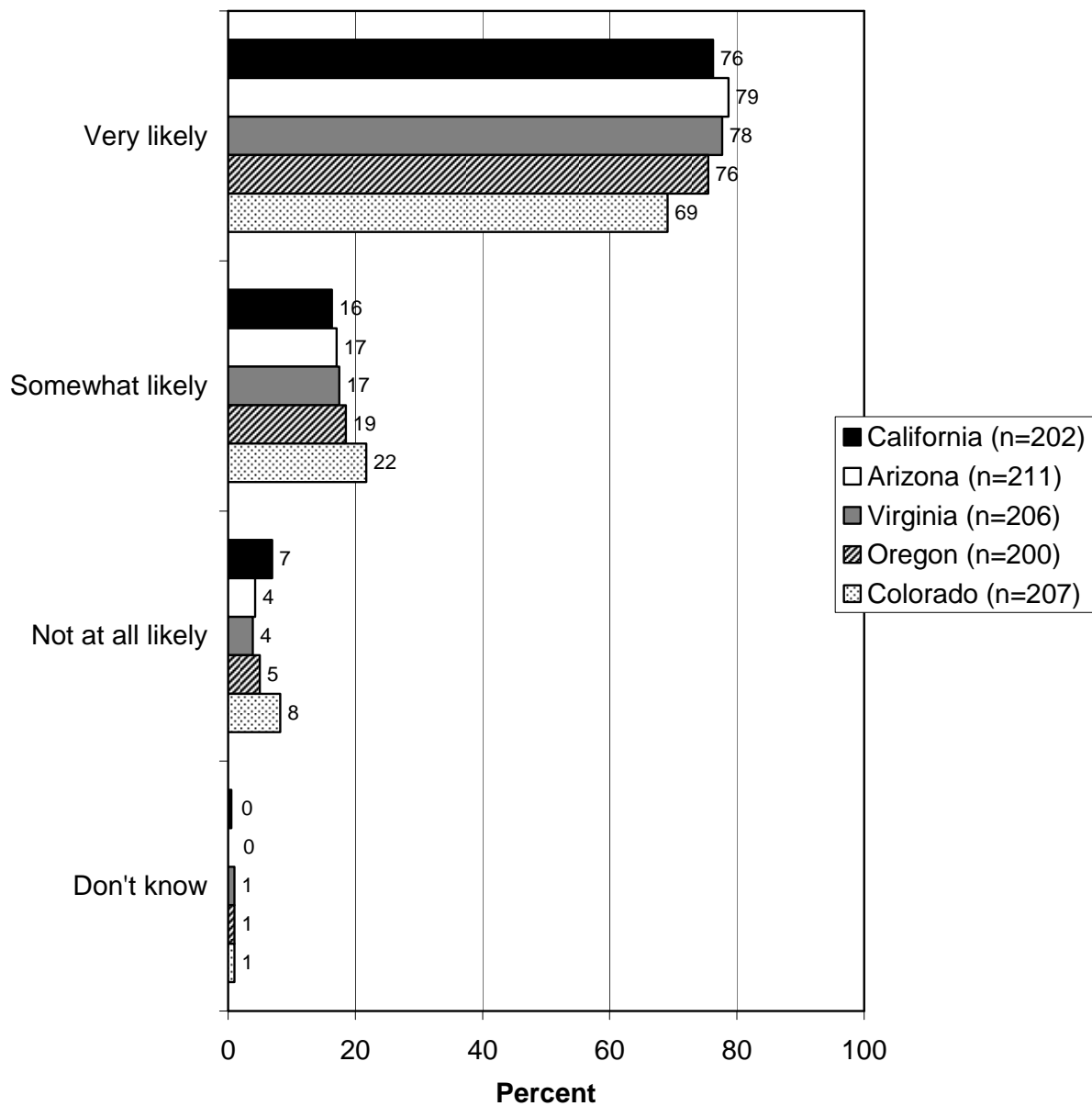
**Percent who would not be at all likely to participate in the following activities if he/she knew they would prevent some recreational shooting areas and ranges on federal lands from being closed.
(Colorado)**



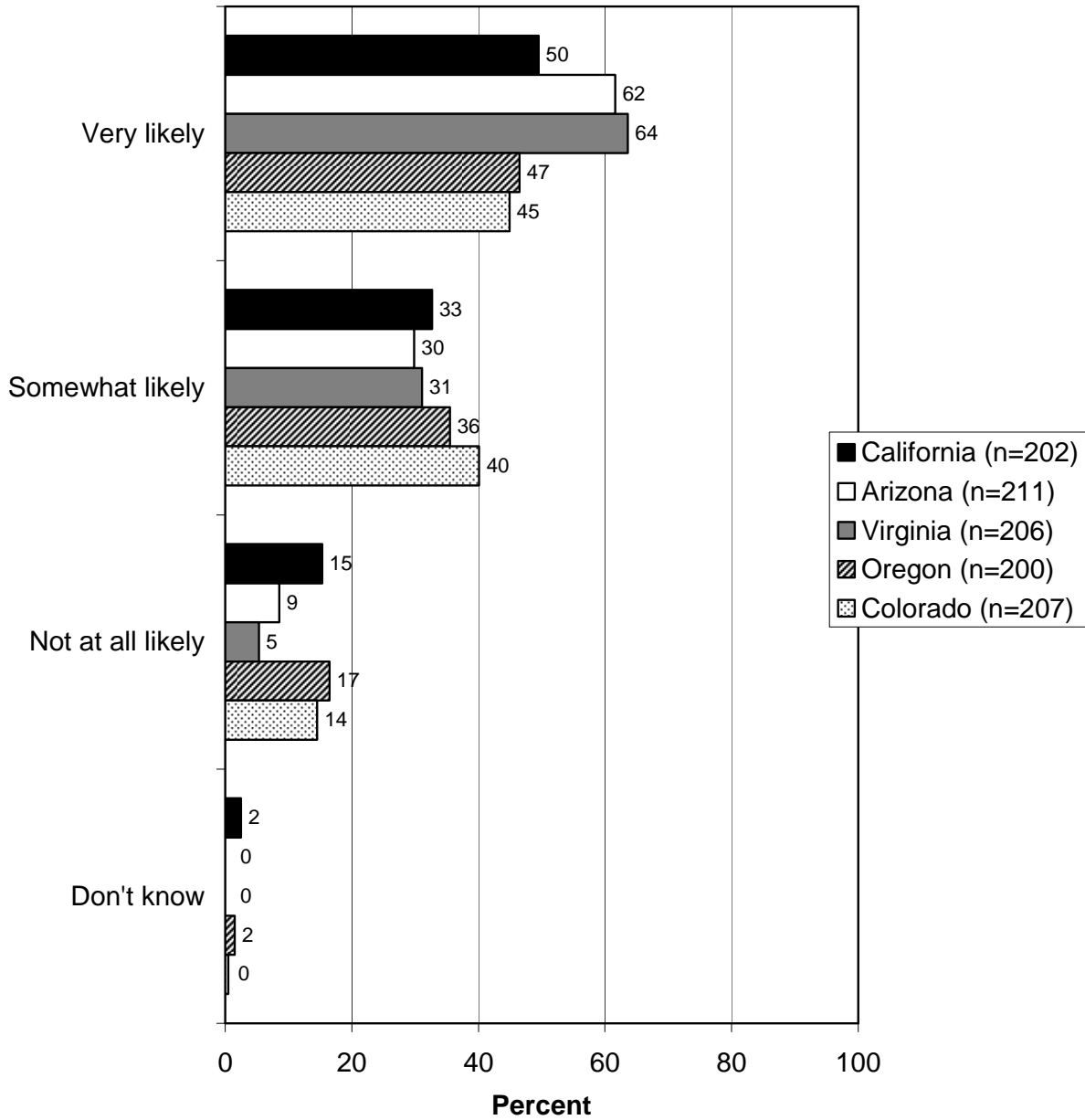
Q193. How about saying something to the people you see participating in unsafe behavior, irresponsible behavior, or littering at the shooting area or range? How likely would you be to do this if you knew it would help prevent some recreational shooting areas and ranges on federal lands from being closed?



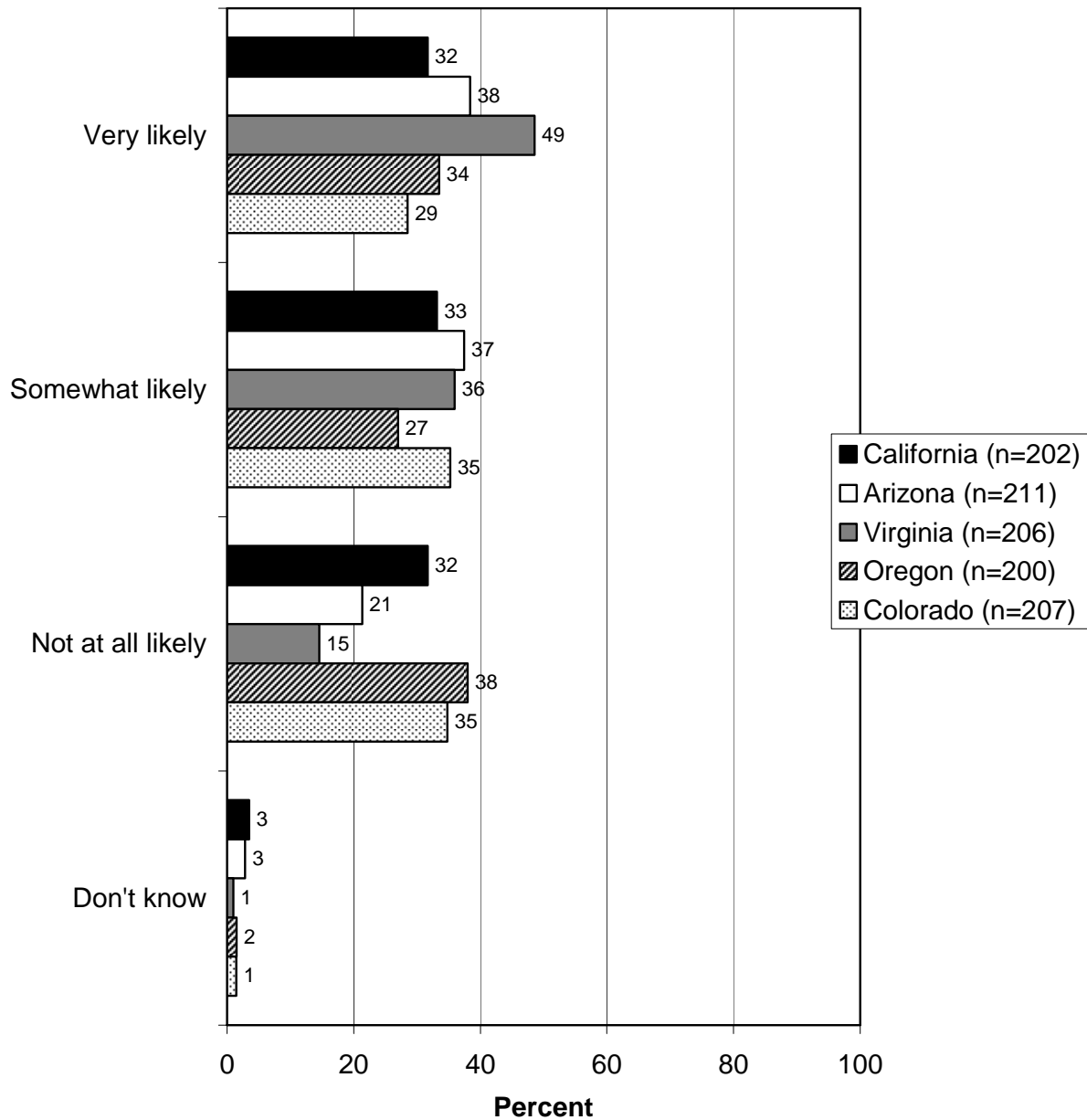
Q194. How about reporting unsafe behavior, irresponsible behavior, littering, and other problems to authorities? How likely would you do this if you knew it would help prevent some recreational shooting areas and ranges on federal lands from being closed?



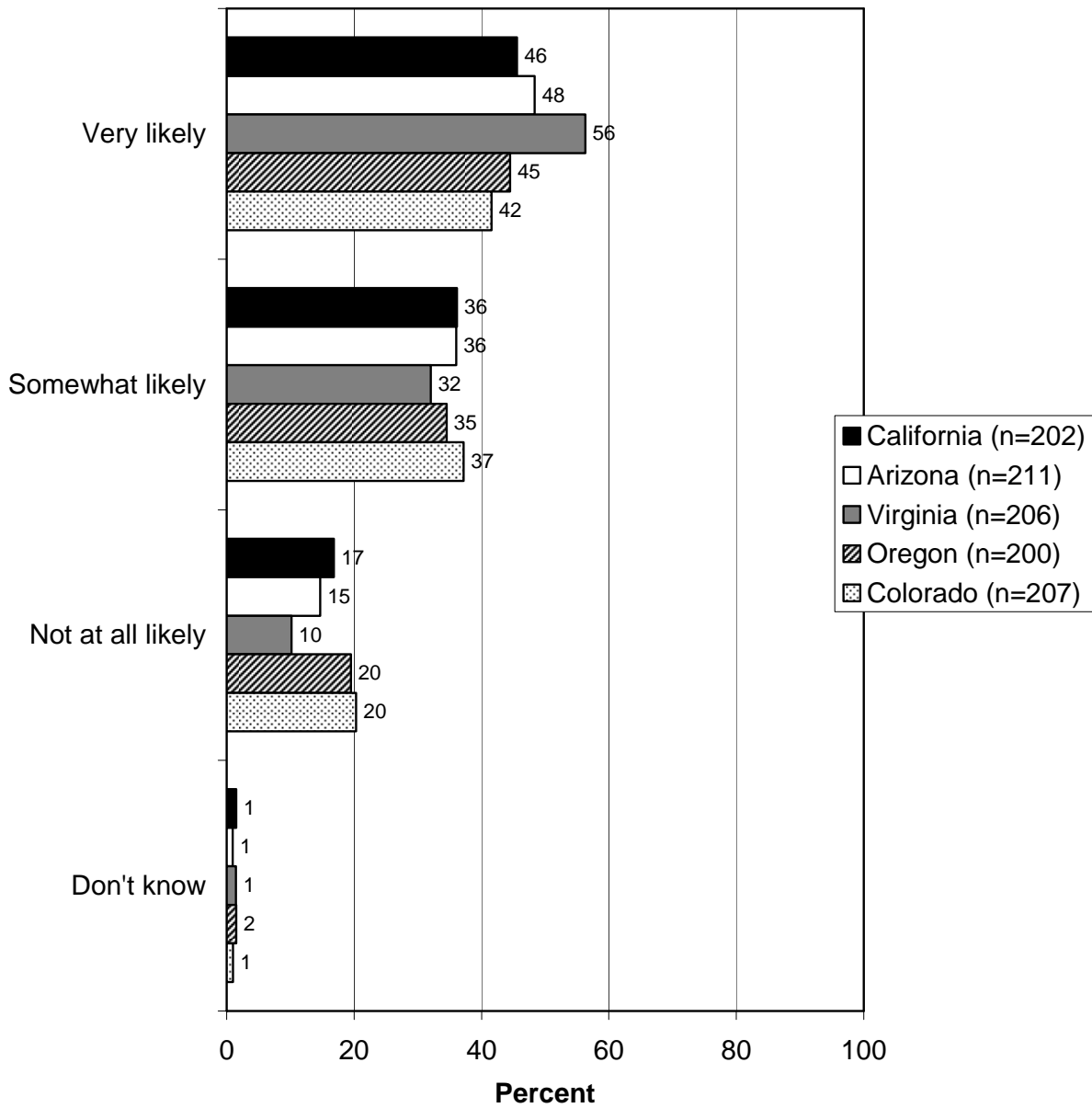
Q195. How about organized volunteer clean-up events? How likely would you be to participate in this if you knew it would help prevent some recreational shooting areas and ranges on federal lands from being closed?



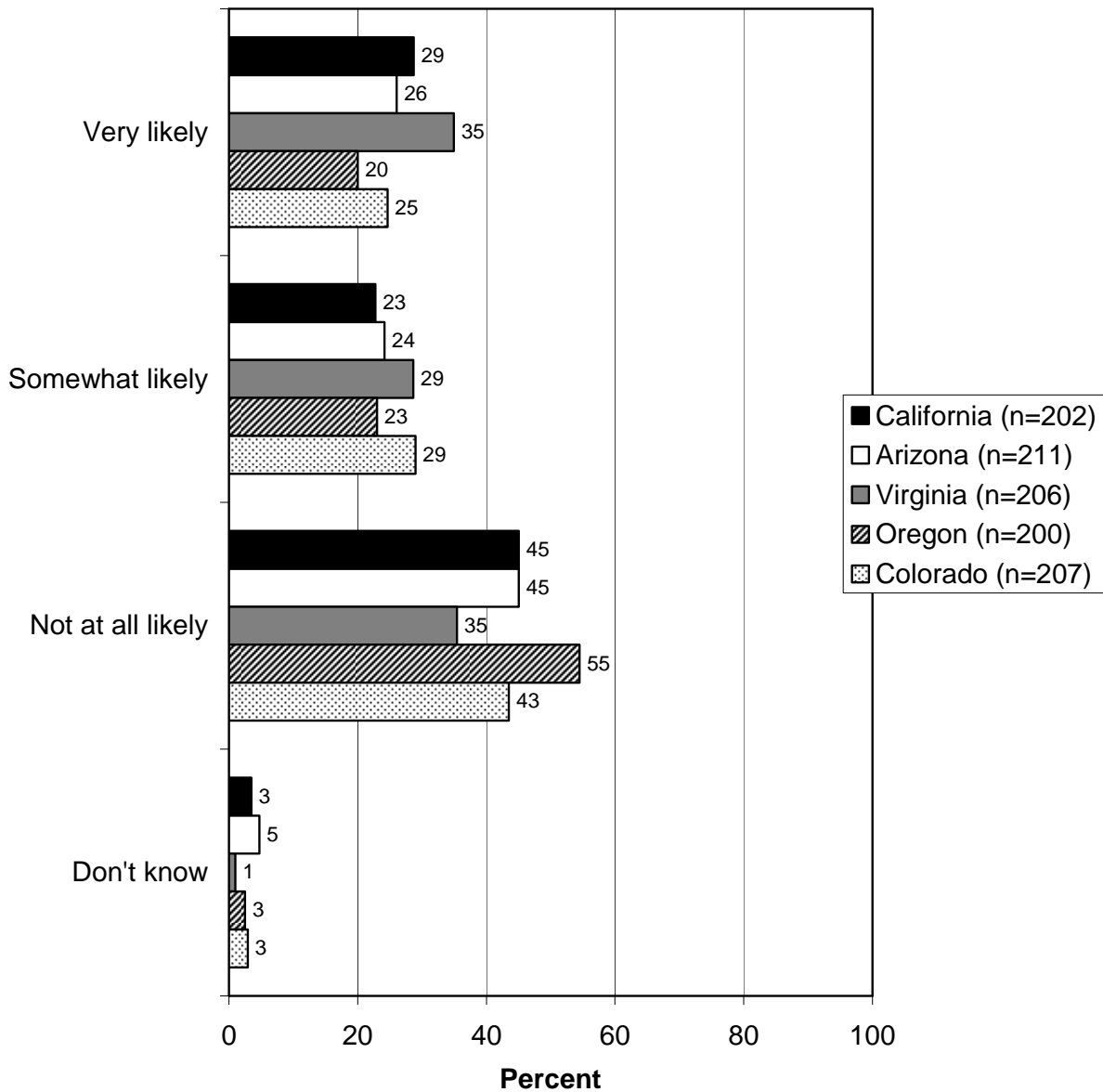
Q196. How about volunteer presence to discourage problems? How likely would you be to participate in this if you knew it would help prevent some recreational shooting areas and ranges on federal lands from being closed?



Q197. How about meetings with the land manager about problems and solutions? How likely would you be to participate in this if you knew it would help prevent some recreational shooting areas and ranges on federal lands from being closed?



Q198. How about paying a user fee to shoot on federal lands, which would be used to clean and maintain the areas and ranges as well as to repair property damage? How likely would you be to participate in this if you knew it would help prevent some recreational shooting areas and ranges on federal lands from being closed?



OPINIONS ON MESSAGES TO CURB UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR ON FEDERAL LANDS

- The survey asked respondents about the effectiveness of twelve possible messages in stopping people from participating in unsafe and irresponsible behavior. The report will first discuss the rankings of the messages for each state and then discuss each message individually. The messages tested in the survey are as follows:
- Irresponsible behavior gives shooters a bad reputation
 - Irresponsible behavior hurts the shooting heritage
 - Irresponsible behavior causes shooting areas/ranges on federal lands to shut down
 - Irresponsible behavior jeopardizes your safety
 - Irresponsible behavior jeopardizes the safety of others
 - Irresponsible behavior is a threat to the future of the shooting sports
 - Irresponsible behavior robs you and your children of a place to shoot
 - Irresponsible behavior threatens our right to shoot
 - Irresponsible behavior provides ammunition for anti-hunting/shooting groups
 - You can be fined for irresponsible behavior
 - Good behavior results in great shooting
 - Keep it Safe, Keep it Open
- This first examination looks at all messages relative to each other in each state. Overall, most messages had a majority in each state saying the message would be *very* effective. One message that was at or near the top of each ranking (ranked by the percentage saying the message would be *very* effective) in the states was “Irresponsible behavior provides ammunition for anti-hunting and anti-shooting groups.” At the bottom of each state’s ranking was “Good behavior results in great shooting.” Otherwise, there was little consistency in the rankings from state to state.
- In California, all messages except for one (“Good behavior results in great shooting”) had a majority saying the message would be *very* effective. Four messages had more than 60% saying they would be *very* effective: “Irresponsible behavior provides ammunition for anti-hunting/shooting groups,” “Irresponsible behavior causes shooting areas/ranges to shut down,”

“Irresponsible behavior robs you and your children of a place to shoot,” and “Irresponsible behavior is a threat to the future of the shooting sports.”

- In Arizona, all messages except for one (Good behavior results in great shooting) had a majority saying the message would be *very* effective. Two messages had 60% or more saying they would be *very* effective: “Irresponsible behavior provides ammunition for anti-hunting/shooting groups” and “You can be fined for irresponsible behavior.”
- In Virginia, all messages had a majority (57% or more) saying that they would be *very* effective. Four messages had 70% or more saying they would be *very* effective: “Irresponsible behavior robs you and your children of a place to shoot,” “Irresponsible behavior threatens our right to shoot,” “Irresponsible behavior is a threat to the future of the shooting sports,” and “Irresponsible behavior provides ammunition for anti-hunting/shooting groups.”
- In Oregon, nine of the twelve messages had a majority saying that they would be *very* effective. Two stand out markedly from the rest, with 73% and 69%, respectively, saying that they would be *very* effective: “Keep it Safe, Keep it Open” and “Irresponsible behavior provides ammunition for anti-hunting/shooting groups.”
- In Colorado, all messages had 50% or more saying that they would be *very* effective. Four messages had more than 60% saying they would be *very* effective: “Irresponsible behavior is a threat to the future of the shooting sports,” “Irresponsible behavior provides ammunition for anti-hunting/shooting groups,” “Irresponsible behavior gives shooters a bad reputation,” and “Keep it Safe, Keep it Open.”
- Because no messages, in general, stood out markedly from the rest in each state (i.e., there was no large gaps from one to the next in the percentage thinking the message would be *very* effective), and because no messages were universally highly or lowly rated (with the two exceptions discussed in the main bullet

above), the reader should examine the graphs of the results for each state to see the messages that did particularly well in that state.

- This examination looks at each message individually.
 - Irresponsible behavior gives shooters a bad reputation: There were no marked differences among the states in the perceived effectiveness of this message. Ratings of *very* effective ranged from 54% to 62%.
 - Irresponsible behavior hurts the shooting heritage: Oregon had a slightly higher percentage of shooters than the other states saying this message would be *not* at all effective. Ratings of *very* effective ranged from 51% to 61%.
 - Irresponsible behavior causes shooting areas/ranges on federal lands to shut down: There were no marked differences among the states in the perceived effectiveness of this message. Ratings of *very* effective ranged from 57% to 64%.
 - Irresponsible behavior jeopardizes your safety: This message played slightly better in Virginia and California than in other states. Ratings of *very* effective ranged from 49% to 63%.
 - Irresponsible behavior jeopardizes the safety of others: This message was received markedly better in Virginia and California; on the other hand, Oregon shooters were the least enthusiastic about this message. Ratings of *very* effective ranged from 46% to 64%.
 - Irresponsible behavior is a threat to the future of the shooting sports: This message played better in Virginia, Colorado, and California than it did in Oregon and Arizona. Ratings of *very* effective ranged from 52% to 71%.
 - Irresponsible behavior robs you and your children of a place to shoot: This message was well received in Virginia and California (relative to the other states); it was not as well received (again, relative to the other states) in Arizona. Ratings of *very* effective ranged from 51% to 72%.

- Irresponsible behavior threatens our right to shoot: Virginia shooters responded to this much more favorably than did shooters from any other state. Ratings of *very* effective ranged from 52% to 72%.
 - Irresponsible behavior provides ammunition for anti-hunting/shooting groups: There were no marked differences among the states in the perceived effectiveness of this message. Ratings of *very* effective ranged from 65% to 70%.
 - You can be fined for irresponsible behavior: Two states had markedly lower percentages, relative to the other states, saying that this message would be *very* effective—California and Colorado. Ratings of *very* effective ranged from 52% to 66%.
 - Good behavior results in great shooting: Only in Virginia did this message have less than 14% saying it was *not* at all effective. Otherwise, from 14% to 20% of shooters in the other states say this would *not* be at all effective. Ratings of *very* effective ranged from only 44% to 57%.
 - Keep it Safe, Keep it Open: This played markedly better in Oregon and Virginia than in the other states. Ratings of *very* effective ranged from 58% to 73%.
- After discussing the series of messages above, the survey asked respondents if they could think of any other messages or statements that might be effective in stopping people from misbehaving on federal shooting lands. Many respondents provided a suggested message or statement (although some respondents indicated an action rather than a message, such as “Additional law enforcement”), which varied too greatly to be readily categorized. Most actions concerned punitive measures (more fines, etc.), and these were deleted from the tabulation. Only those responses that are *messages/slogans* are tabulated below.

Message
Treat it better than your own
You may be watched when you're irresponsible

Message
Be responsible; don't lose your rights or privileges
Take care of it as if it was your own land
Irresponsible behavior will end up robbing you of you 2nd amendment rights
This range might be closed if it keeps getting trashed
Pack your trash out; there's no one to clean up your trash but you
Drink shoot = ticket
Stop and think
Clean up after yourself or this area will be closed
Illegal dumping and bad behavior results in confiscation of your firearms
Remember that guns kill people when used irresponsibly
Uneducated people cause deaths
Get educated
Do the crime, pay the time
Pick up after yourself
You can't call back the bullet
Litter, and it will be shut down
Don't do it
Use it right or lose it
Haul it in haul it out
Keep it open, keep it clean
If you do it, you're going to pay
Take care of it and keep it
Shooting in this area is a privilege that will go away if you damage or litter the environment
Listen to grandmother
Keep the white lightning at home
Be safe
You will be held accountable!
Be responsible for yourself; we need to keep our land clean
If you like to hunt or shoot, YOU have to manage your sport!
You WILL be fined for irresponsible behavior
Keep the area clean, and safety first
With the right to shoot brings with it a responsibility
Be responsible for yourself and what you do
Treat the property as if it is your own
Don't shoot this sign
No more dumping
Leave it better than it was
Be safe out there

Message
If you don't behave, you don't shoot
If you like to shoot, don't pollute!
Clean up after yourself; it's the law
Misuse, you lose it
Take nothing but pictures. Leave nothing but footprints.
Be responsible and mature with your shooting habits
Take ownership! Be responsible for your sport!
Leave it the way you find it
If you break targets, take the evidence home with you
Pick up after yourself; your mother does not work here
Good behavior will keep this site open for you and others
Use your brain when you're shooting; shoot smart
Carry it in, carry it out
It's your legacy: What you do, you will leave to your kids
Be responsible for yourself
Littering and dumping in this area will force it to be closed to shooters
Leave it better than you found it
Don't drink and shoot!
This is yours to keep and enjoy
Pack it in, pack it out

- The survey tested the perceived effectiveness of eight messages aimed at stopping shooters from littering and leaving shooting debris behind. In general, the shorter messages ("Keep it Clean, Keep it Open" and "Keep it Clean, Keep it Safe") resonated well, as did the message discussing fines that could result or the bad reputation that could result. The longer messages that used the terms "unhealthy," "hurts the environment," and "eyesore" did not resonate well, relative to the other messages. The messages tested are as follows:
- Leaving behind shooting debris/litter makes the shooting site an eyesore
 - Leaving behind shooting debris/litter gives shooters a bad reputation
 - Leaving shooting debris/litter at the shooting sites makes them unhealthy
 - Leaving shooting debris/litter at the shooting sites hurts the environment
 - Leaving your shooting debris at the shooting areas and ranges IS littering
 - You can be fined for not cleaning up your shooting debris and litter
 - Keep it Clean, Keep it Safe
 - Keep it Clean, Keep it Open

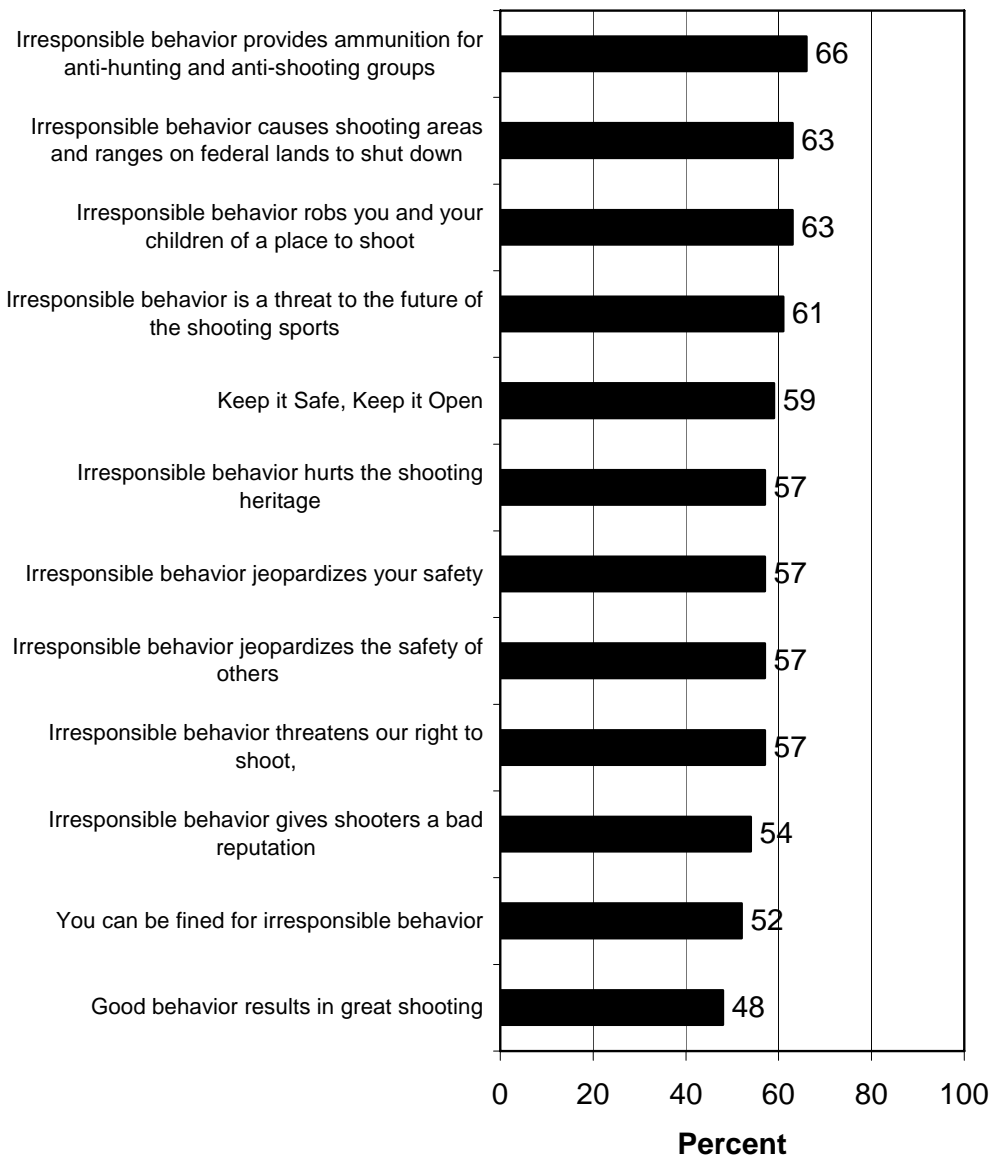
- This examination looks at all potential messages relative to each other in each state.
 - In California, “Keep it Clean, Keep it Open” resonated markedly better than the other messages. Three other messages were in a middle grouping in being *very* effective: “You can be fined for not cleaning up your shooting debris and litter,” “Leaving behind shooting debris/litter gives shooters a bad reputation,” and “Keep it Clean, Keep it Safe.”
 - In Arizona, three messages resonated well: “Keep it Clean, Keep it Open,” “You can be fined for not cleaning up your shooting debris and litter,” and “Leaving behind shooting debris/litter gives shooters a bad reputation.”
 - In Virginia, three messages resonated well: “You can be fined for not cleaning up your shooting debris and litter,” “Keep it Clean, Keep it Open,” and “Keep it Clean, Keep it Safe.”
 - In Oregon, two messages resonated well: “Keep it Clean, Keep it Open” and “You can be fined for not cleaning up your shooting debris and litter.”
 - In Colorado, two messages resonated well: “You can be fined for not cleaning up your shooting debris and litter” and “Keep it Clean, Keep it Open.”
 - These results are shown in graphs that follow; they are also tabulated below for the reader’s convenience. This tabulation allows a quick comparison among states.

Comparison Among States of Series of Questions on Rating of Messages Aimed at Stopping Shooters from Littering and Leaving Shooting Debris Behind

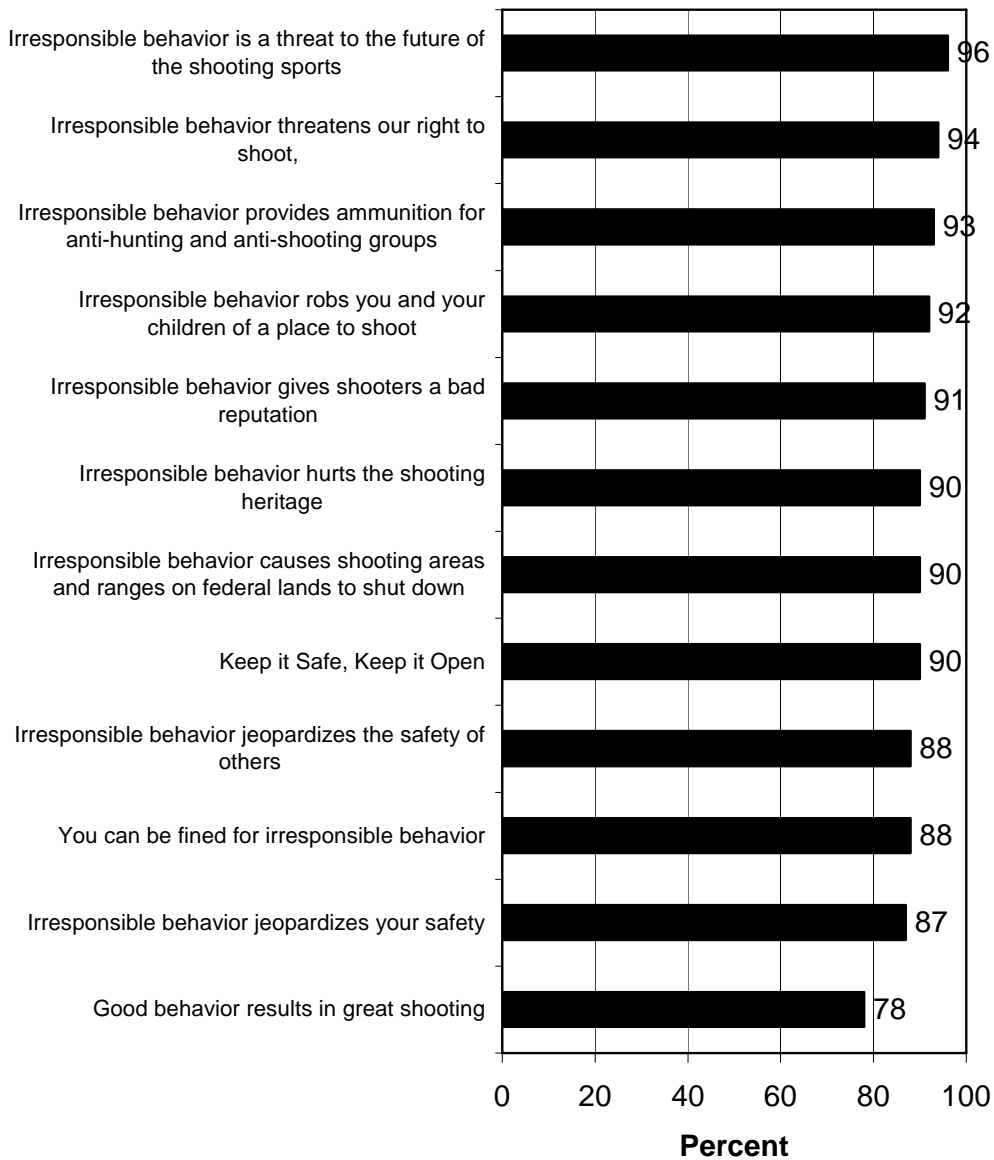
Percent saying each would be <i>very</i> effective at preventing littering/leaving shooting debris	CA	AZ	VA	OR	CO
60% or more	Keep it Clean, Keep it Open	Keep it Clean, Keep it Open	You can be fined... Keep it Clean, Keep it Open	Keep it Clean, Keep it Open	You can be fined... Keep it Clean, Keep it Open
50% to 59%	You can be fined... Leaving behind shooting debris...bad reputation	You can be fined... Leaving behind shooting debris...bad reputation	Keep it Clean, Keep it Safe Leaving behind shooting debris...bad reputation Leaving your shooting debris...IS littering	You can be fined...	Leaving behind shooting debris...bad reputation
40% to 49%	Keep it Clean, Keep it Safe	Leaving your shooting debris...IS littering Keep it Clean, Keep it Safe	Leaving shooting debris... environment	Leaving behind shooting debris...bad reputation Keep it Clean, Keep it Safe	Keep it Clean, Keep it Safe Leaving your shooting debris...IS littering
30% to 39%	Leaving your shooting debris...IS littering Leaving shooting debris... environment	Leaving behind shooting debris... eyesore	Leaving behind shooting debris... eyesore Leaving shooting debris... unhealthy	Leaving your shooting debris...IS littering Leaving behind shooting debris... eyesore	Leaving behind shooting debris... eyesore
Less than 30%	Leaving behind shooting debris... eyesore Leaving shooting debris... unhealthy	Leaving shooting debris... environment Leaving shooting debris... unhealthy	NONE	Leaving shooting debris... environment Leaving shooting debris... unhealthy	Leaving shooting debris... environment Leaving shooting debris... unhealthy

- This examination looks at each message individually.
 - Leaving behind shooting debris/litter makes the shooting site an eyesore: This resonated better in Virginia than in the other states.
 - Leaving behind shooting debris/litter gives shooters a bad reputation: There were no marked differences among the states in the perceived effectiveness of this message.
 - Leaving shooting debris/litter at the shooting sites makes them unhealthy: This resonated better in Virginia than in the other states.
 - Leaving shooting debris/litter at the shooting sites hurts the environment: Oregon had a higher percentage of shooters saying this would *not* be at all effective, relative to the other states.
 - Leaving your shooting debris at the shooting areas and ranges IS littering: Oregon had a higher percentage of shooters saying this would *not* be at all effective, relative to the other states.
 - You can be fined for not cleaning up your shooting debris and litter: Oregon had a higher percentage of shooters saying this would *not* be at all effective, relative to the other states.
 - Keep it Clean, Keep it Safe: This resonated better in Virginia than in the other states.
 - Keep it Clean, Keep it Open: There were no marked differences among the states in the perceived effectiveness of this message.

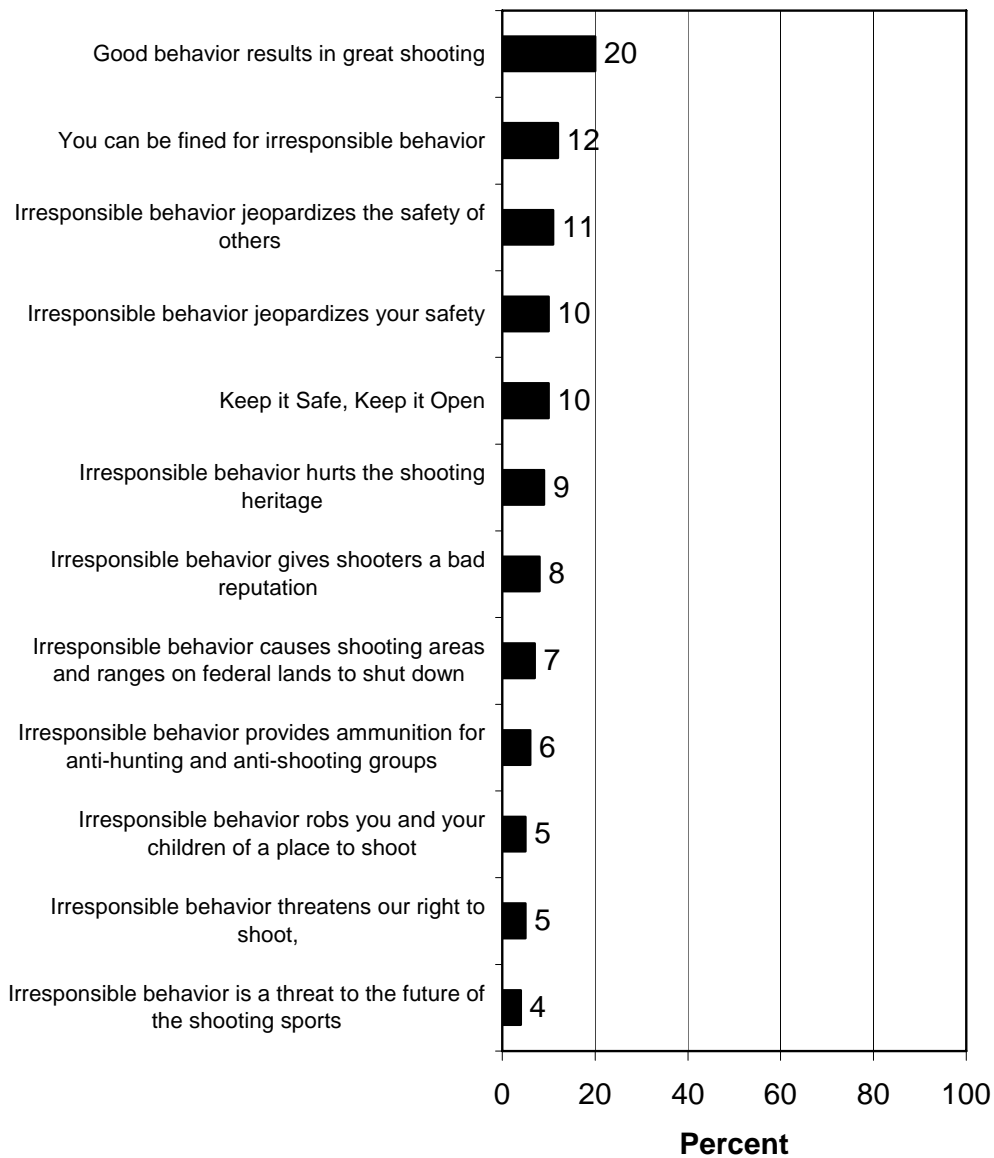
Percent who think the following messages would be very effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (California)



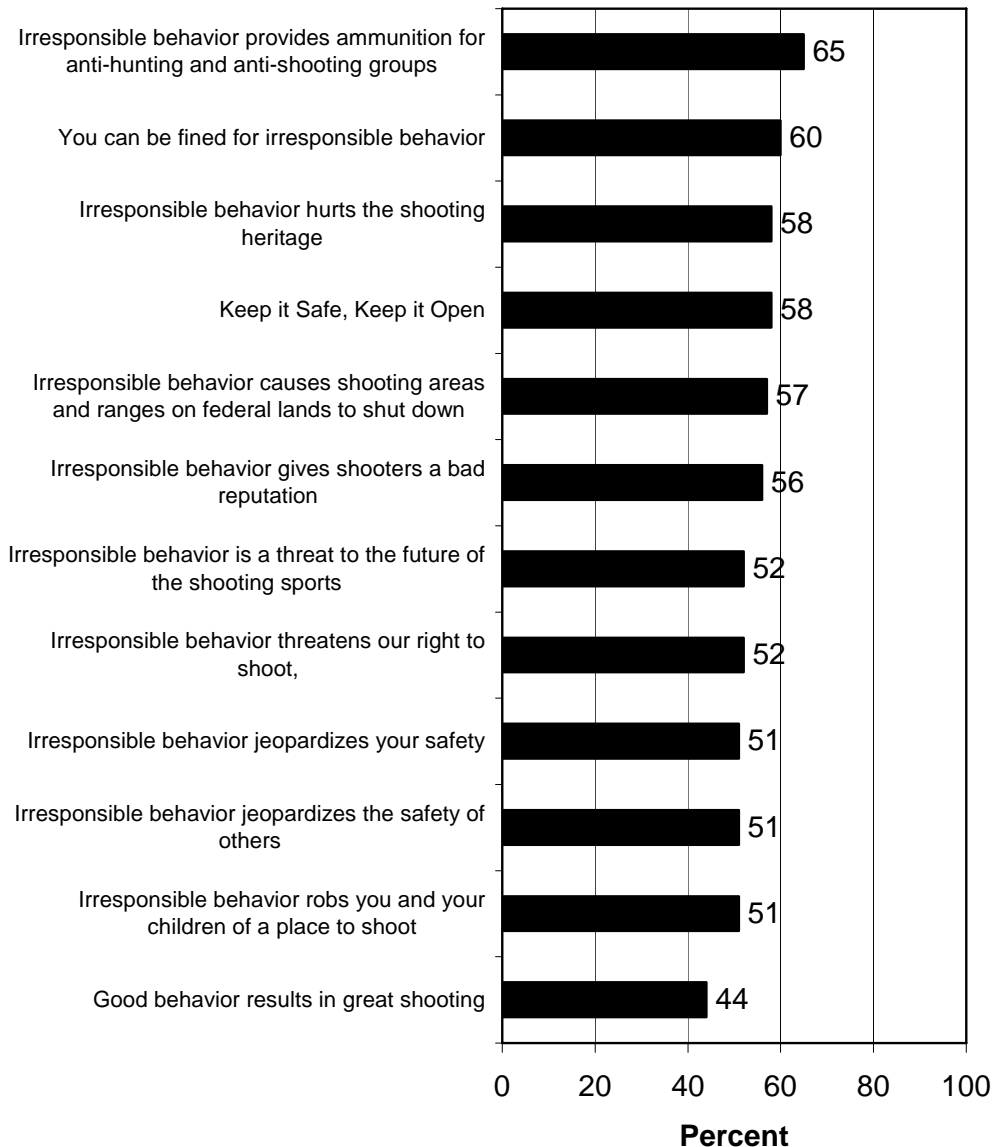
Percent who think the following messages would be effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (California)



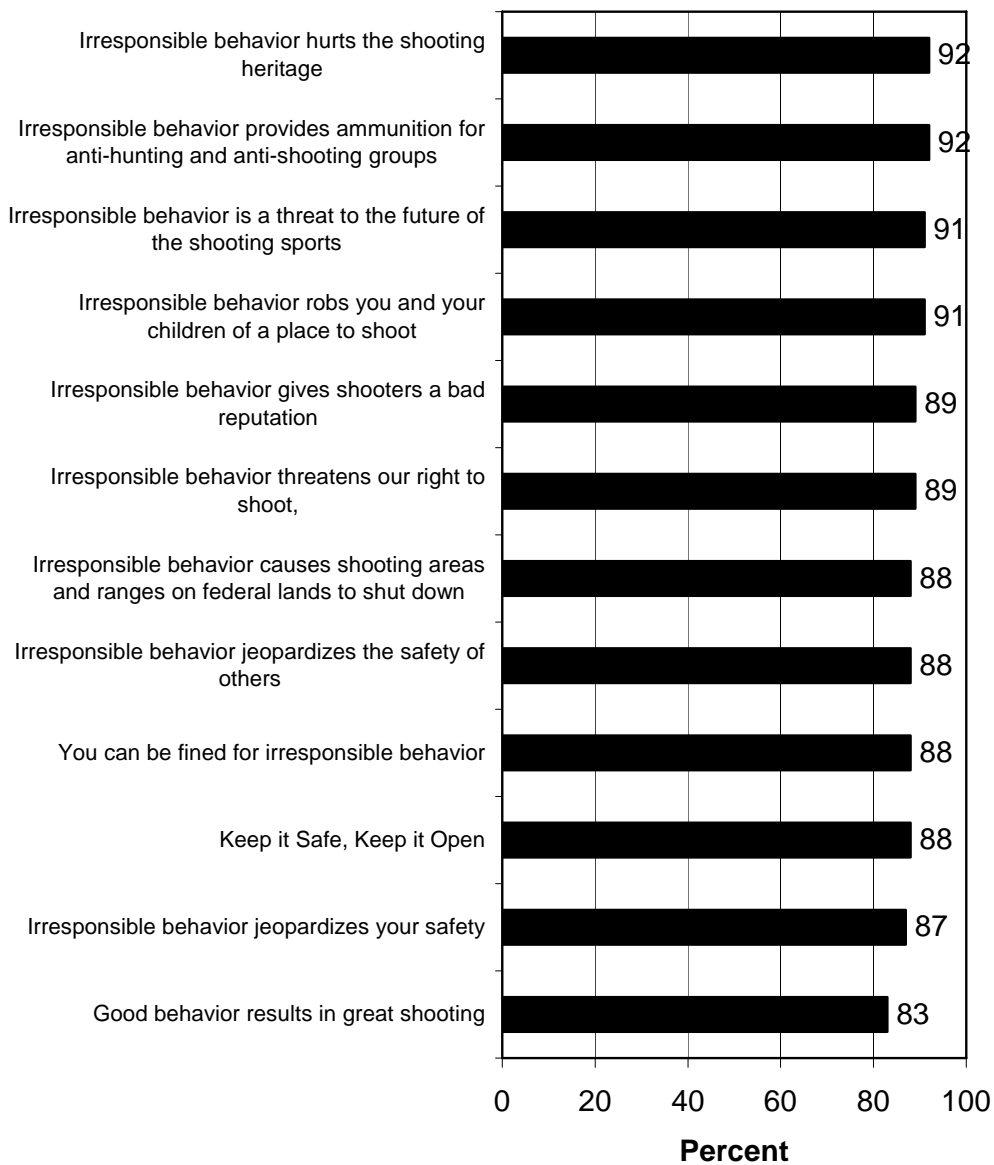
Percent who think the following messages would be not at all effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (California)



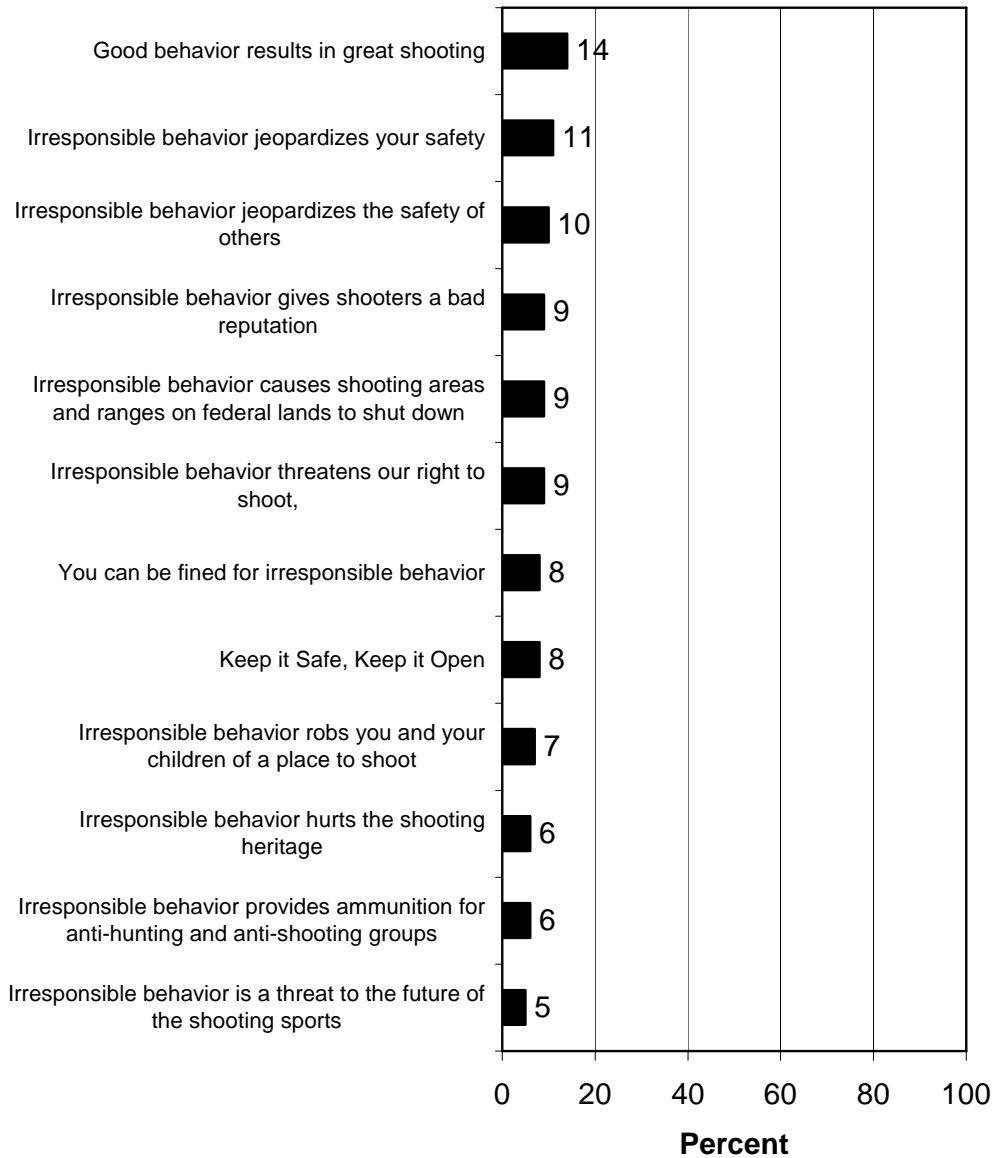
Percent who think the following messages would be very effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (Arizona)



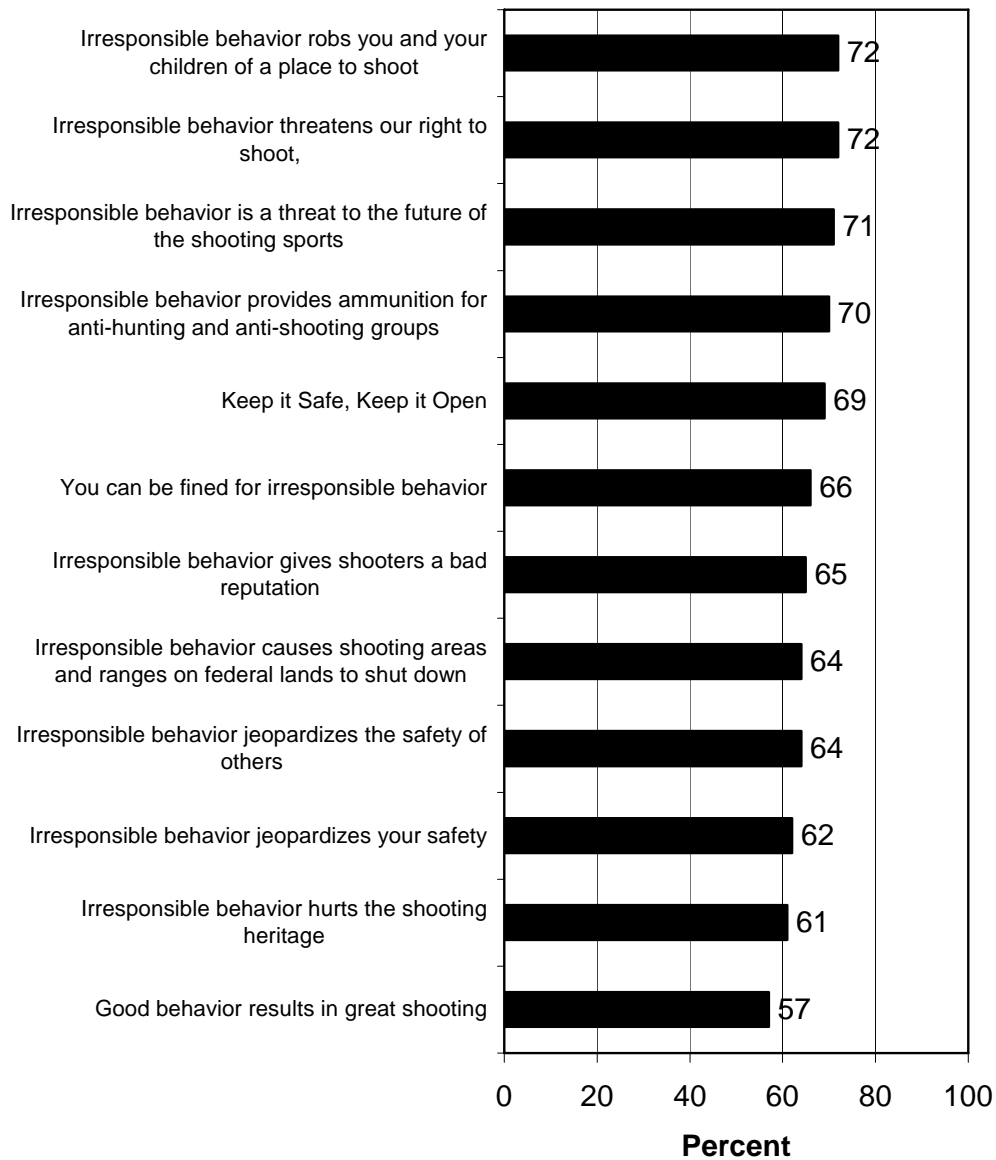
Percent who think the following messages would be effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (Arizona)



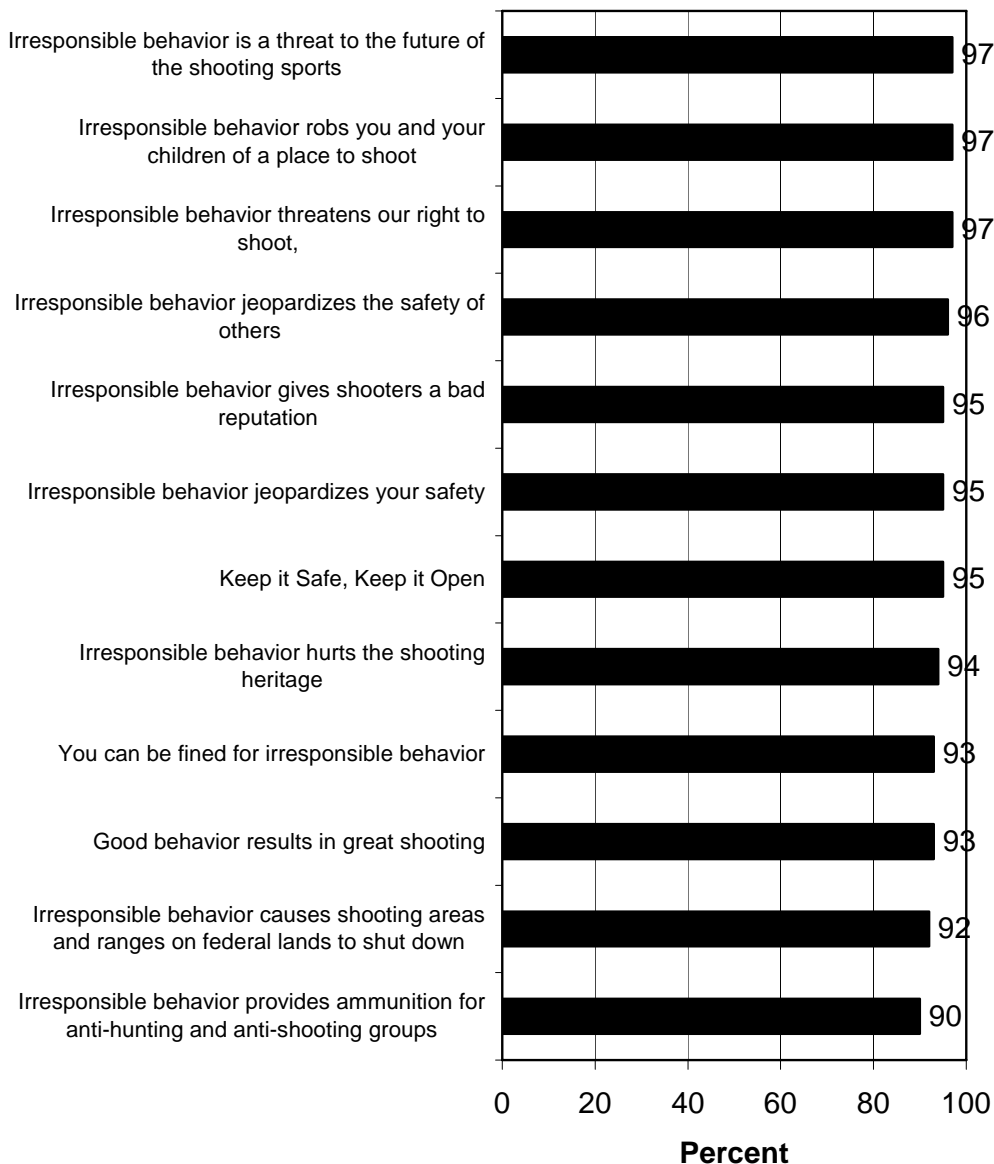
Percent who think the following messages would be not at all effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (Arizona)



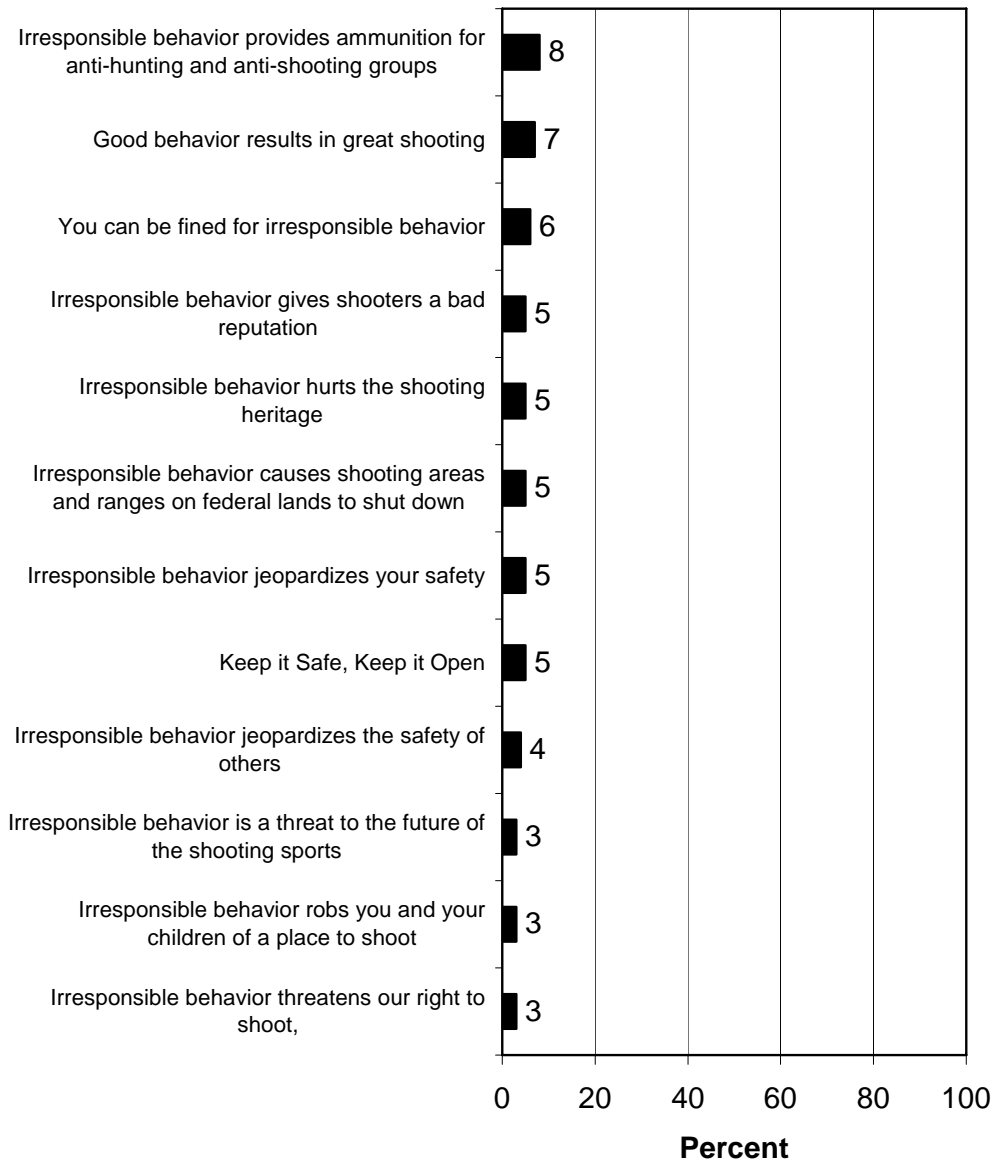
Percent who think the following messages would be very effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (Virginia)



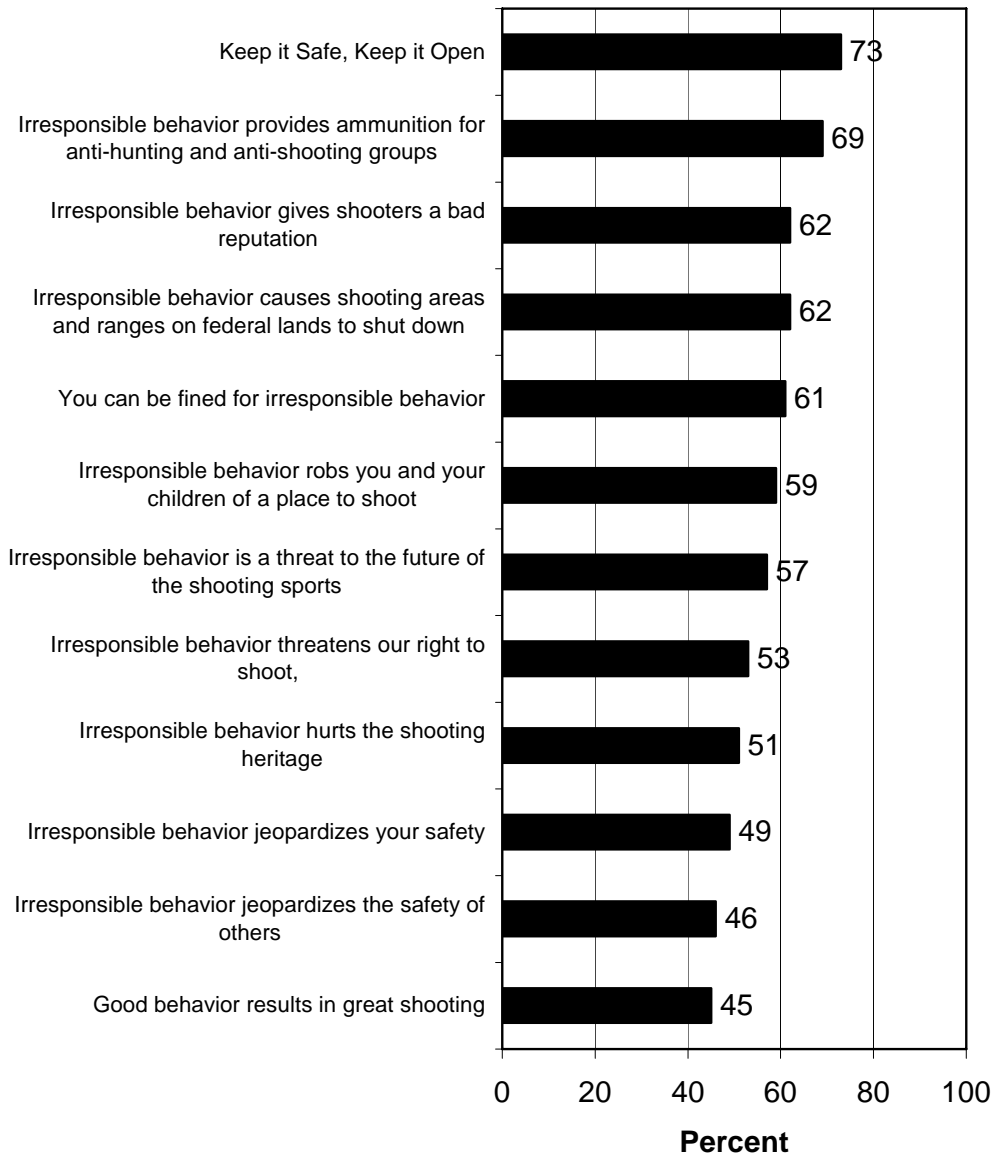
Percent who think the following messages would be effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (Virginia)



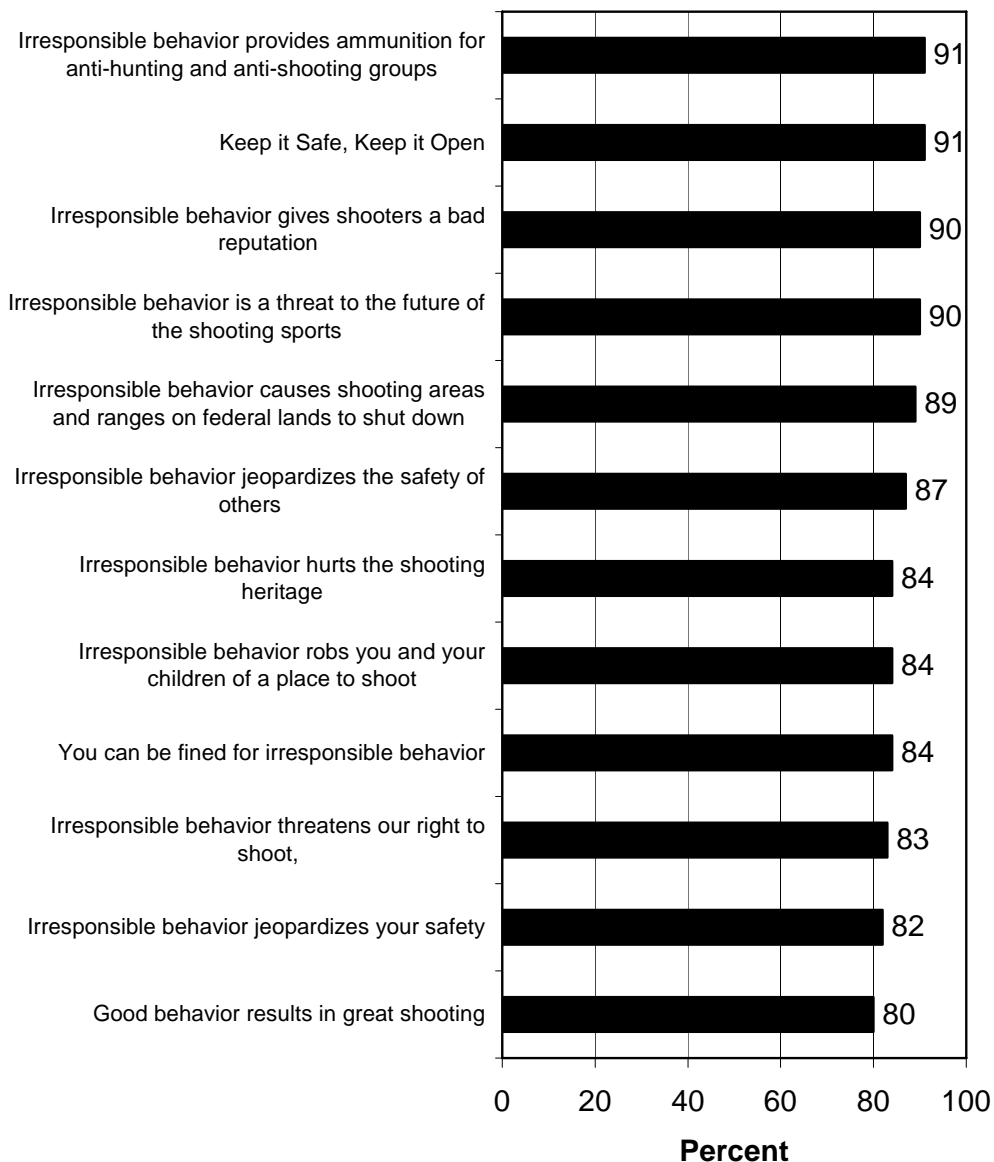
Percent who think the following messages would be not at all effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (Virginia)



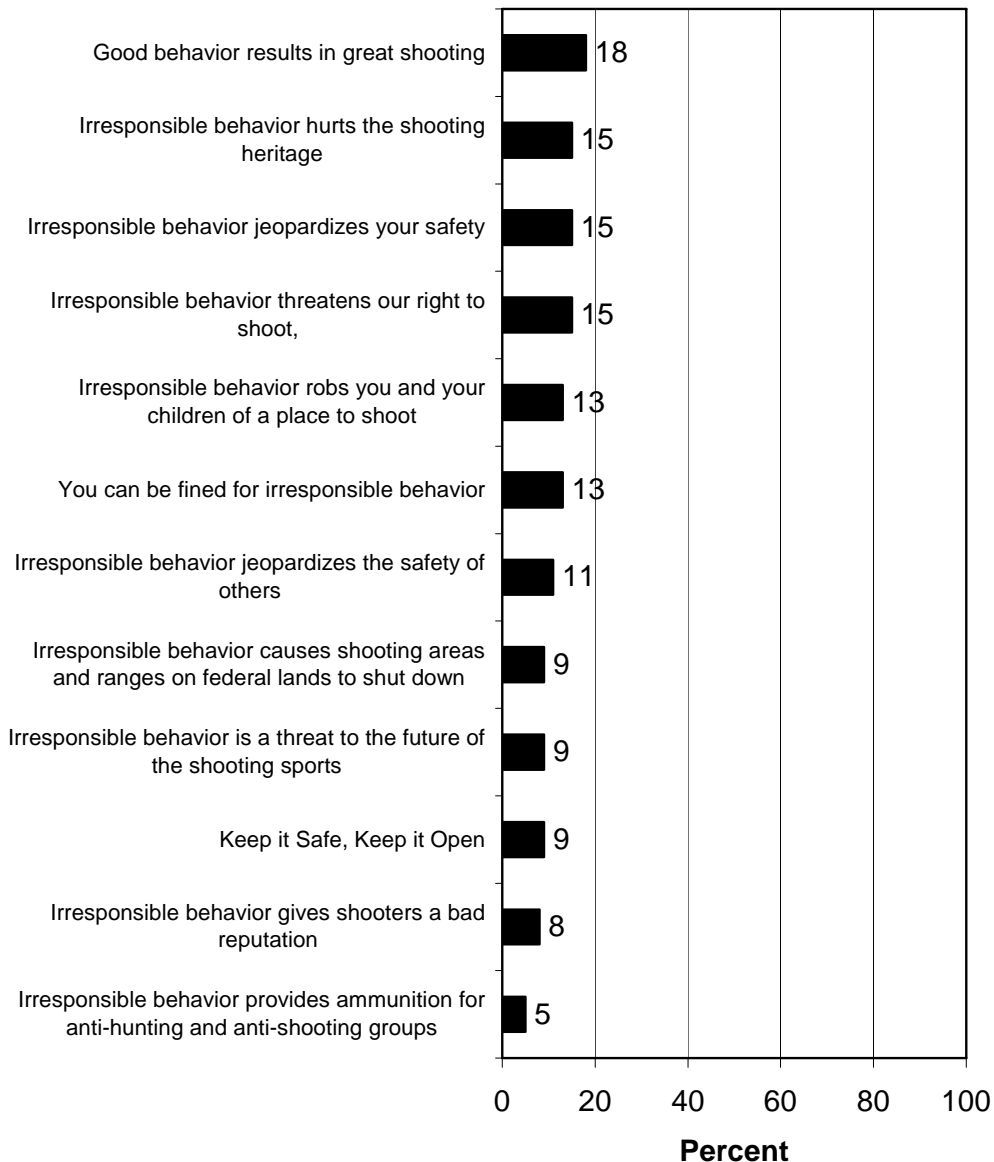
Percent who think the following messages would be very effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (Oregon)



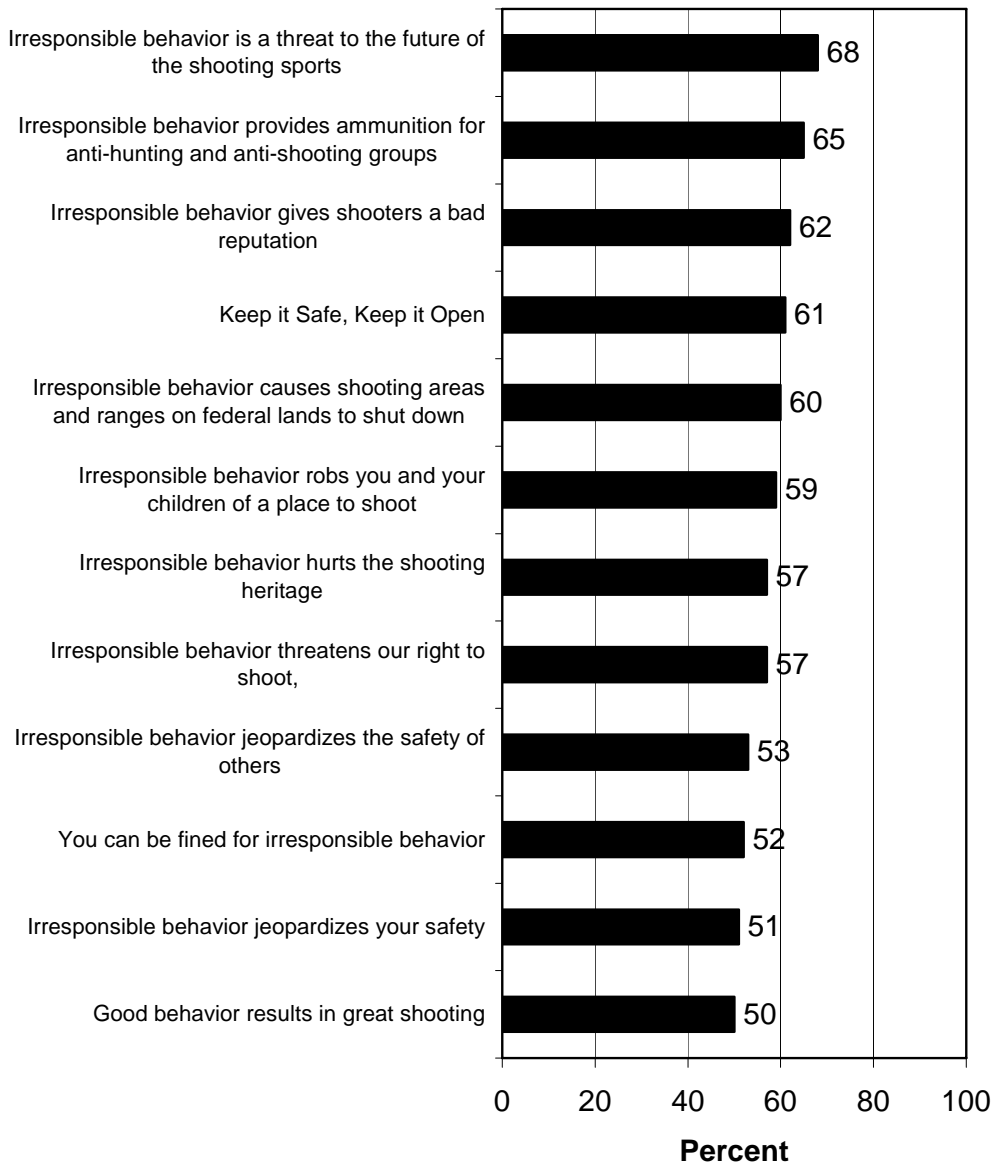
Percent who think the following messages would be effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (Oregon)



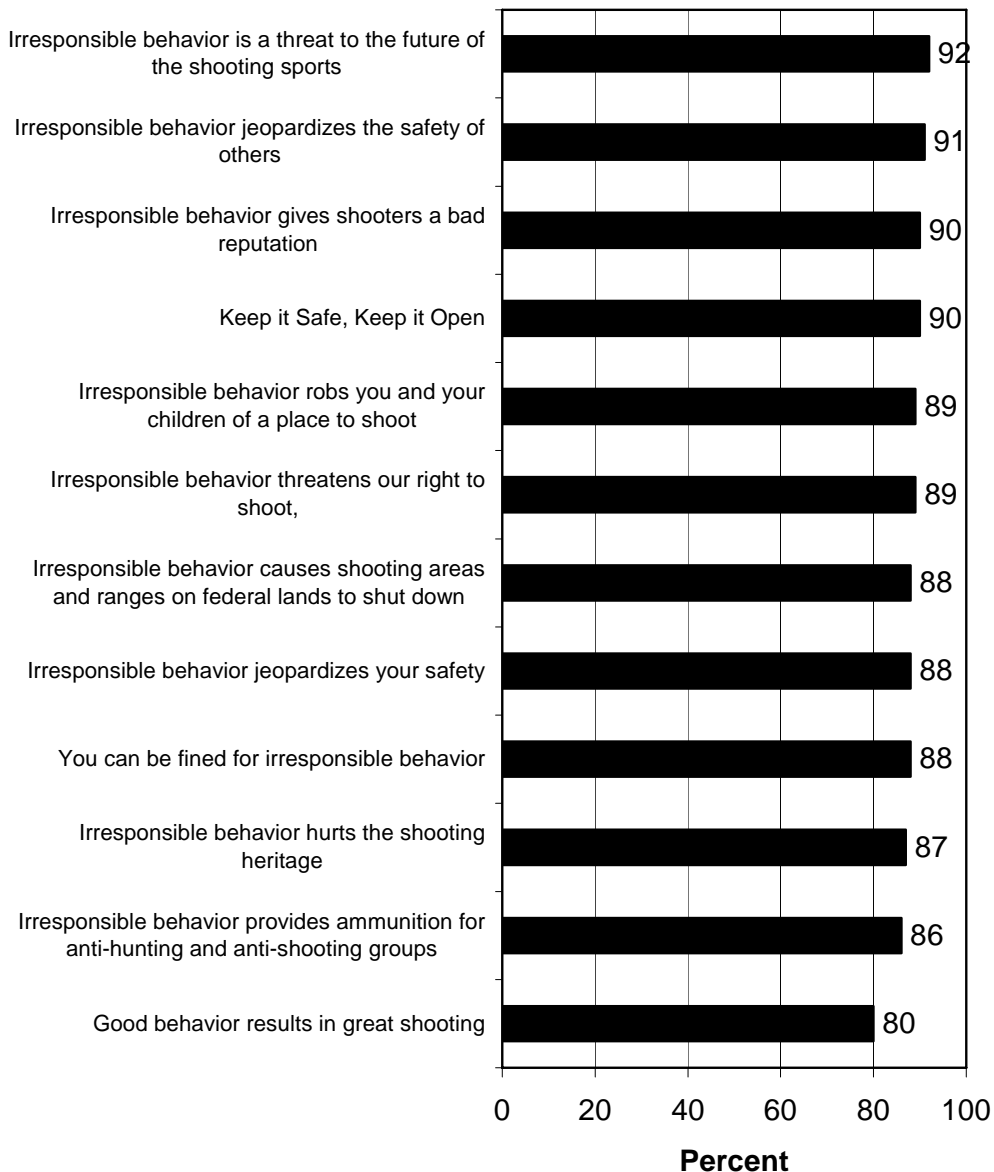
Percent who think the following messages would be not at all effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (Oregon)



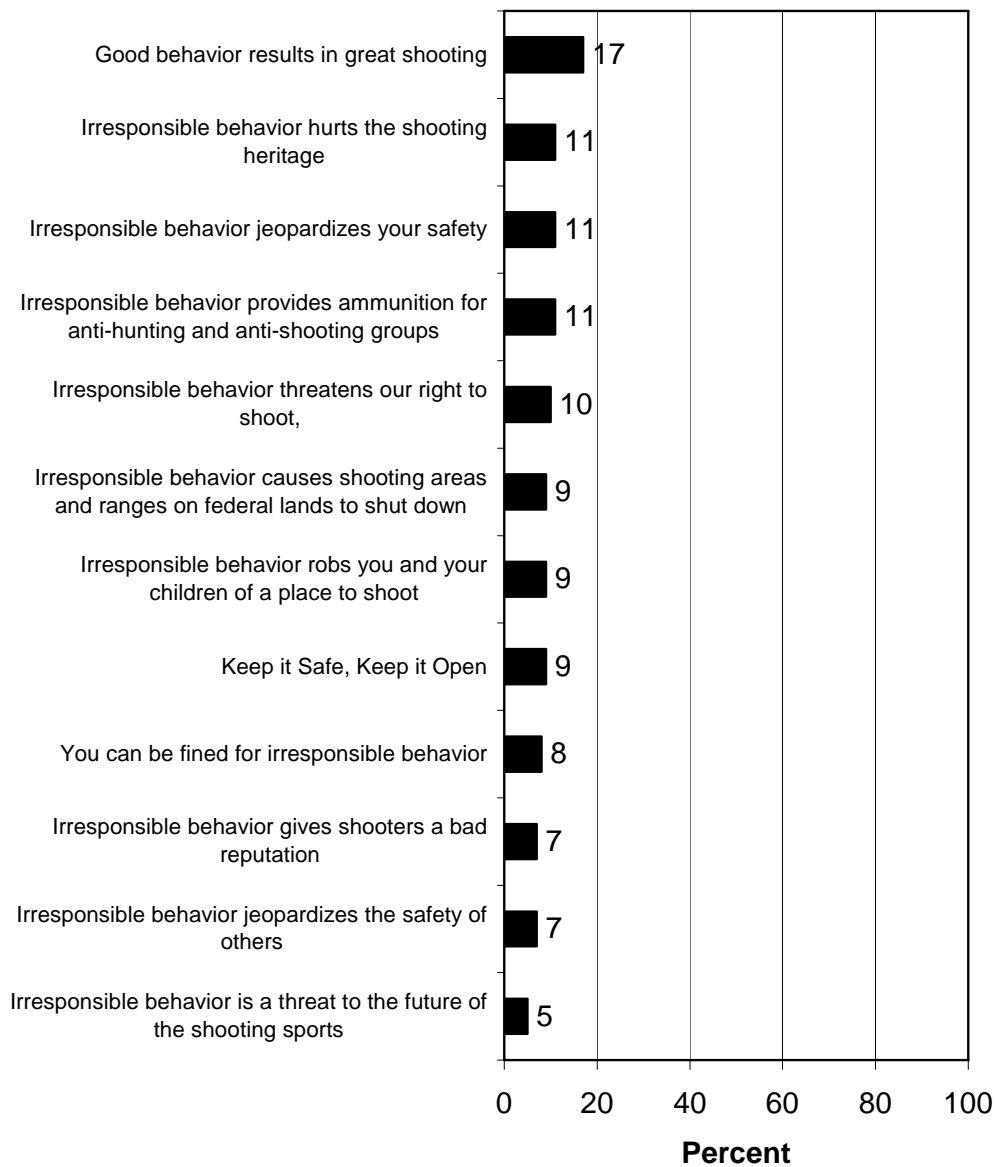
Percent who think the following messages would be very effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (Colorado)



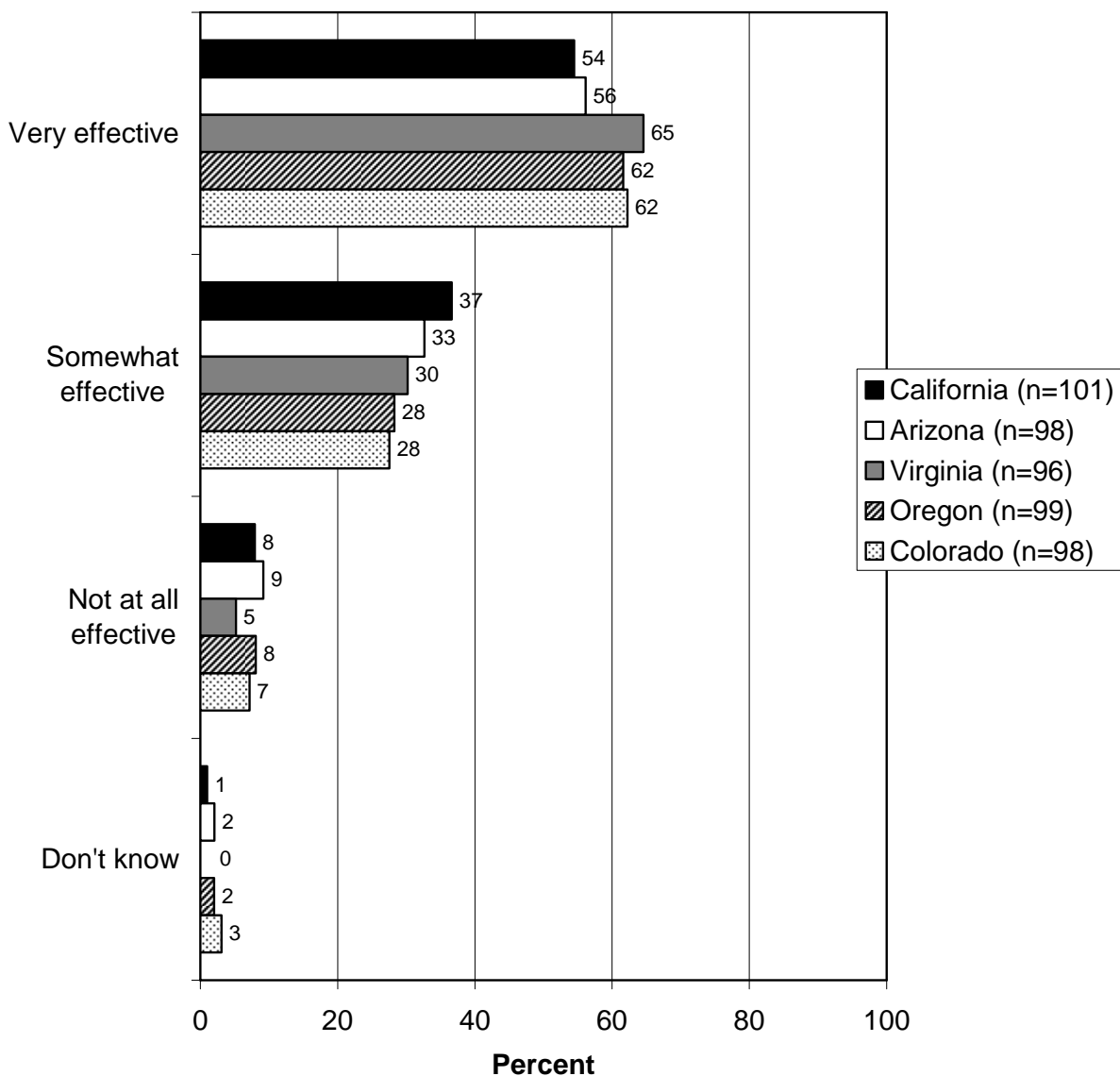
**Percent who think the following messages would be effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands.
(Colorado)**



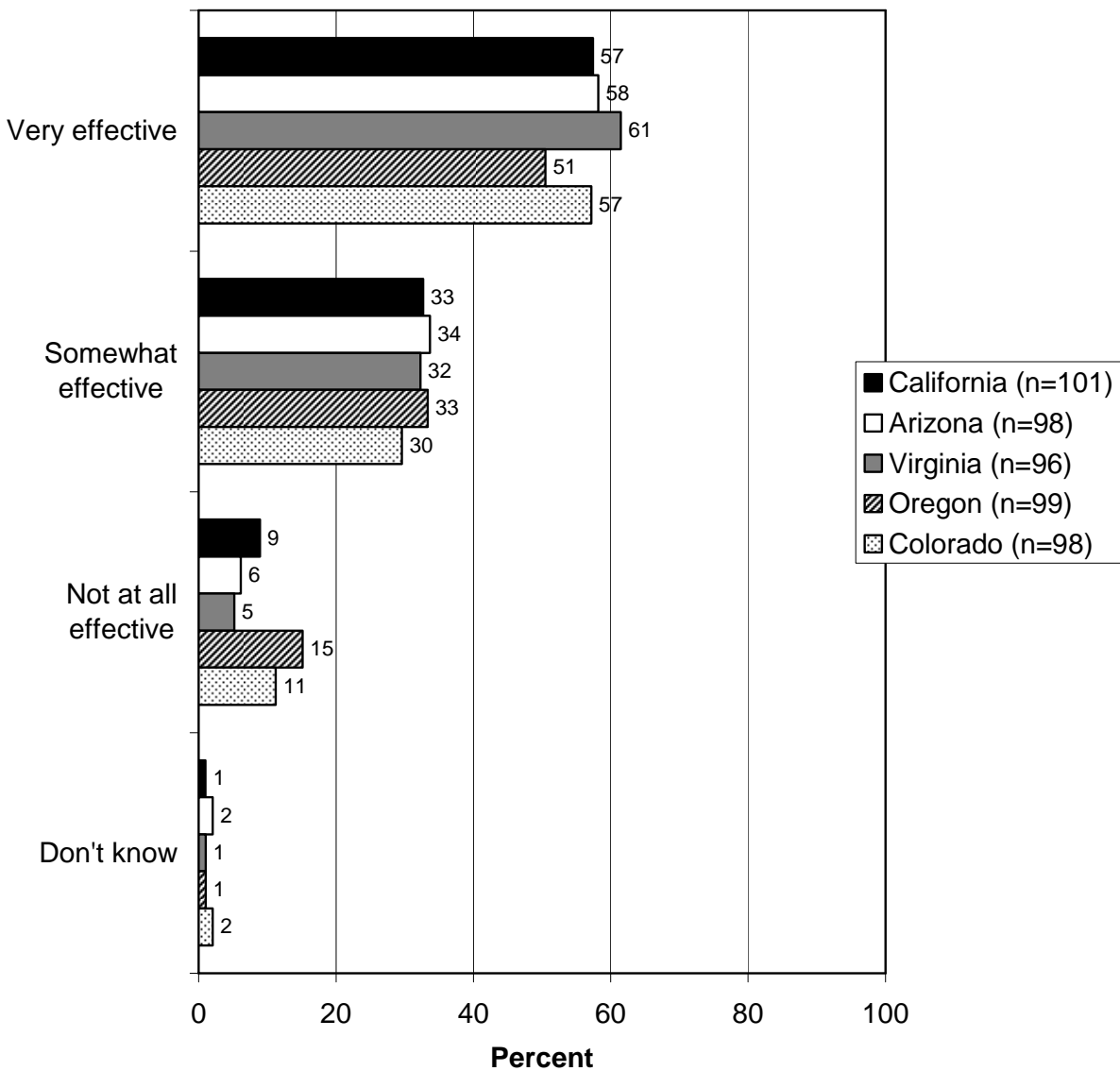
Percent who think the following messages would be not at all effective at stopping people from participating in unsafe shooting practices, causing property and environmental damage, and behaving irresponsibly at recreational shooting areas and ranges on federal lands. (Colorado)



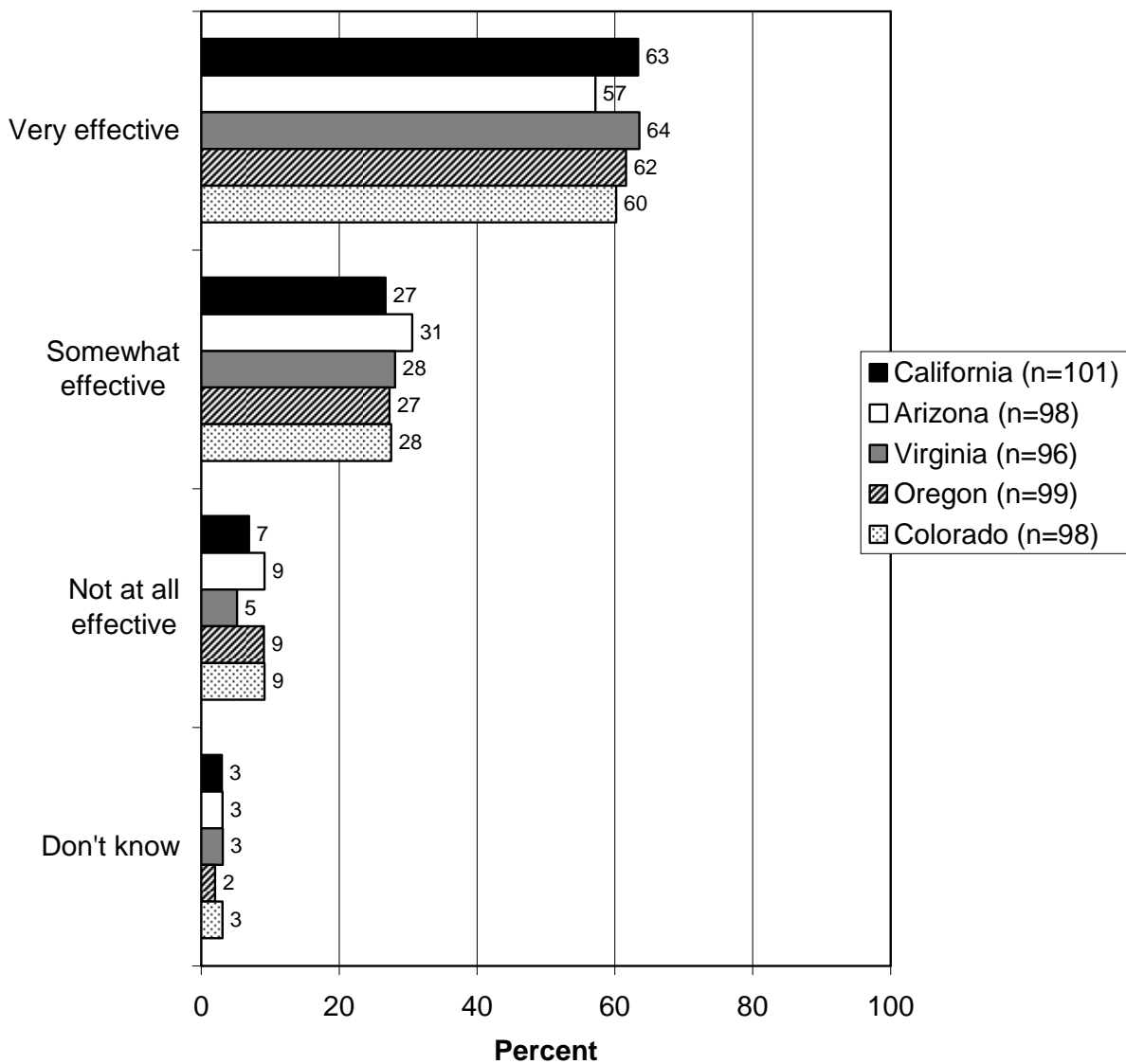
Q167. How effective do you think the message "Irresponsible behavior gives shooters a bad reputation" would be at stopping you or other people from participating in or causing unsafe shooting practices, behavior that causes property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands?



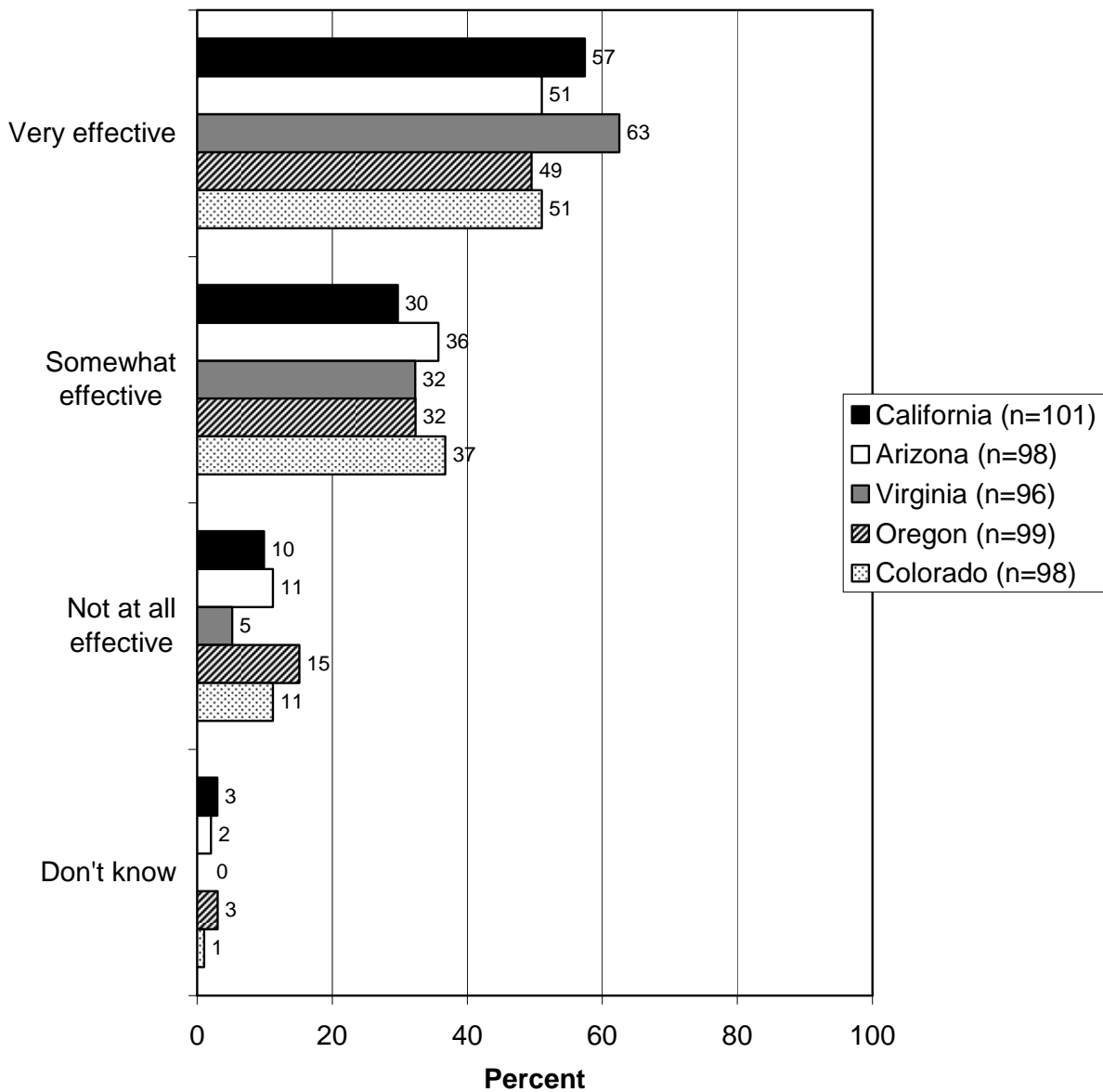
Q168. How effective do you think the message "Irresponsible behavior hurts the shooting heritage" would be at stopping you or other people from participating in or causing unsafe shooting practices, behavior that causes property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands?



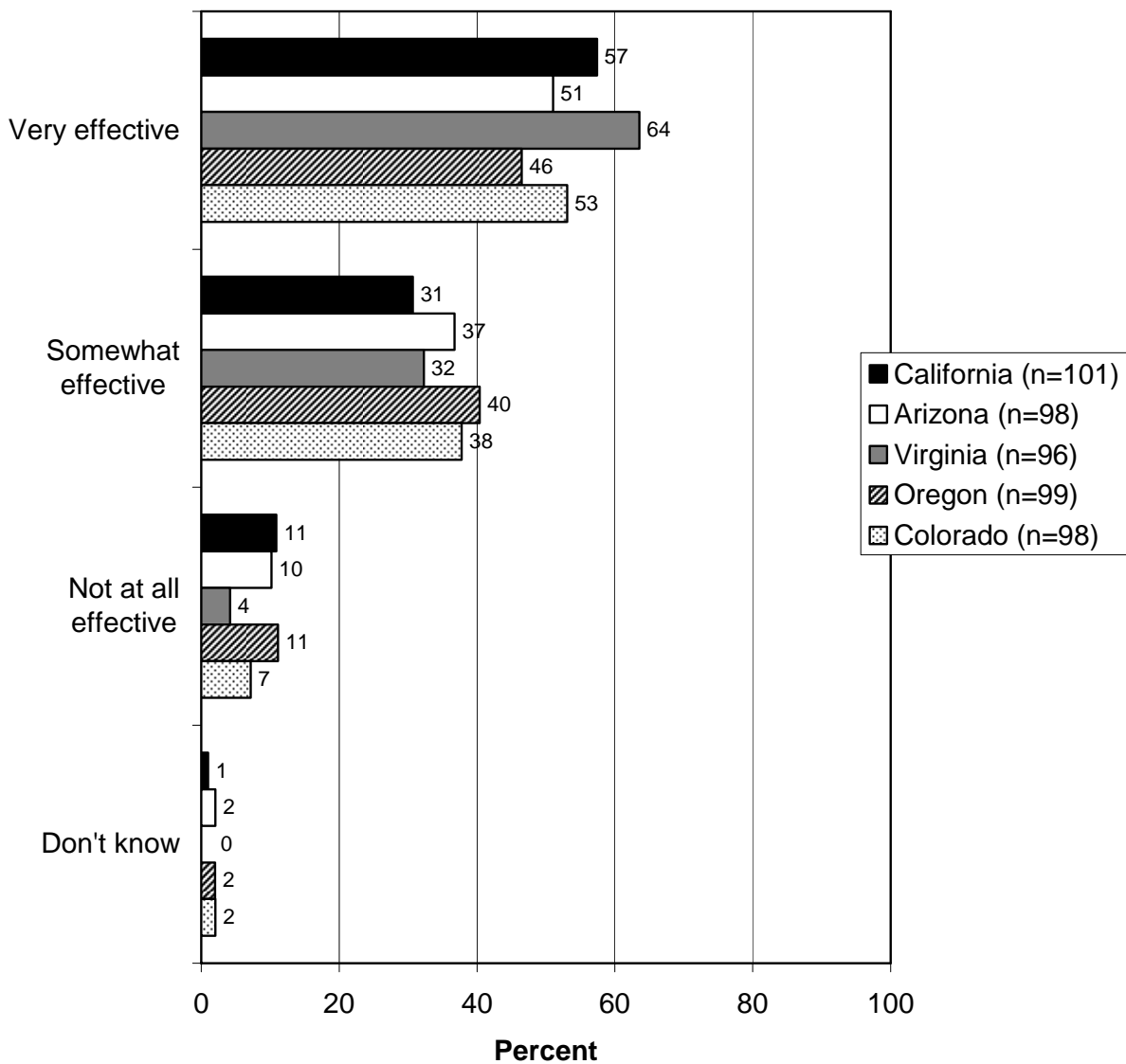
Q169. How effective do you think the message "Irresponsible behavior causes shooting areas and ranges on federal lands to shut down" would be at stopping you or other people from participating in or causing unsafe shooting practices, behavior that causes property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands?



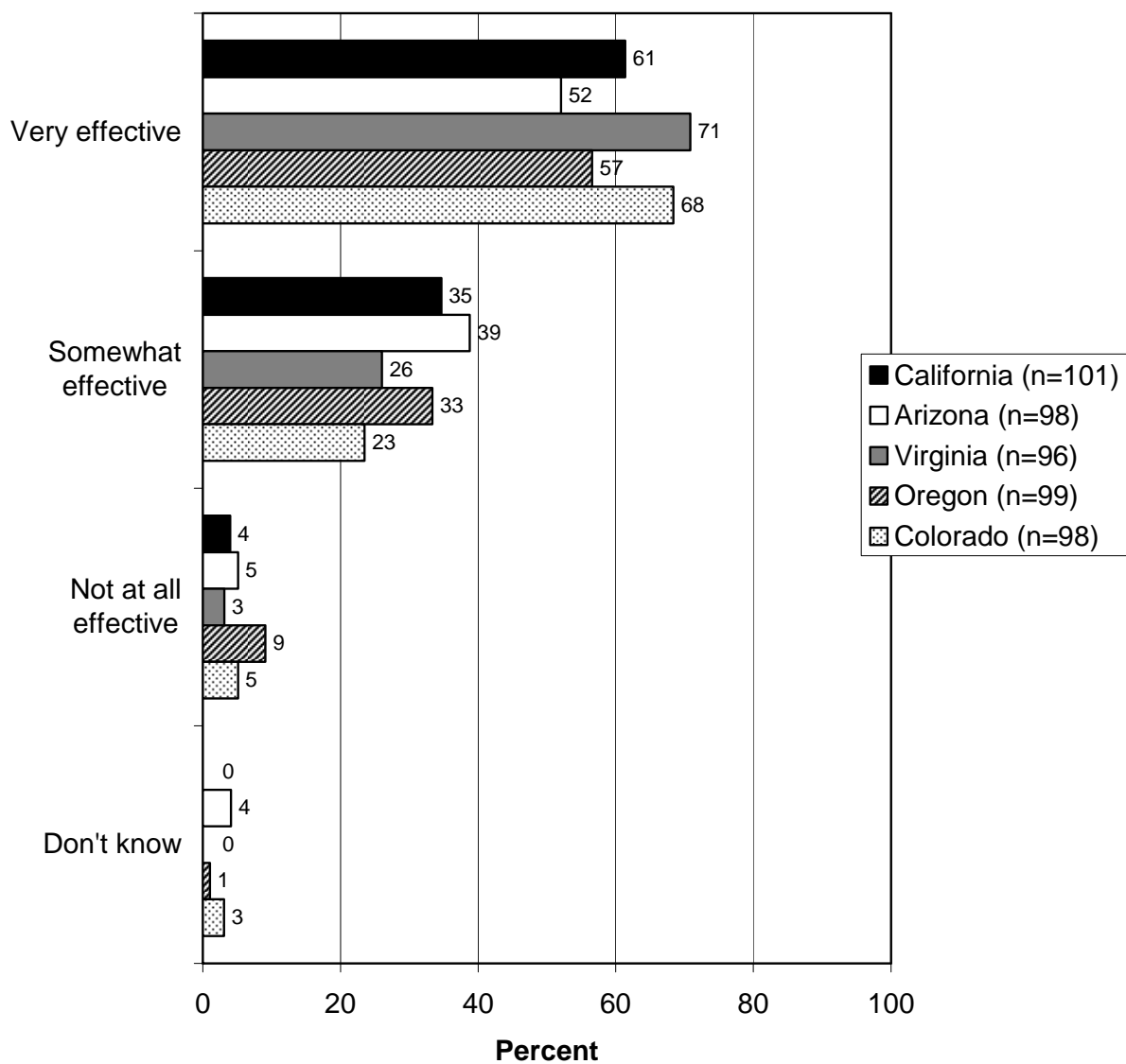
Q170. How effective do you think the message "Irresponsible behavior jeopardizes your safety" would be at stopping you or other people from participating in or causing unsafe shooting practices, behavior that causes property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands?



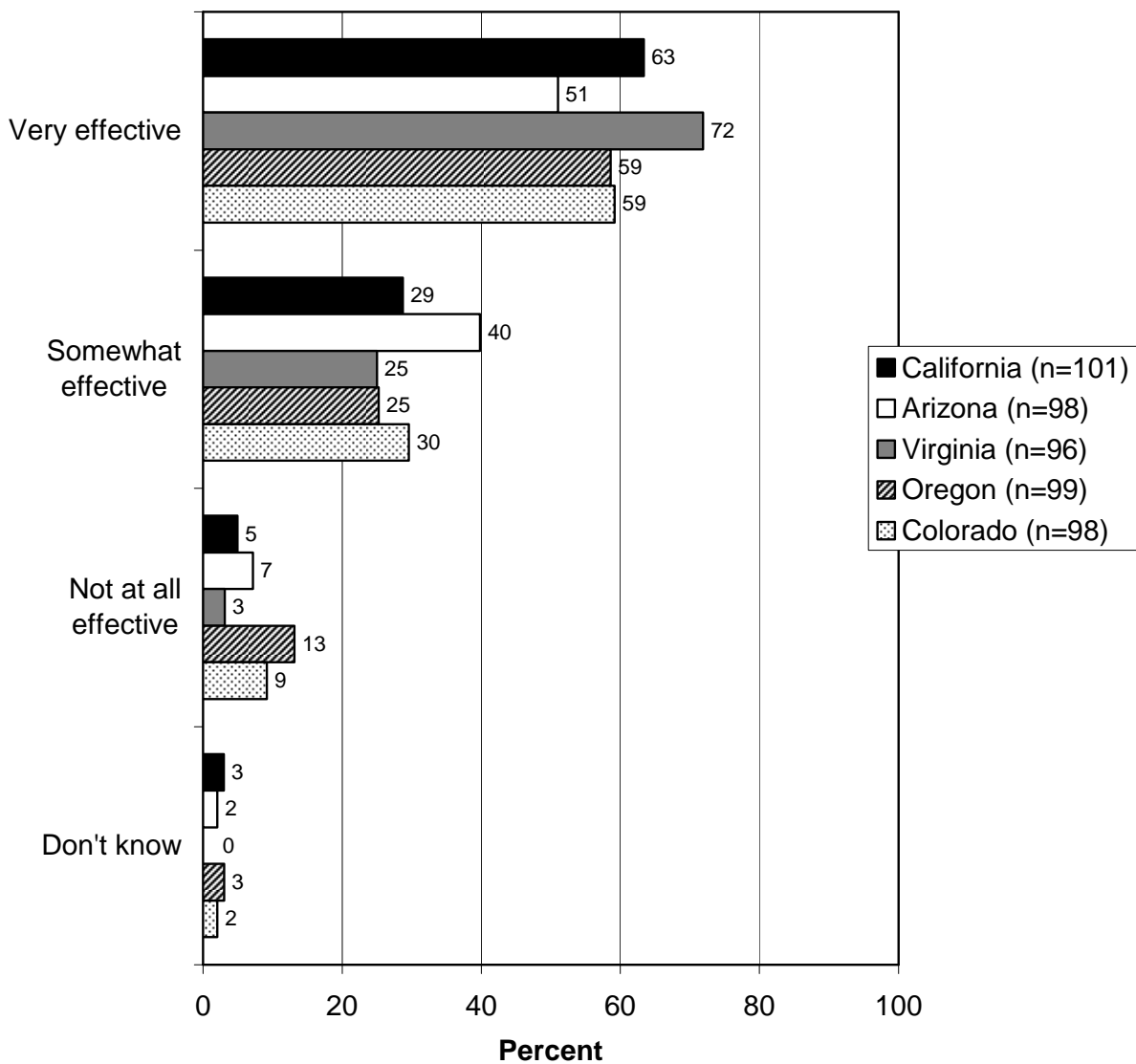
Q171. How effective do you think the message "Irresponsible behavior jeopardizes the safety of others" would be at stopping you or other people from participating in or causing unsafe shooting practices, behavior that causes property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands?



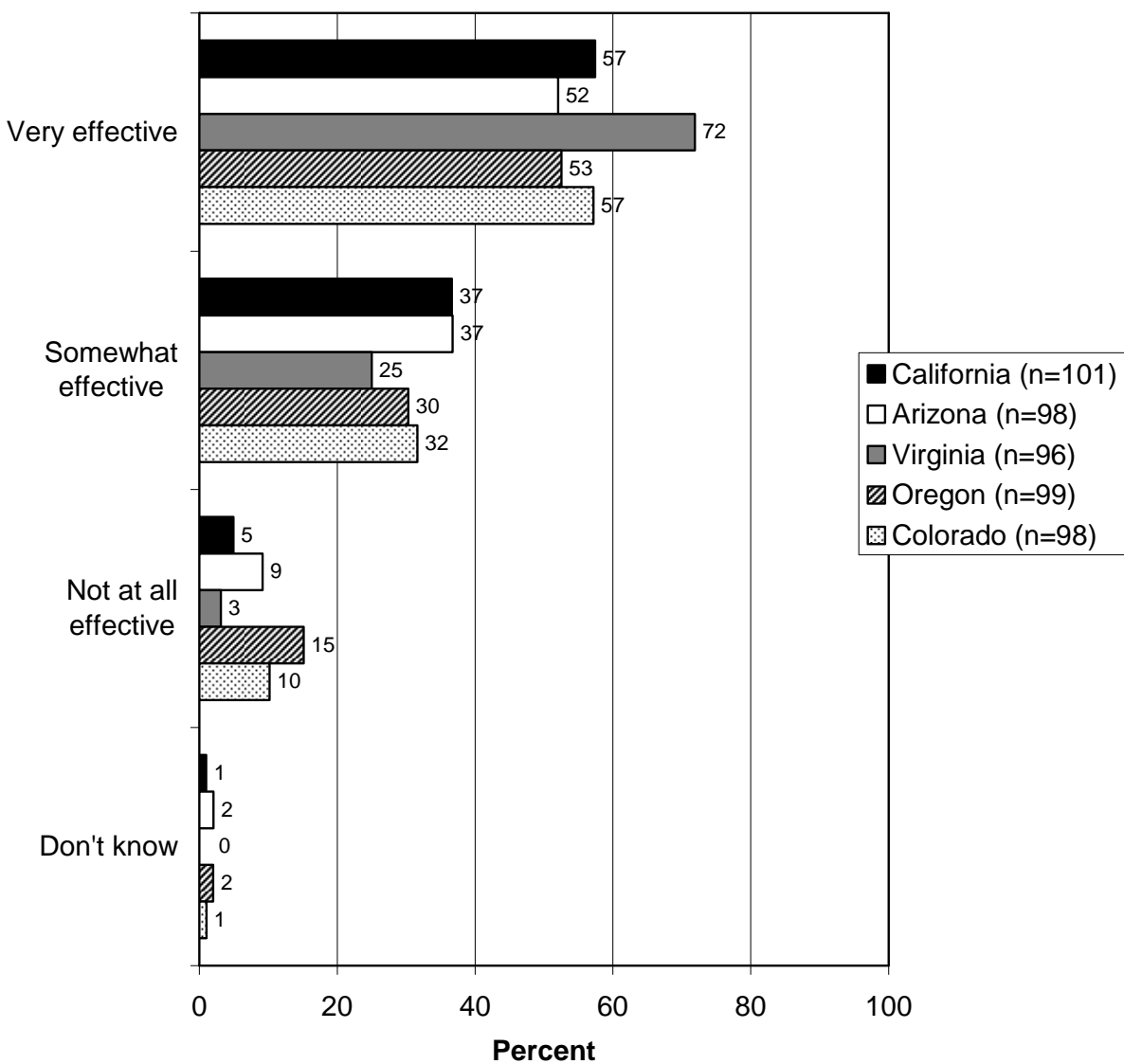
Q172. How effective do you think the message "Irresponsible behavior is a threat to the future of the shooting sports" would be at stopping you or other people from participating in or causing unsafe shooting practices, behavior that causes property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands?



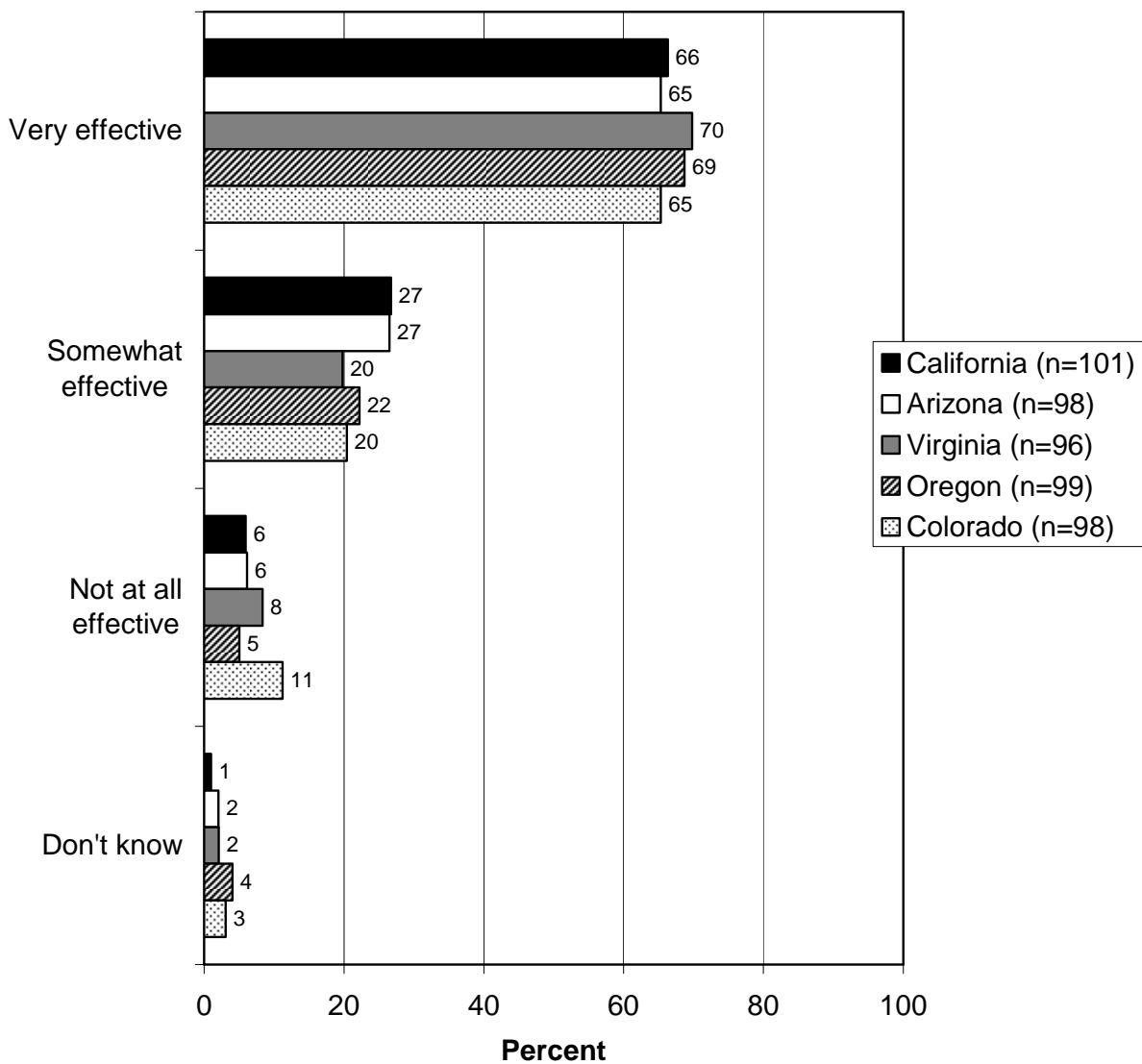
Q173. How effective do you think the message "Irresponsible behavior robs you and your children of a place to shoot" would be at stopping you or other people from participating in or causing unsafe shooting practices, behavior that causes property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands?



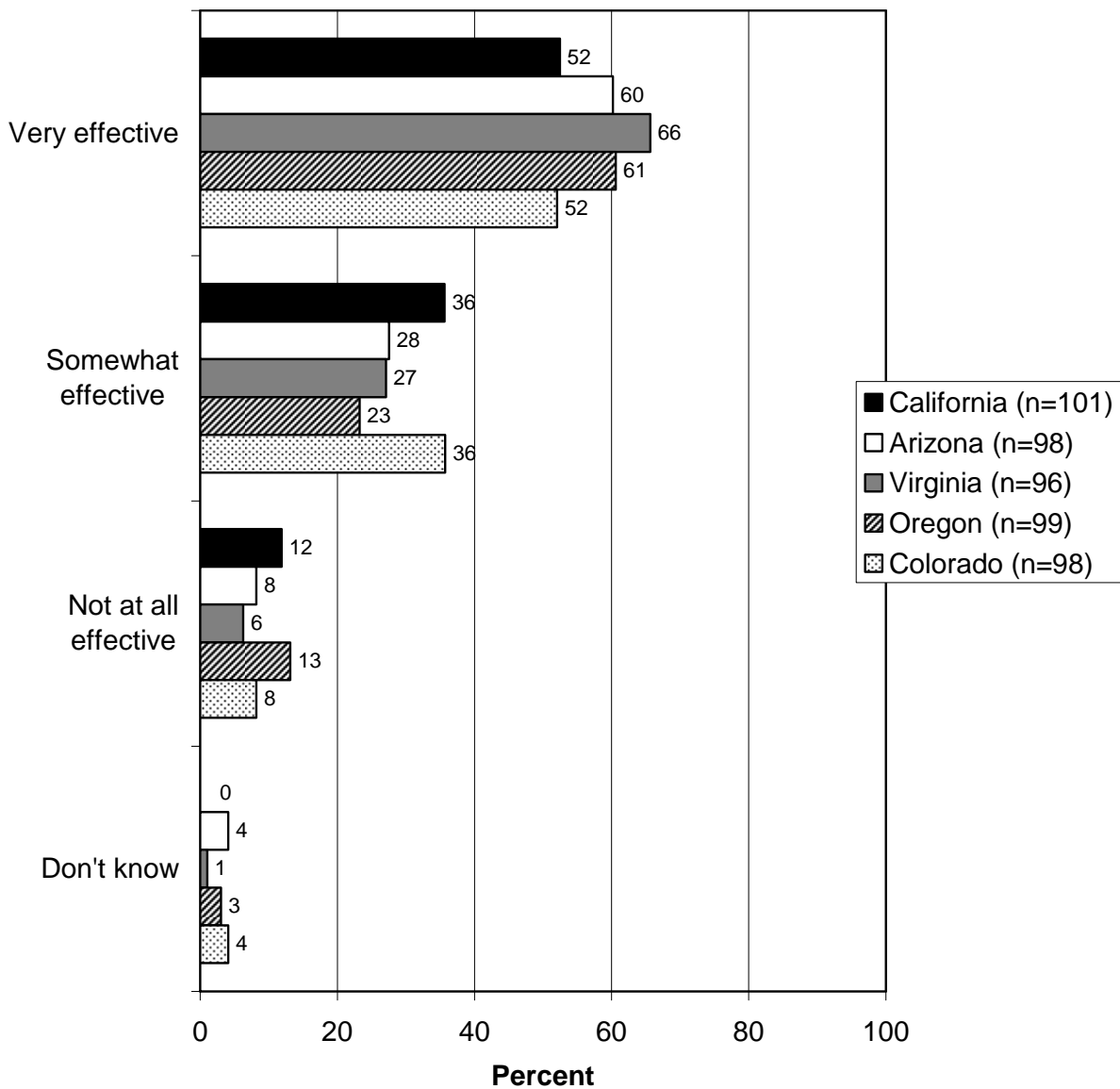
Q174. How effective do you think the message "Irresponsible behavior threatens our right to shoot" would be at stopping you or other people from participating in or causing unsafe shooting practices, behavior that causes property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands?



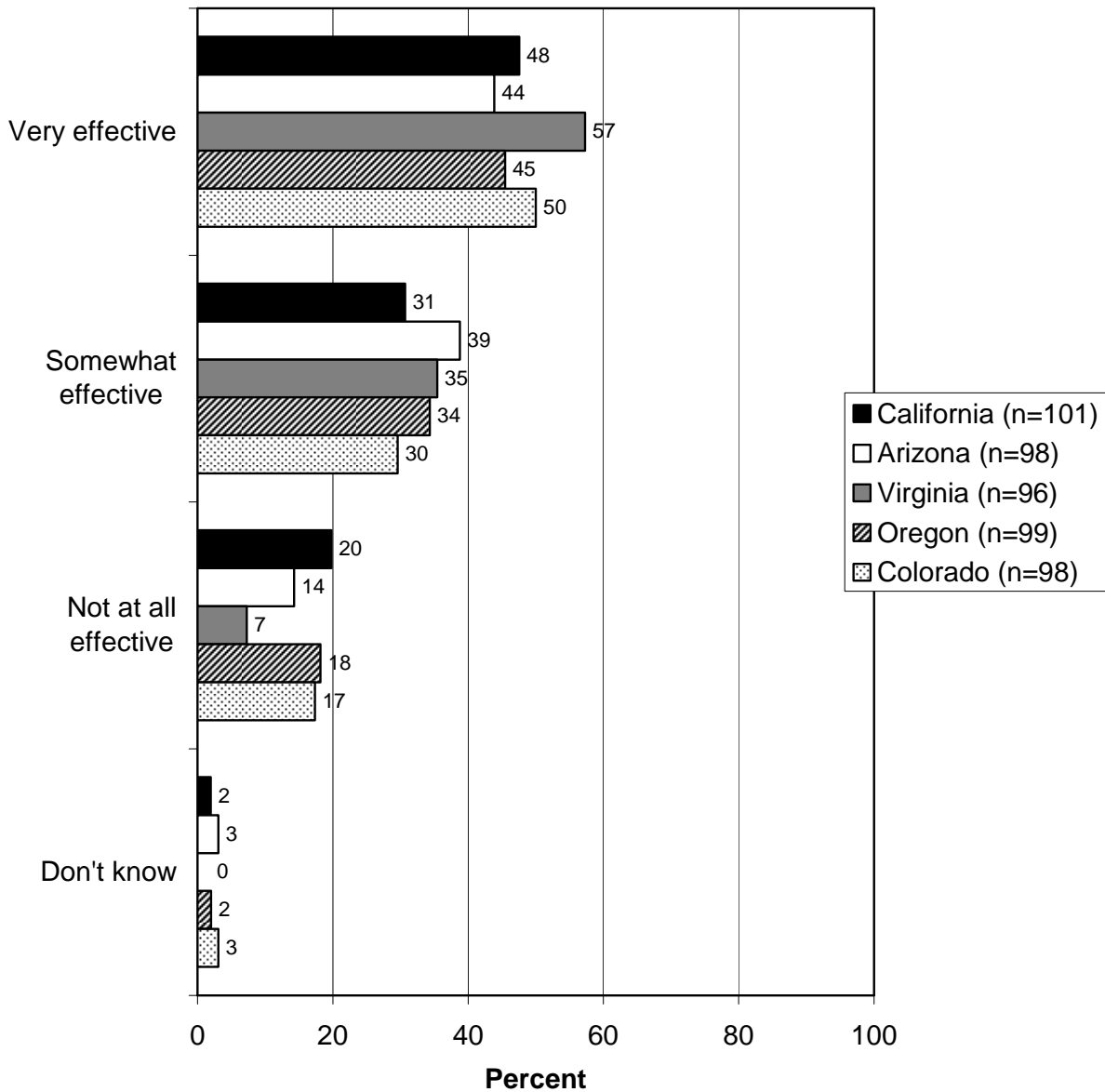
Q175. How effective do you think the message "Irresponsible behavior provides ammunition for anti-hunting and anti-shooting groups" would be at stopping you or other people from participating in or causing unsafe shooting practices, behavior that causes property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands?



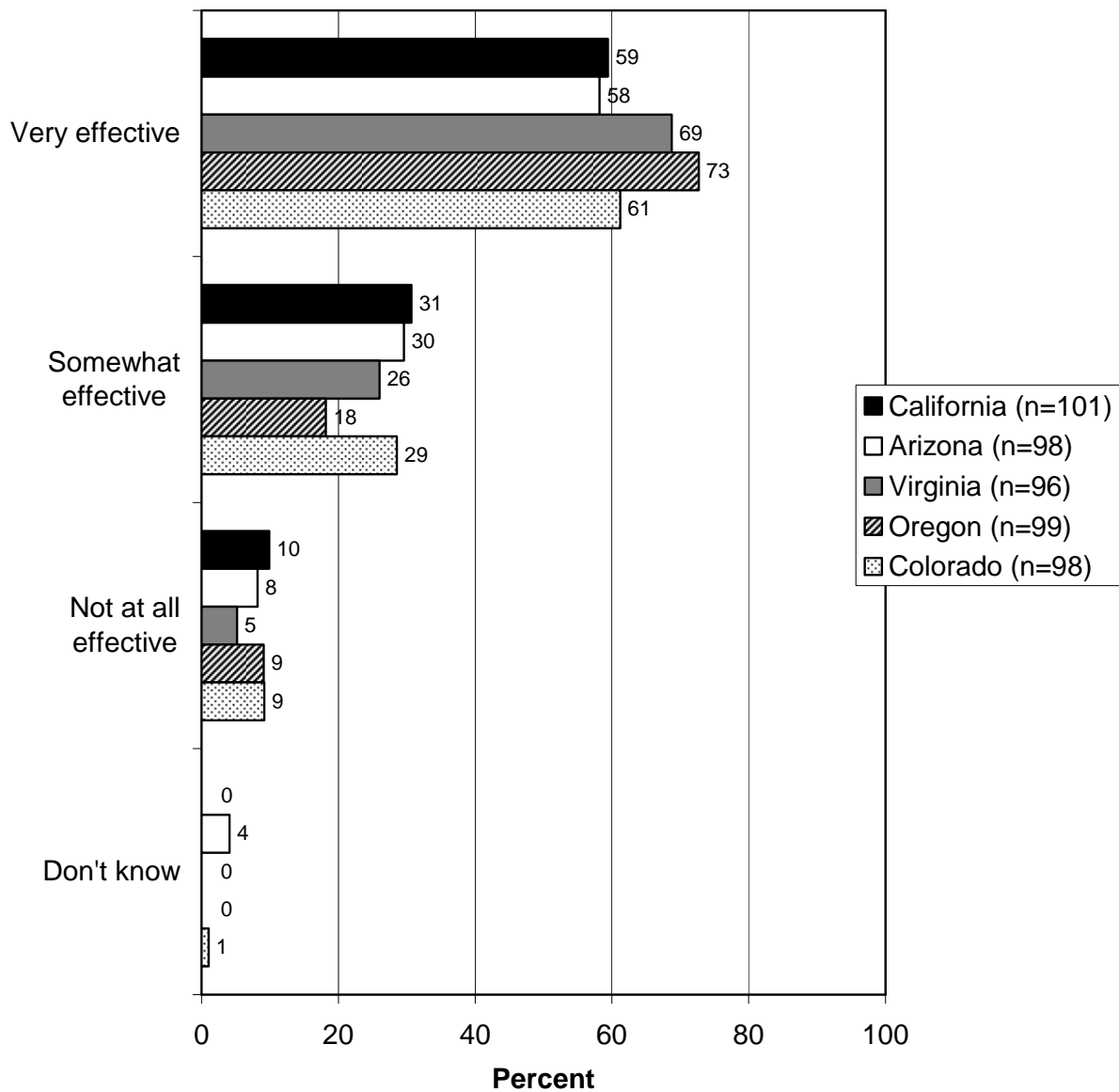
Q176. How effective do you think the message "You can be fined for irresponsible behavior" would be at stopping you or other people from participating in or causing unsafe shooting practices, behavior that causes property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands?



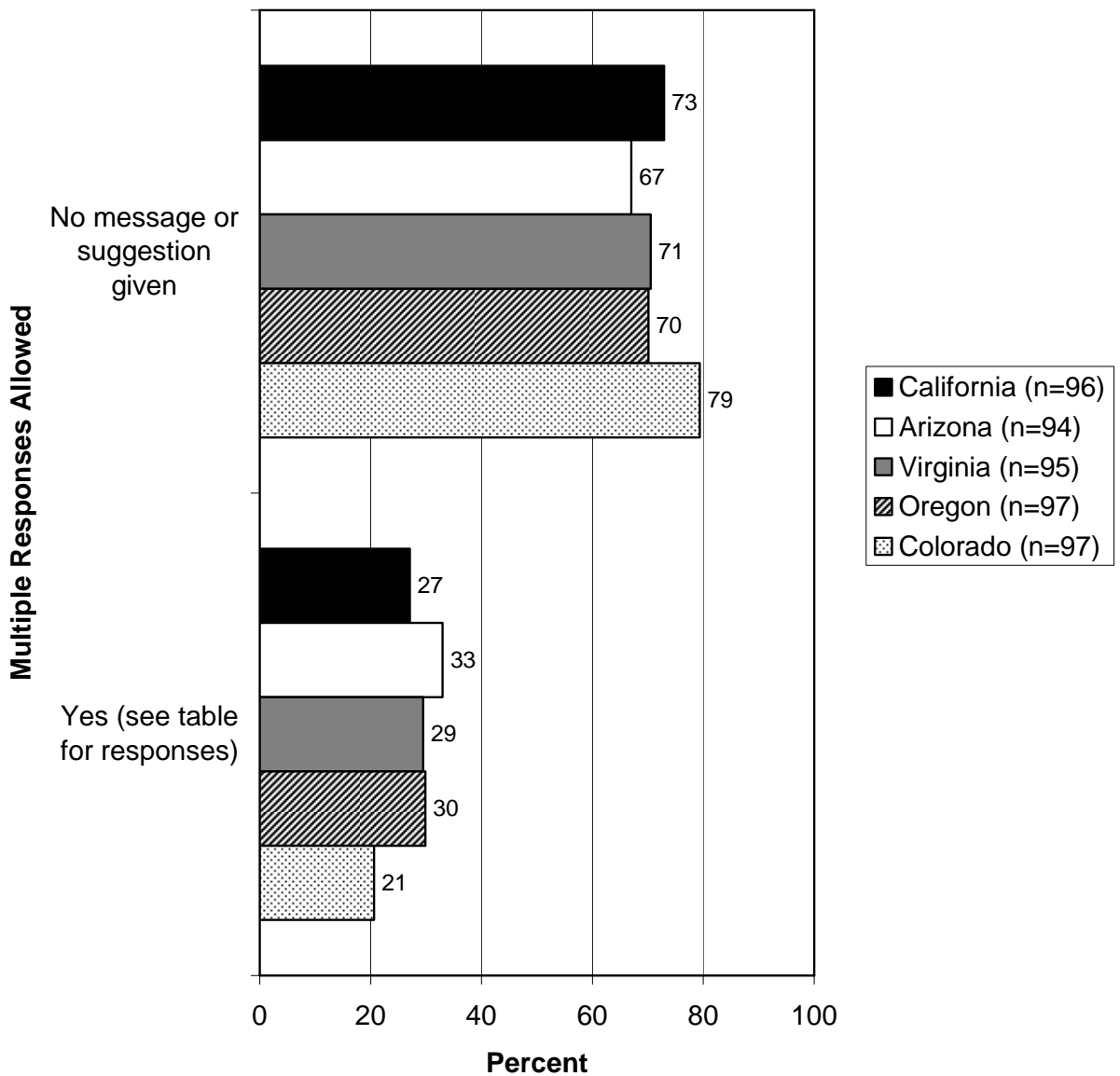
Q177. How effective do you think the message "Good behavior results in great shooting" would be at stopping you or other people from participating in or causing unsafe shooting practices, behavior that causes property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands?



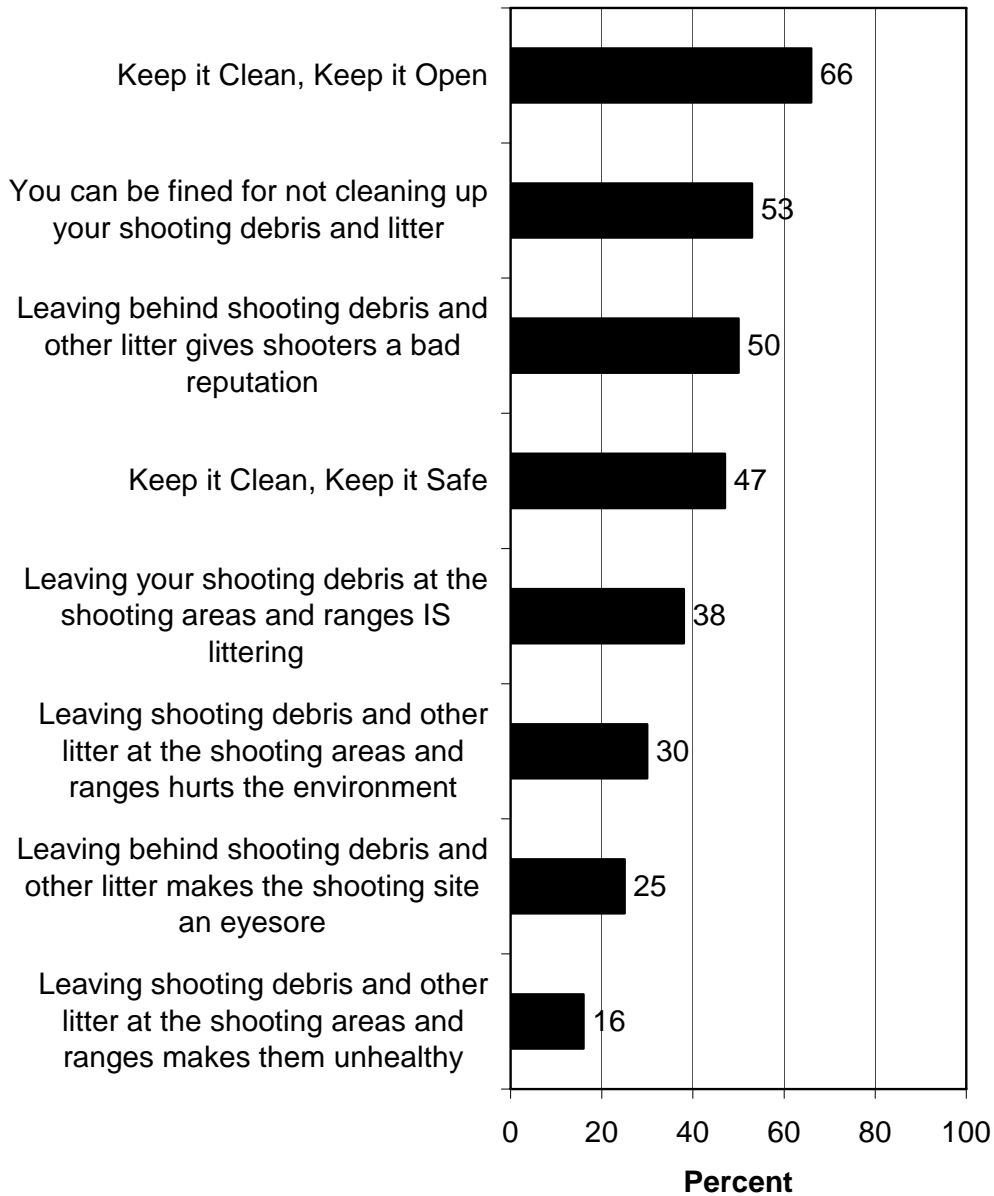
Q178. How effective do you think the message "Keep it Safe, Keep it Open" would be at stopping you or other people from participating in or causing unsafe shooting practices, behavior that causes property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands?



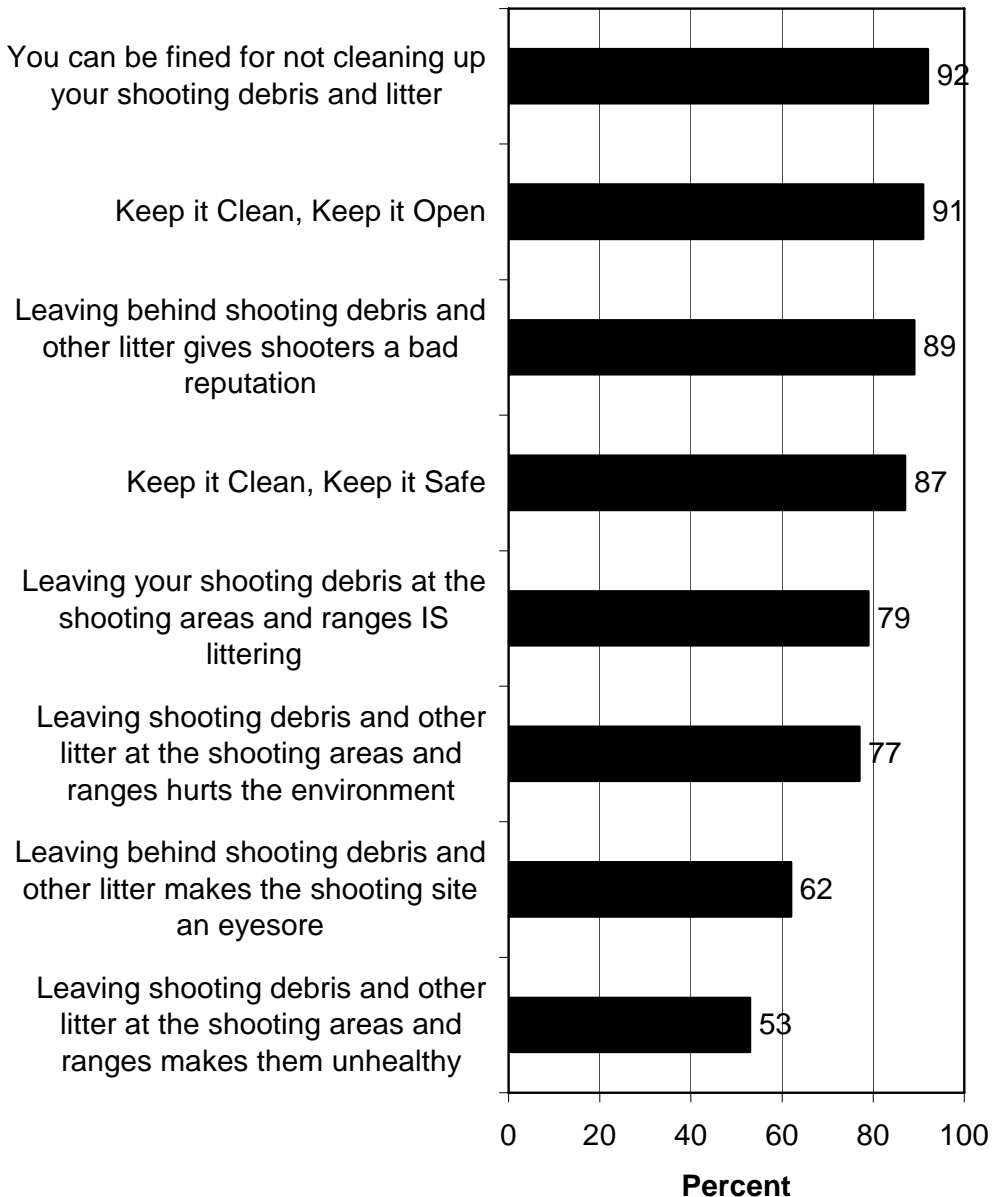
Q179. Are there any other messages or statements that you think might be effective at stopping you or other people from participating in or causing unsafe shooting practices, behavior that causes property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands?



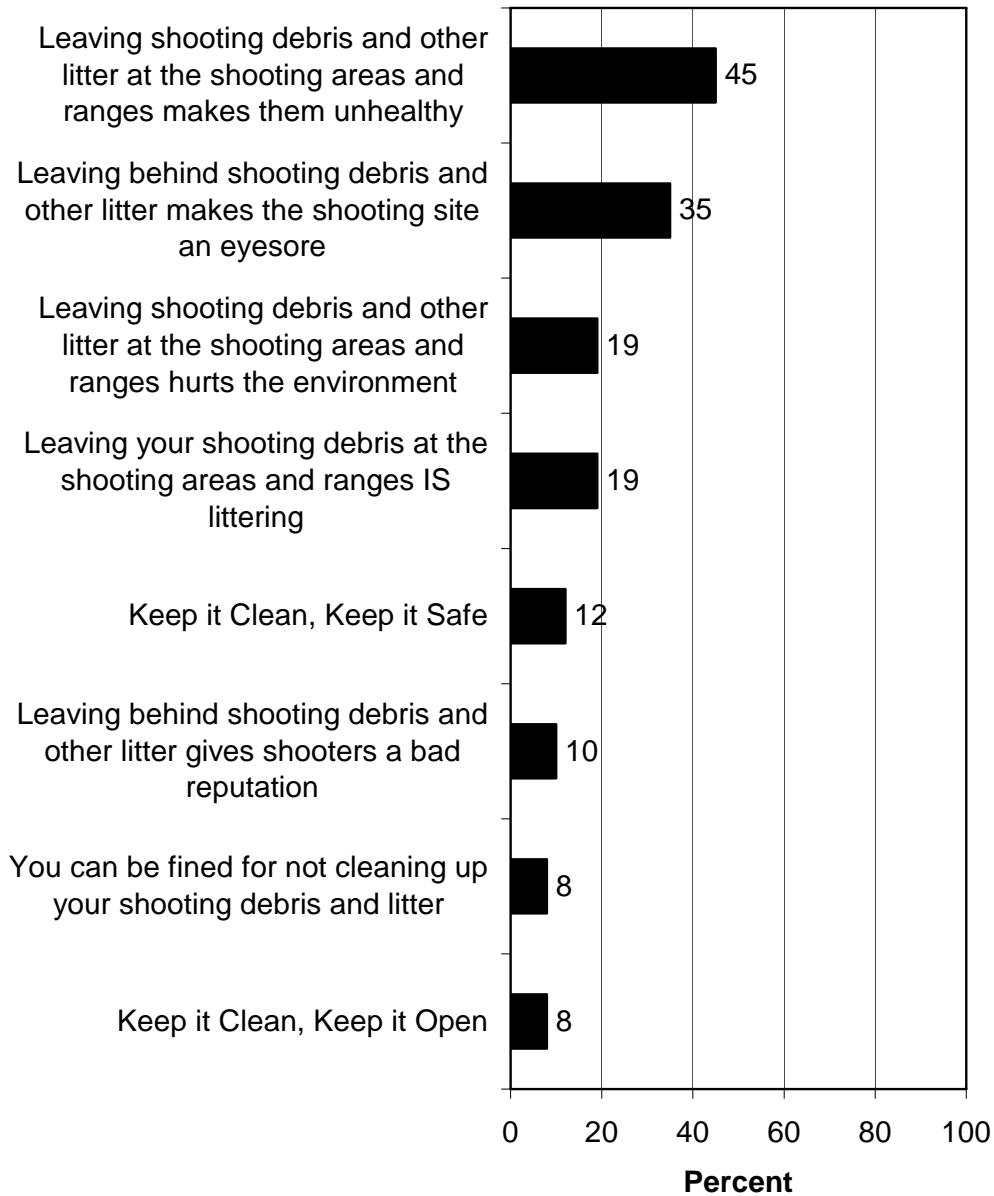
Percent who think the following messages would be very effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (California)



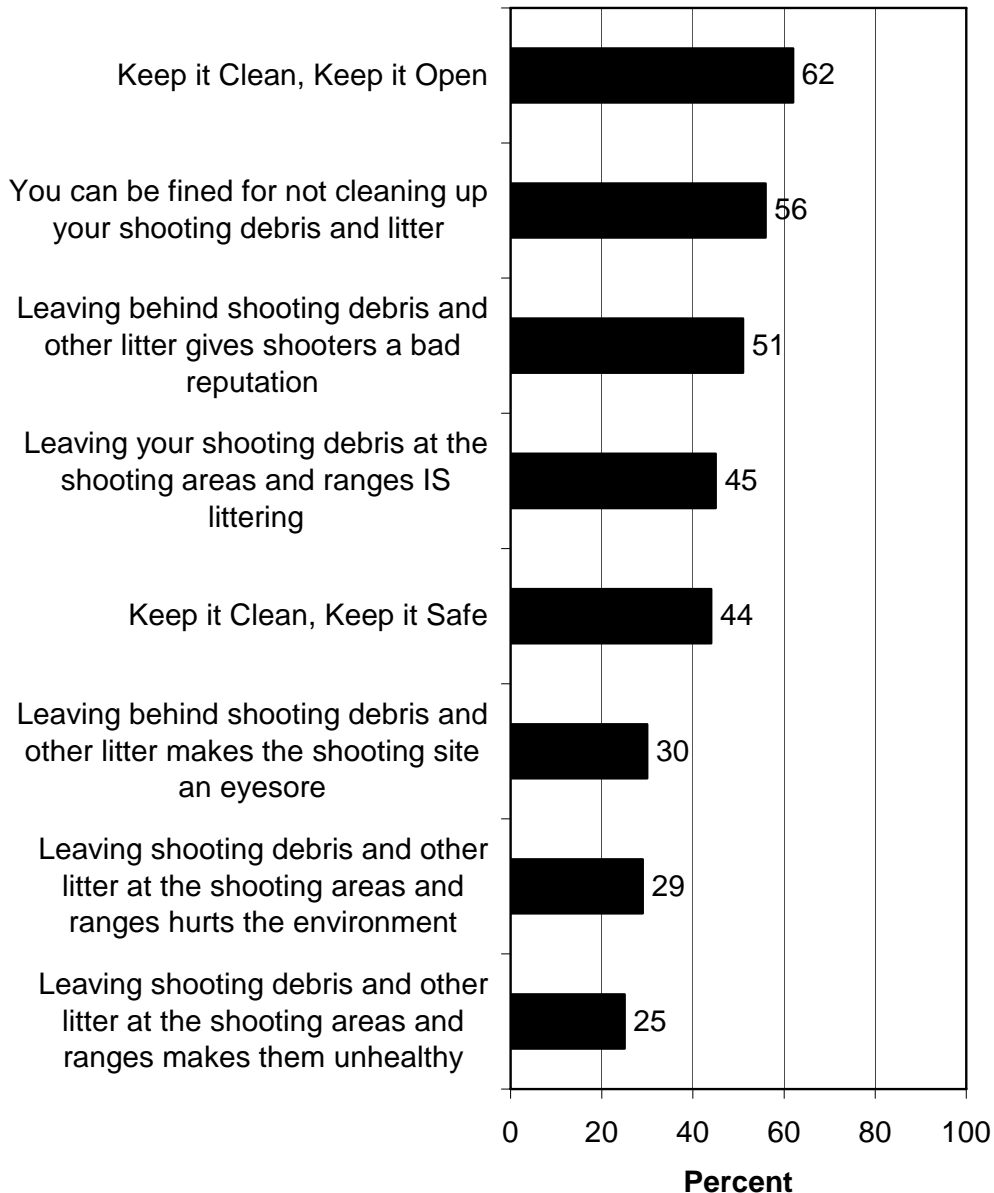
Percent who think the following messages would be very or somewhat effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (California)



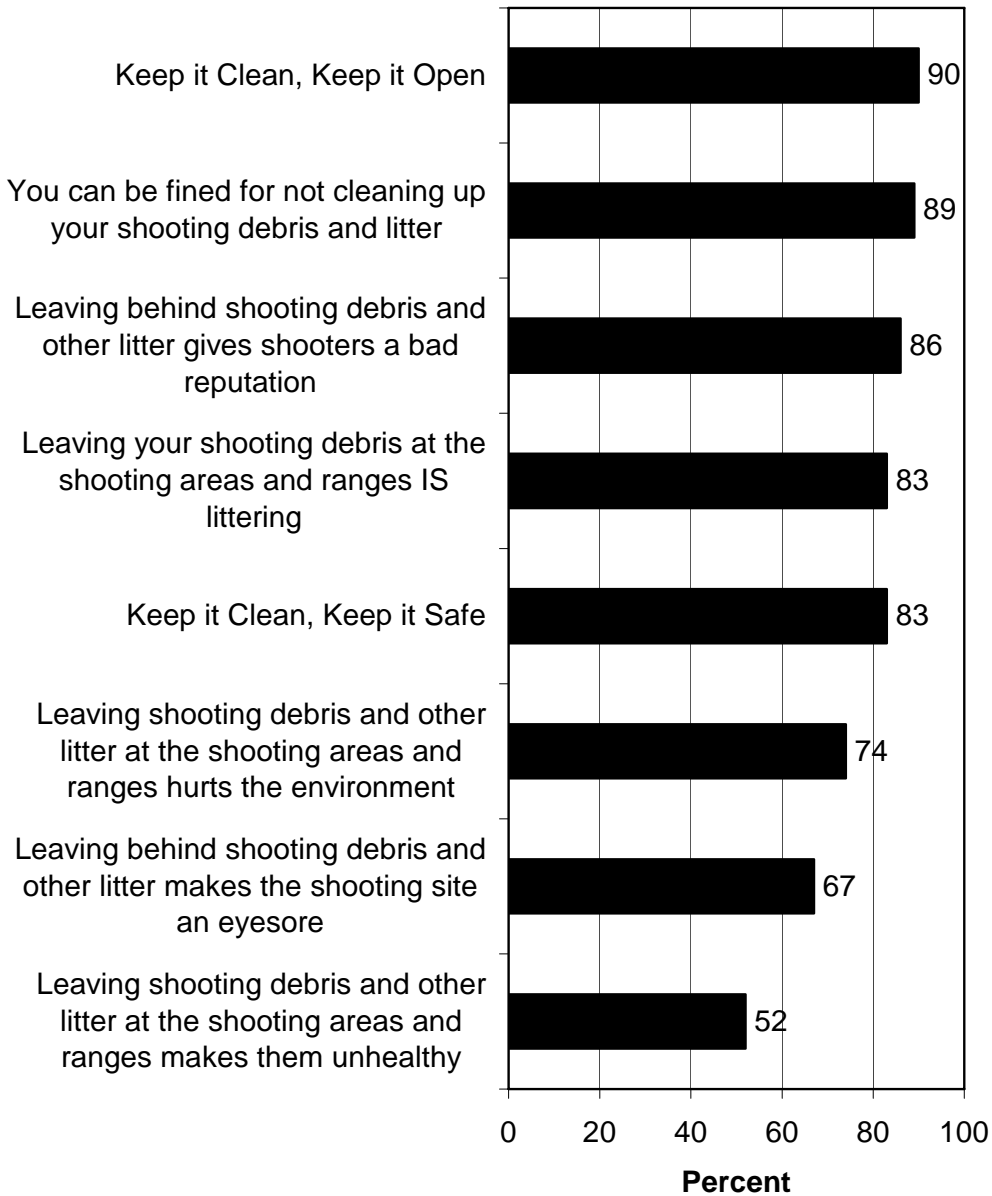
Percent who think the following messages would be not at all effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (California)



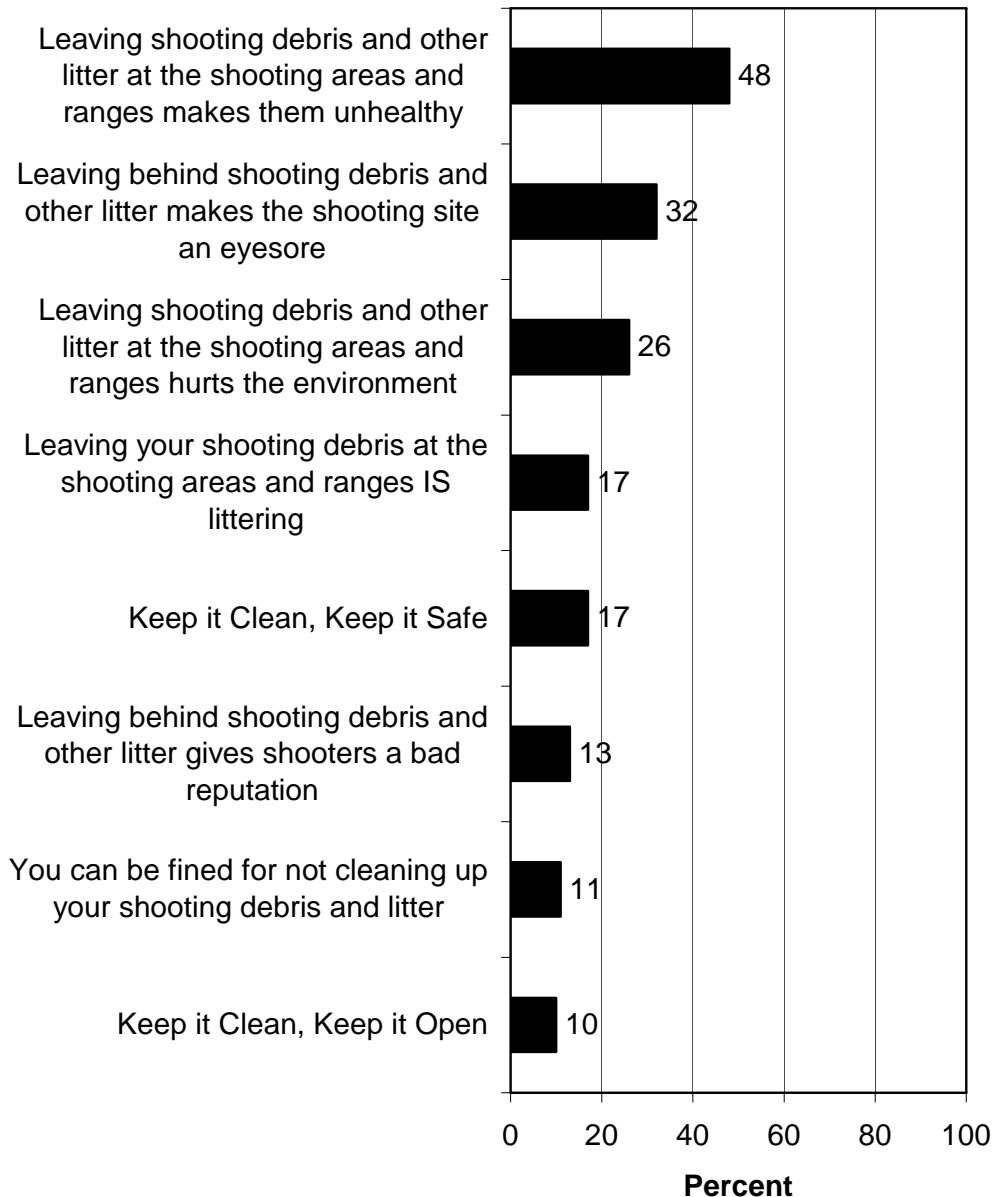
Percent who think the following messages would be very effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (Arizona)



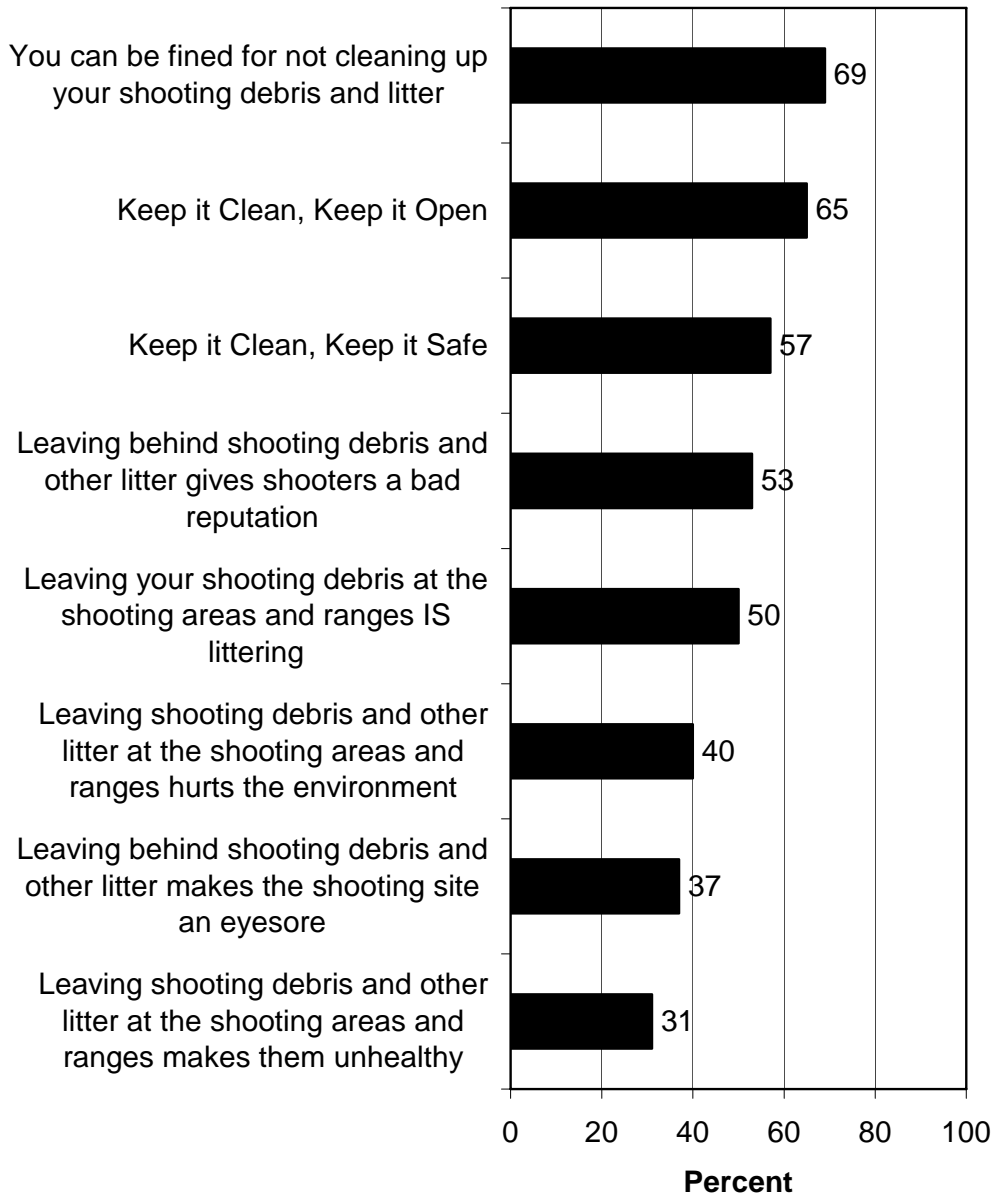
Percent who think the following messages would be very or somewhat effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (Arizona)



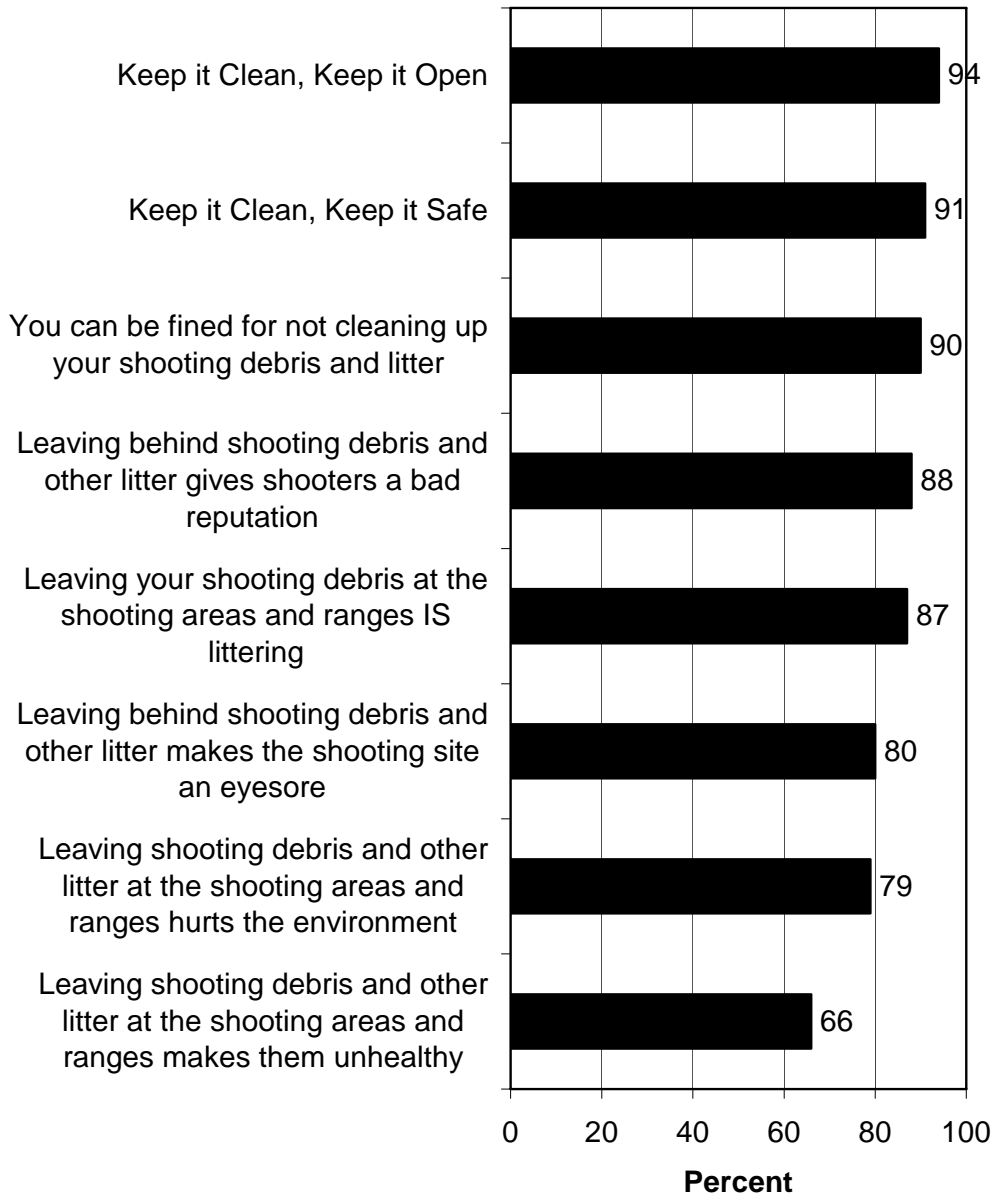
Percent who think the following messages would be not at all effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (Arizona)



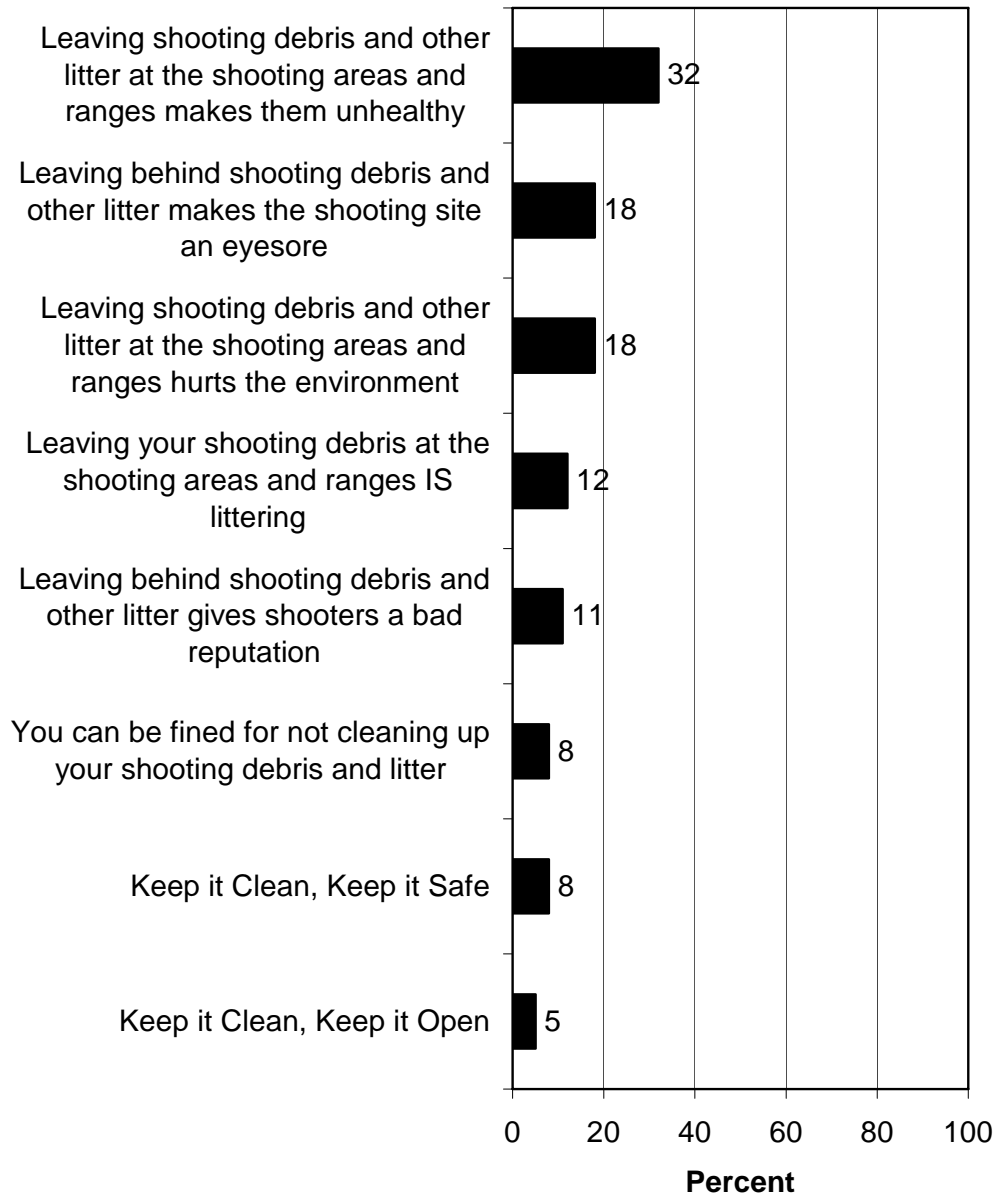
Percent who think the following messages would be very effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (Virginia)



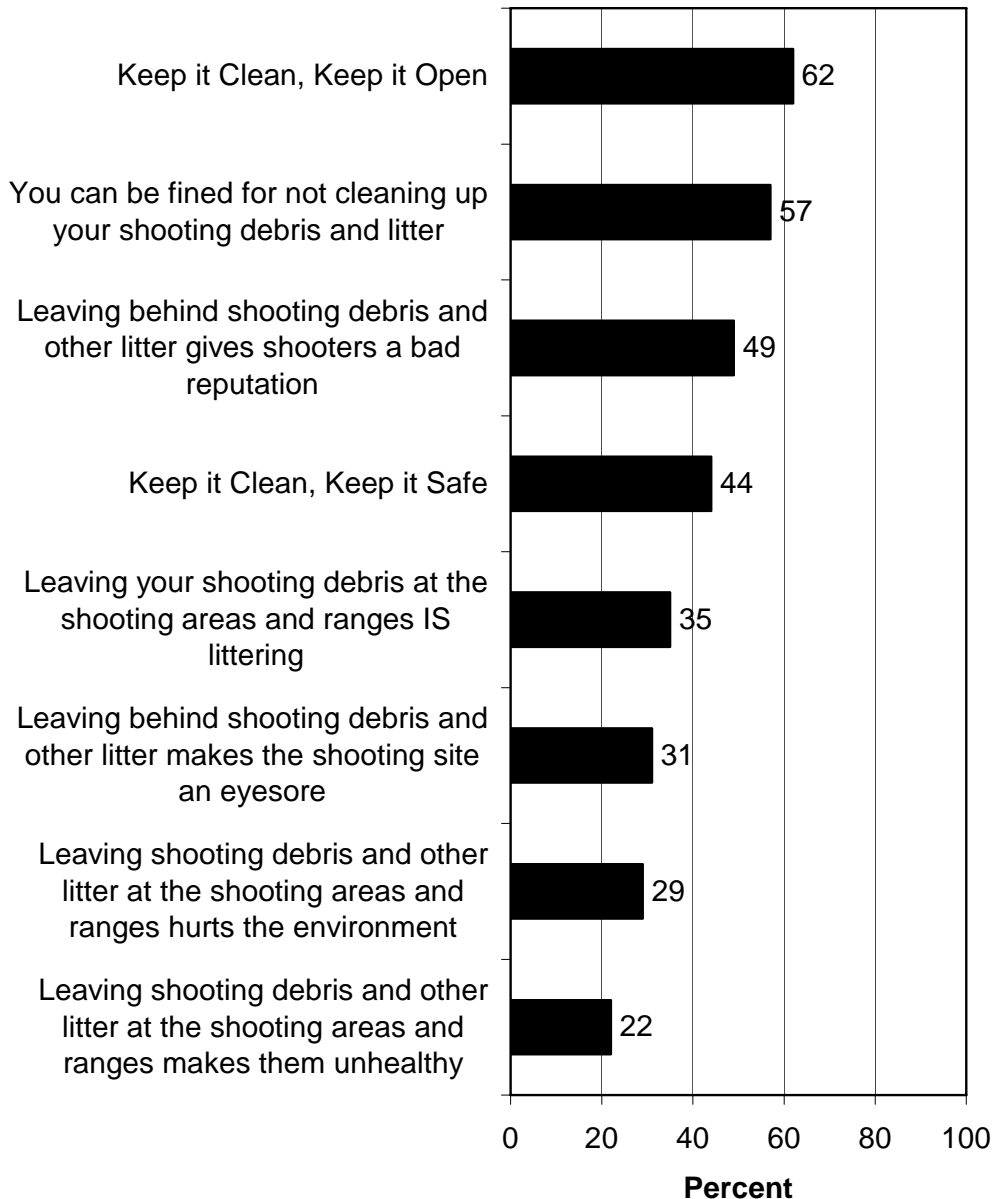
Percent who think the following messages would be very or somewhat effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (Virginia)



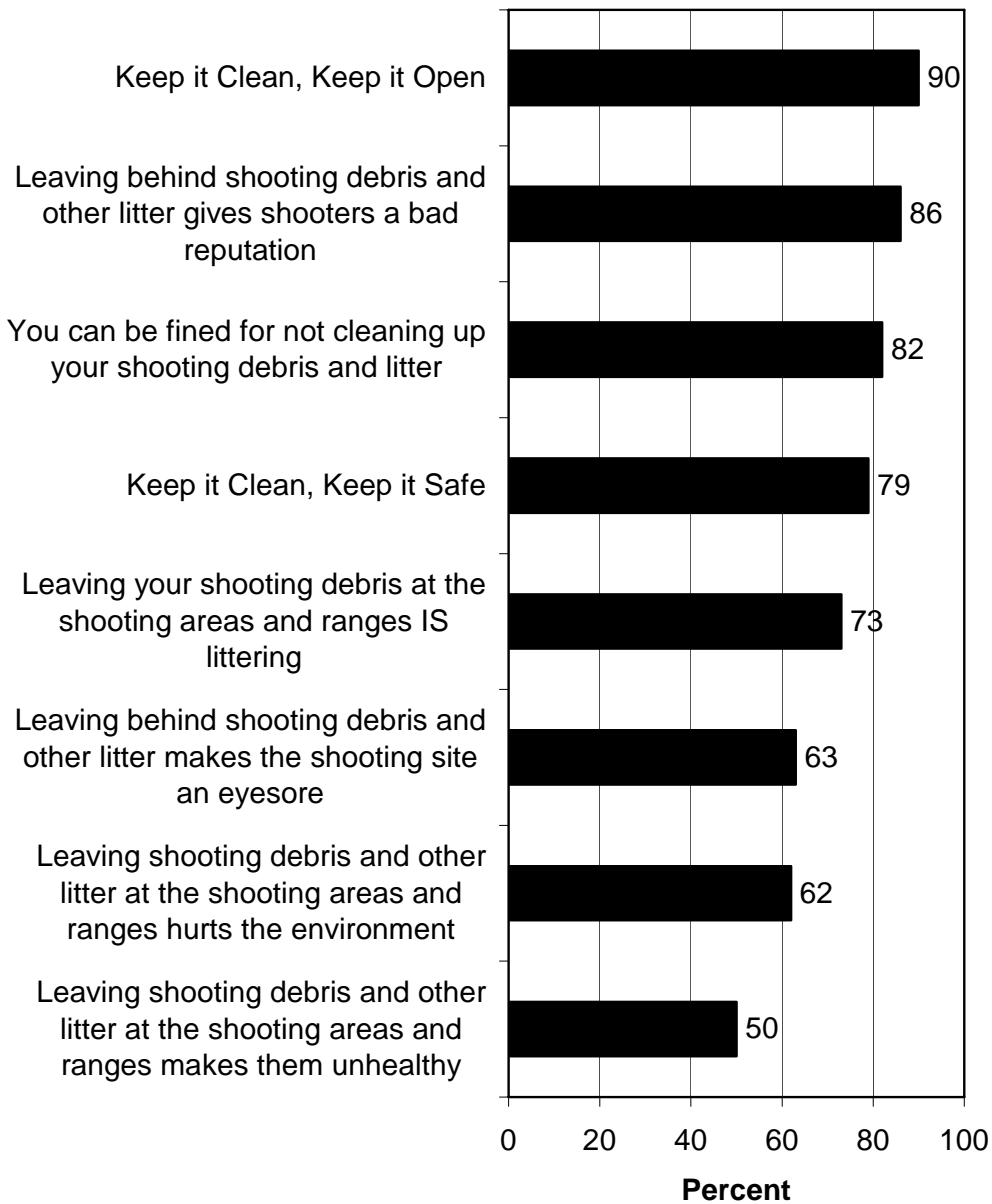
Percent who think the following messages would be not at all effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (Virginia)



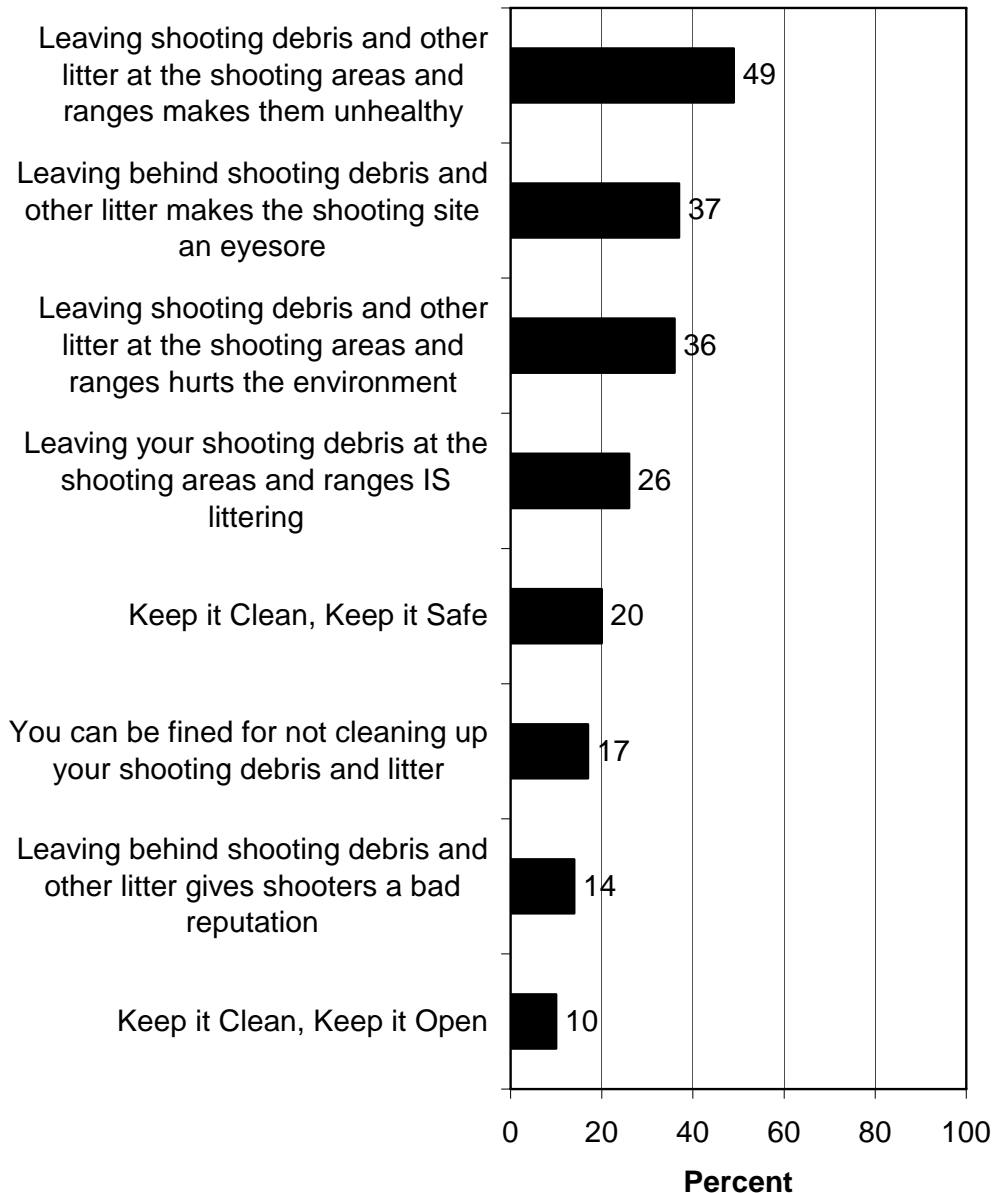
Percent who think the following messages would be very effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (Oregon)



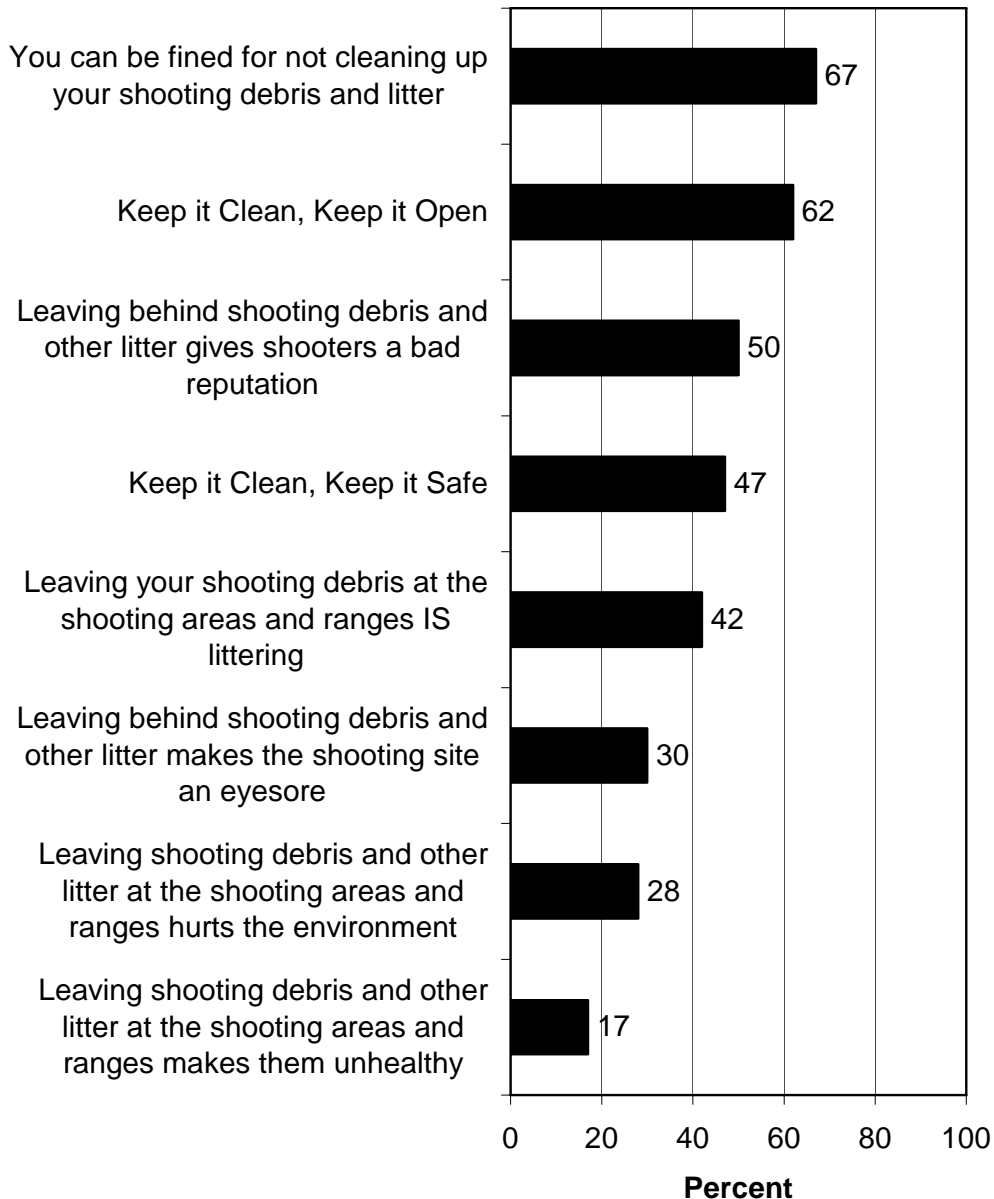
Percent who think the following messages would be very or somewhat effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (Oregon)



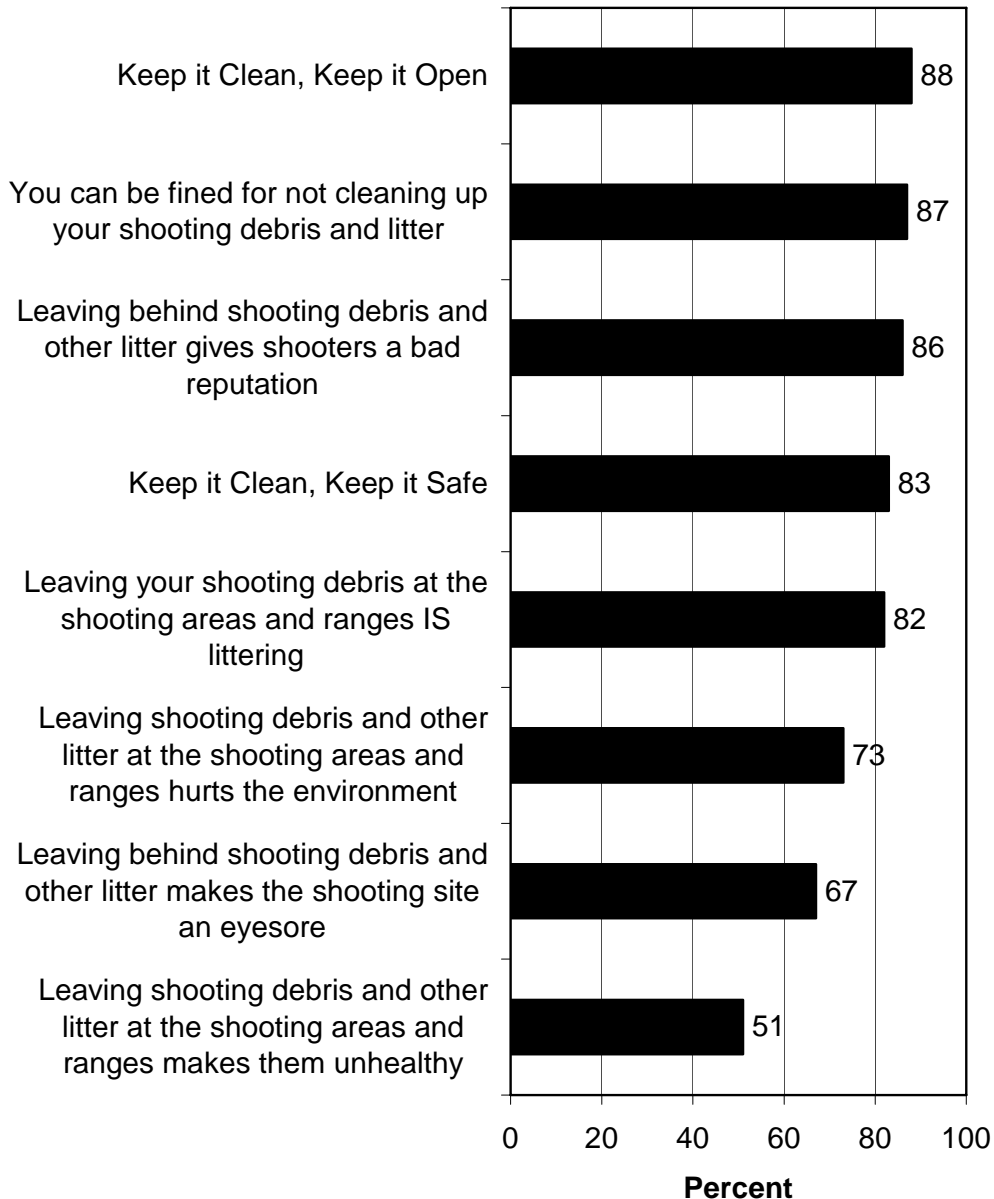
Percent who think the following messages would be not at all effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (Oregon)



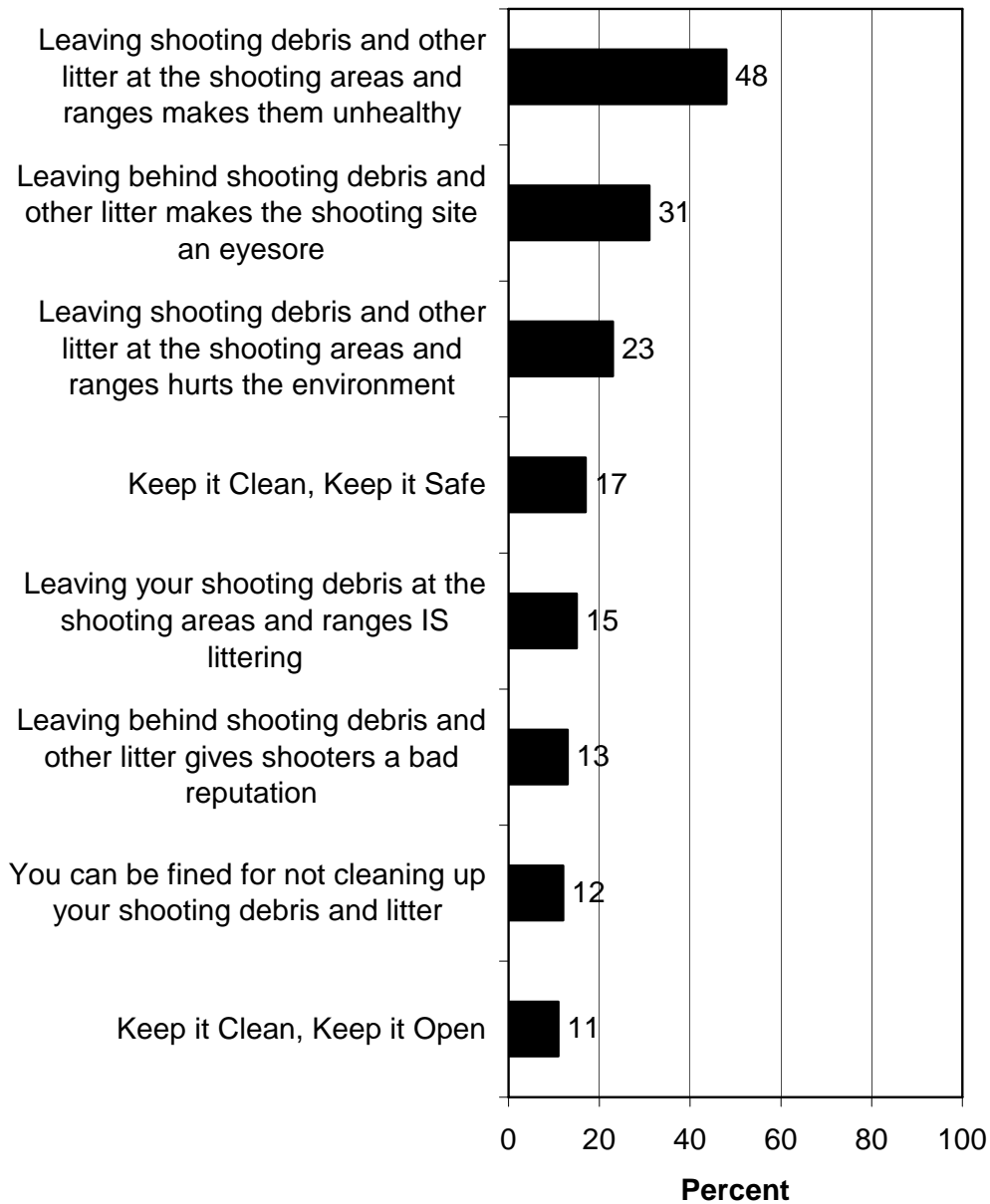
Percent who think the following messages would be very effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (Colorado)



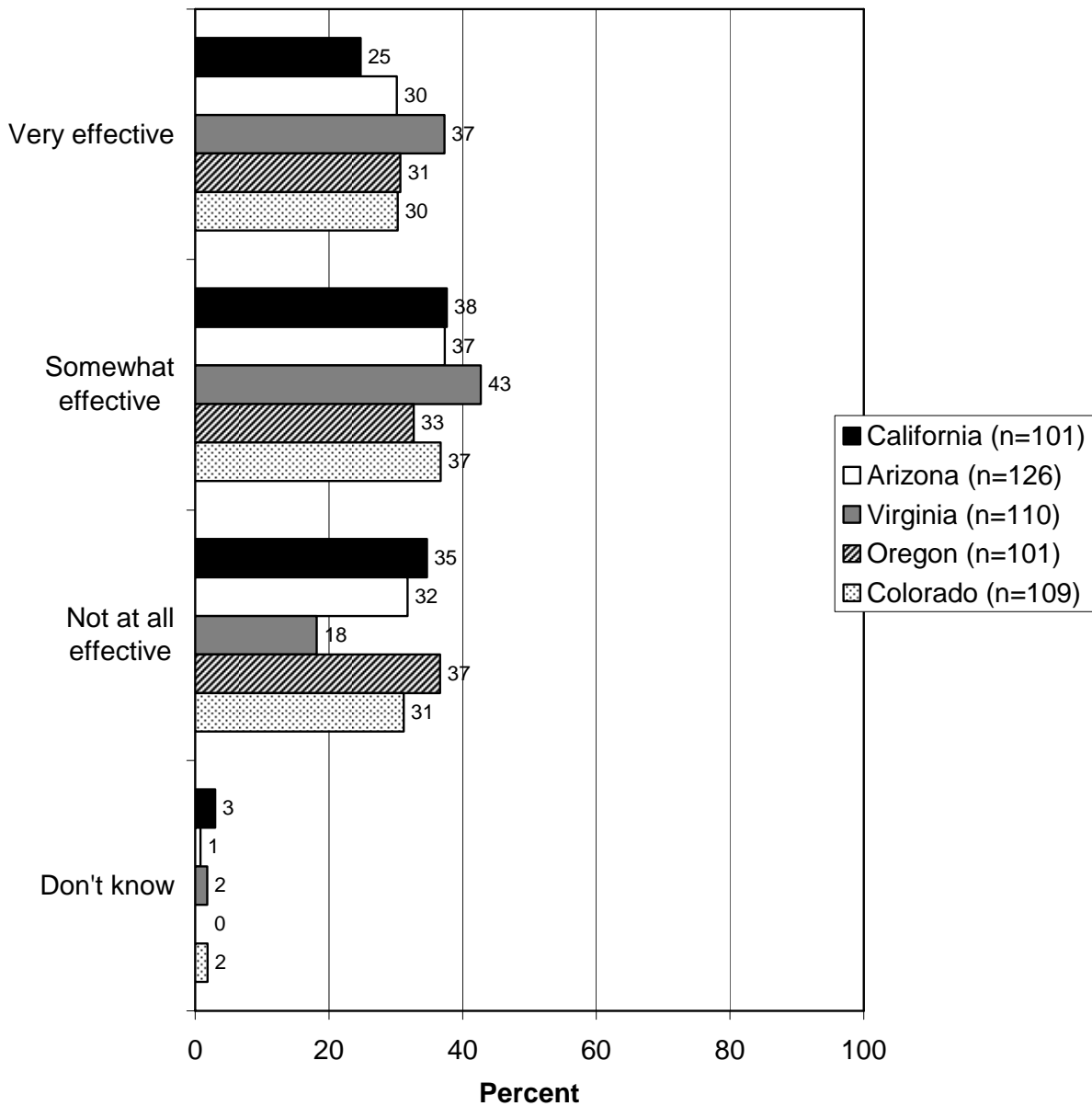
Percent who think the following messages would be very or somewhat effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (Colorado)



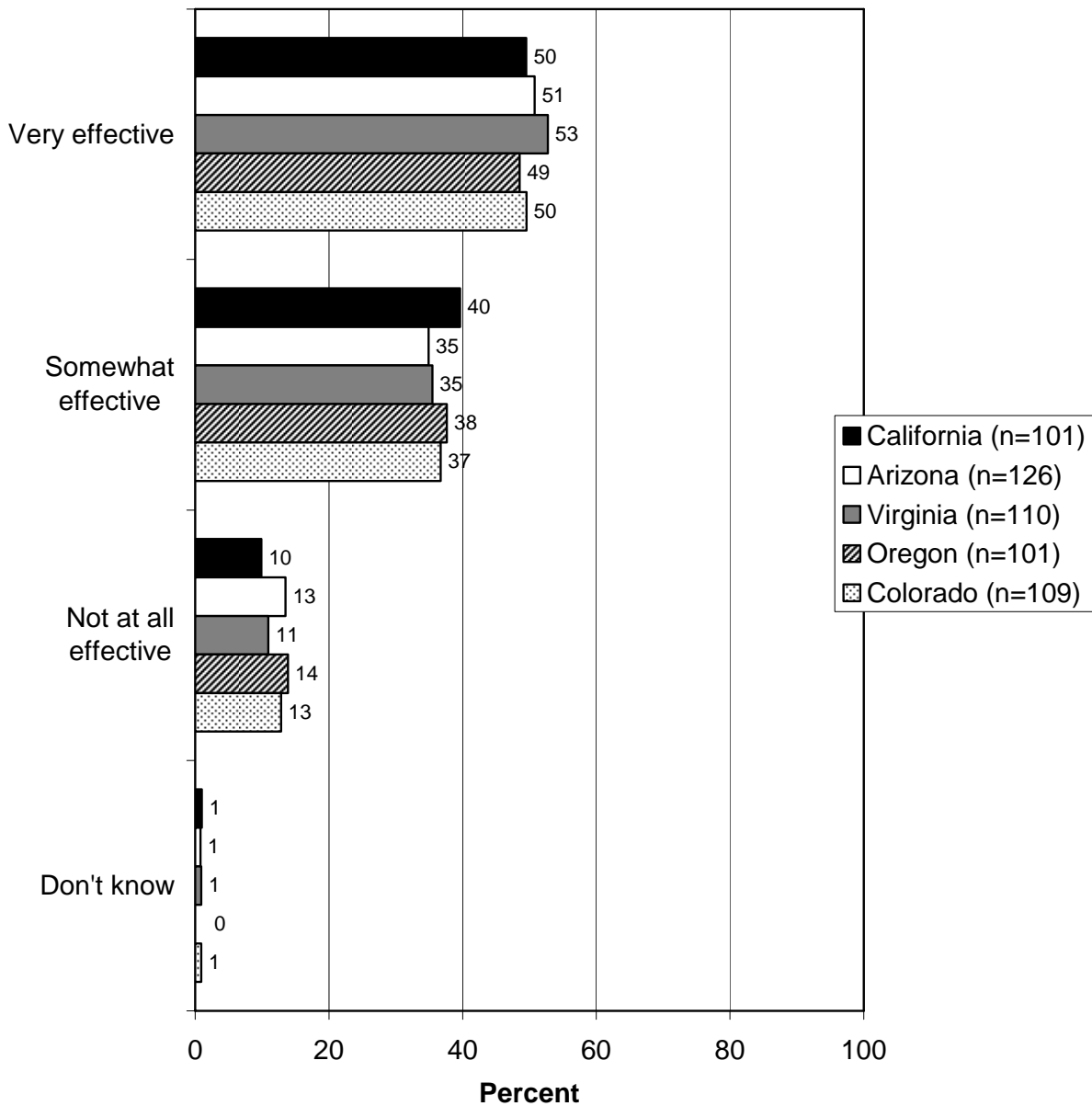
Percent who think the following messages would be not at all effective at stopping people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. (Colorado)



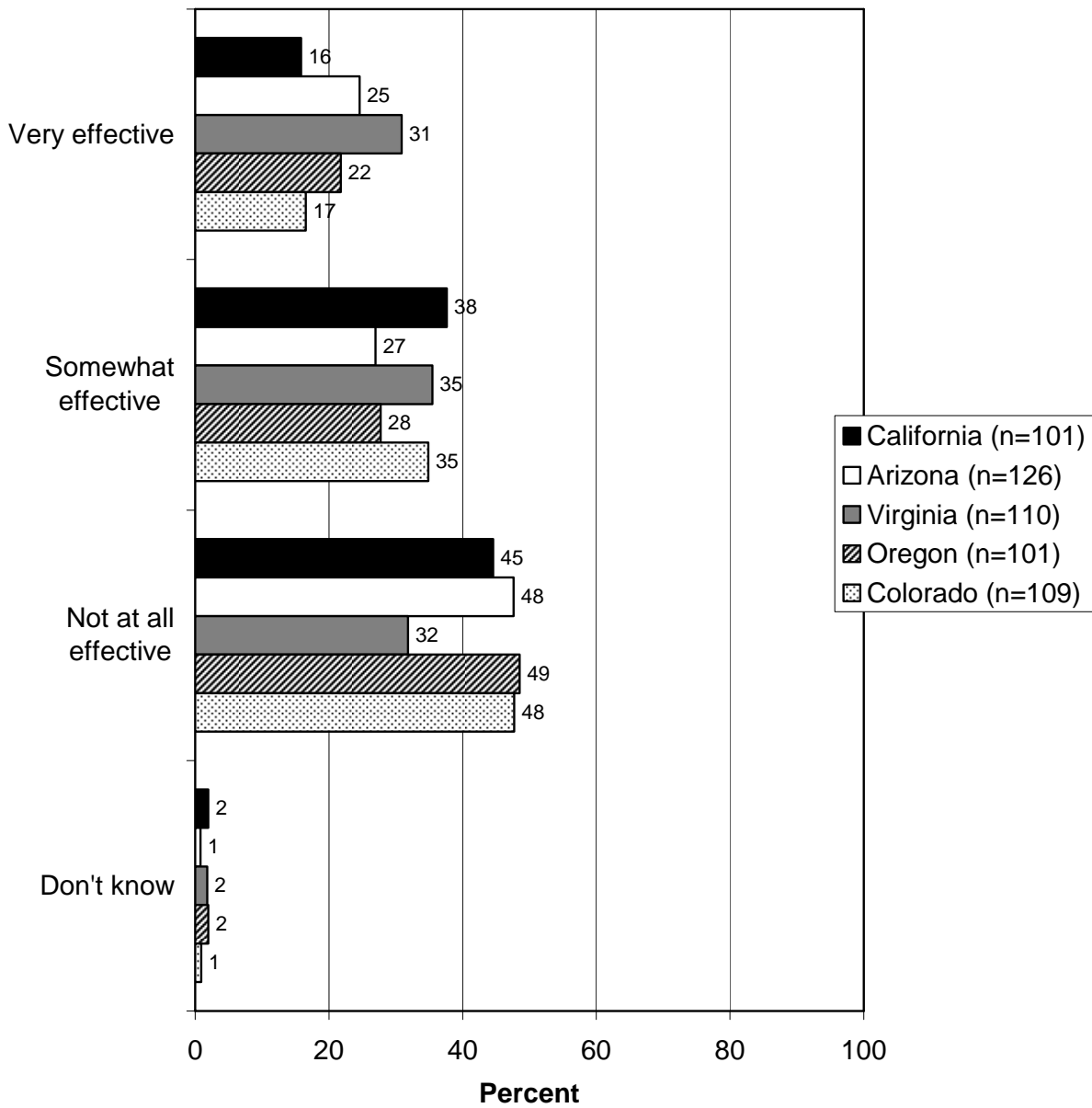
Q182. How effective do you think the message "Leaving behind shooting debris and other litter makes the shooting site an eyesore" would be at stopping you or other people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands?



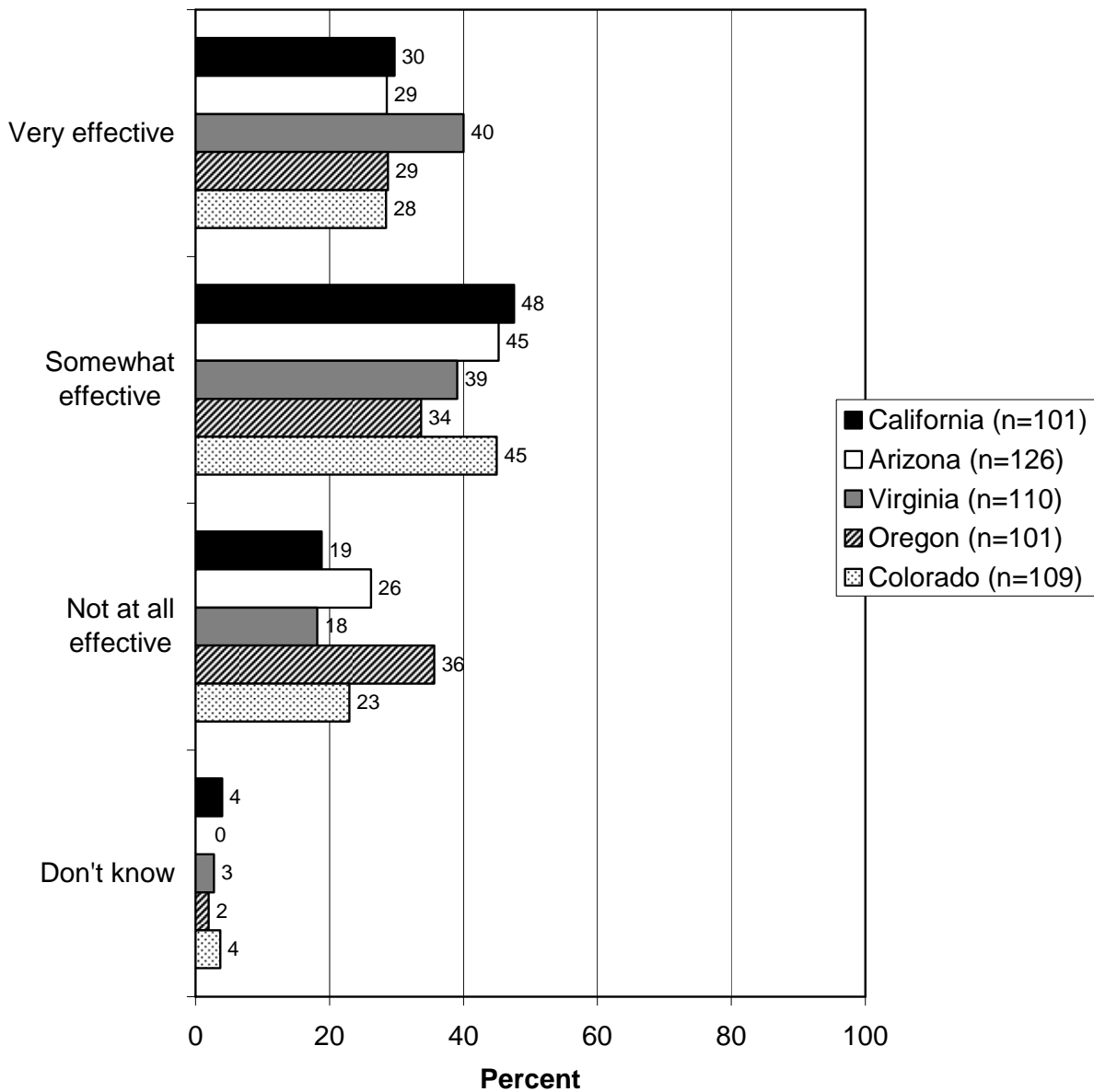
Q183. How effective do you think the message "Leaving behind shooting debris and other litter gives shooters a bad reputation" would be at stopping you or other people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands?



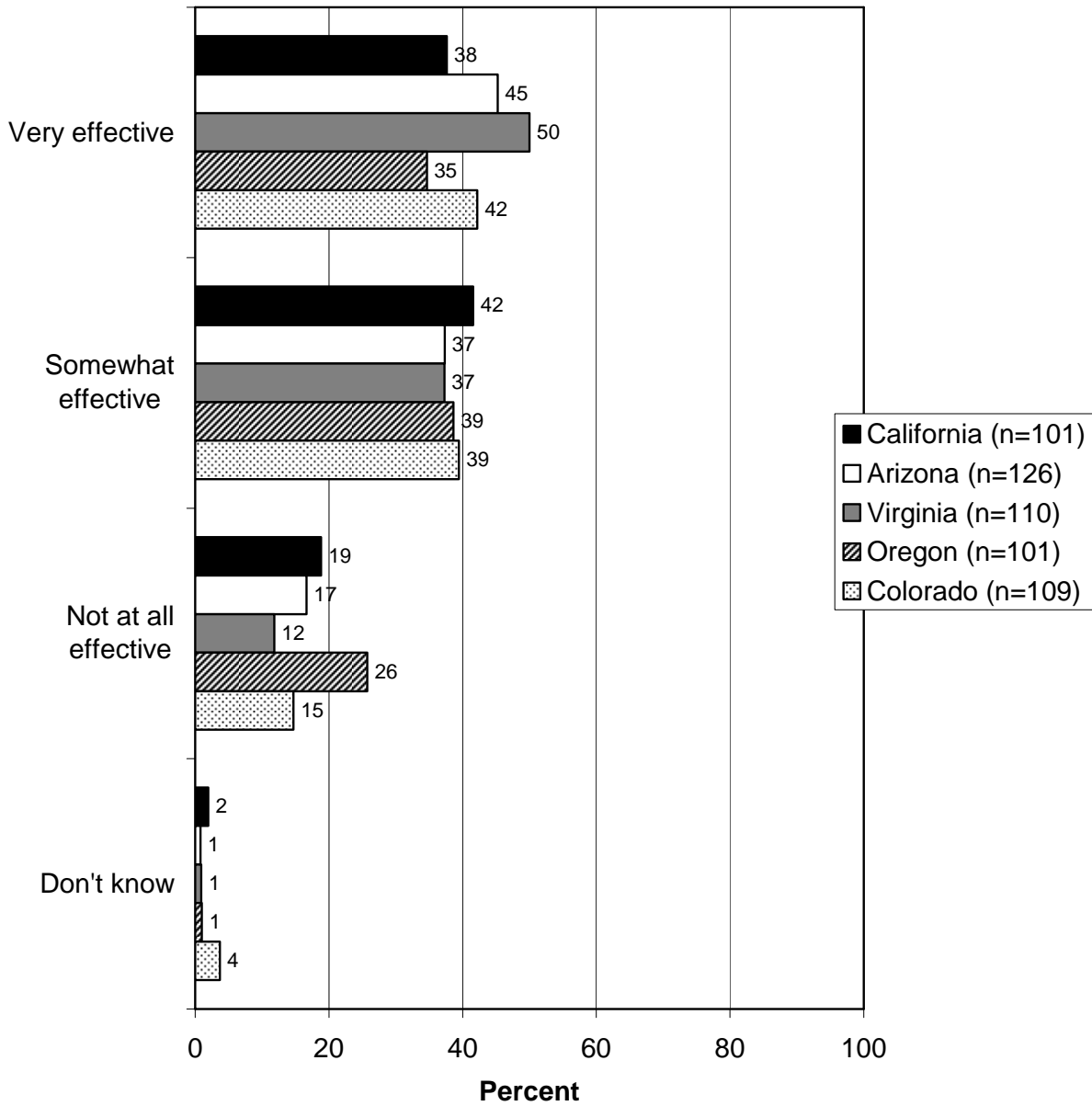
Q184. How effective do you think the message "Leaving shooting debris and other litter at the shooting areas and ranges makes them unhealthy" would be at stopping you or other people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands?



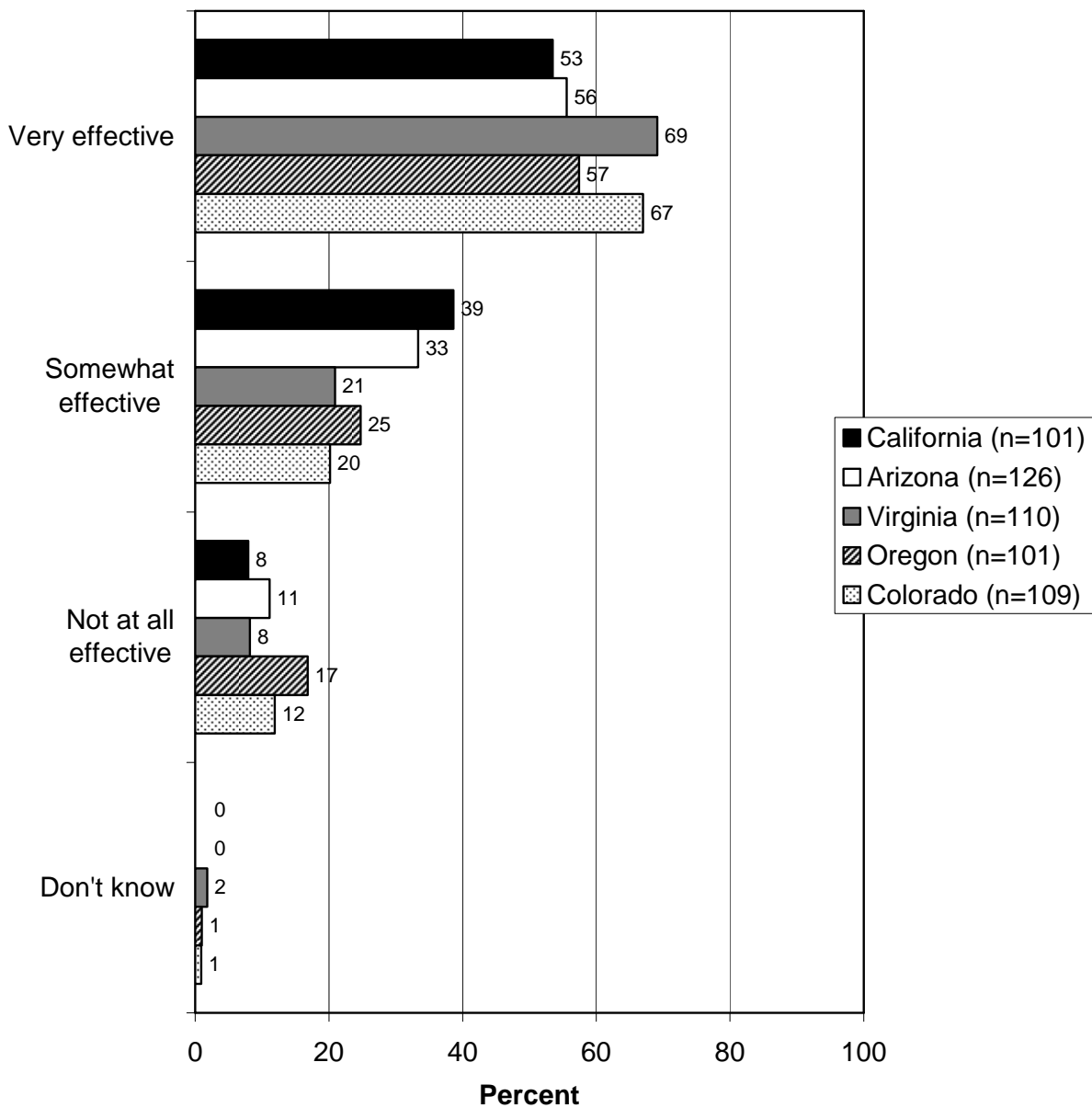
Q185. How effective do you think the message "Leaving shooting debris and other litter at the shooting areas and ranges hurts the environment" would be at stopping you or other people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands?



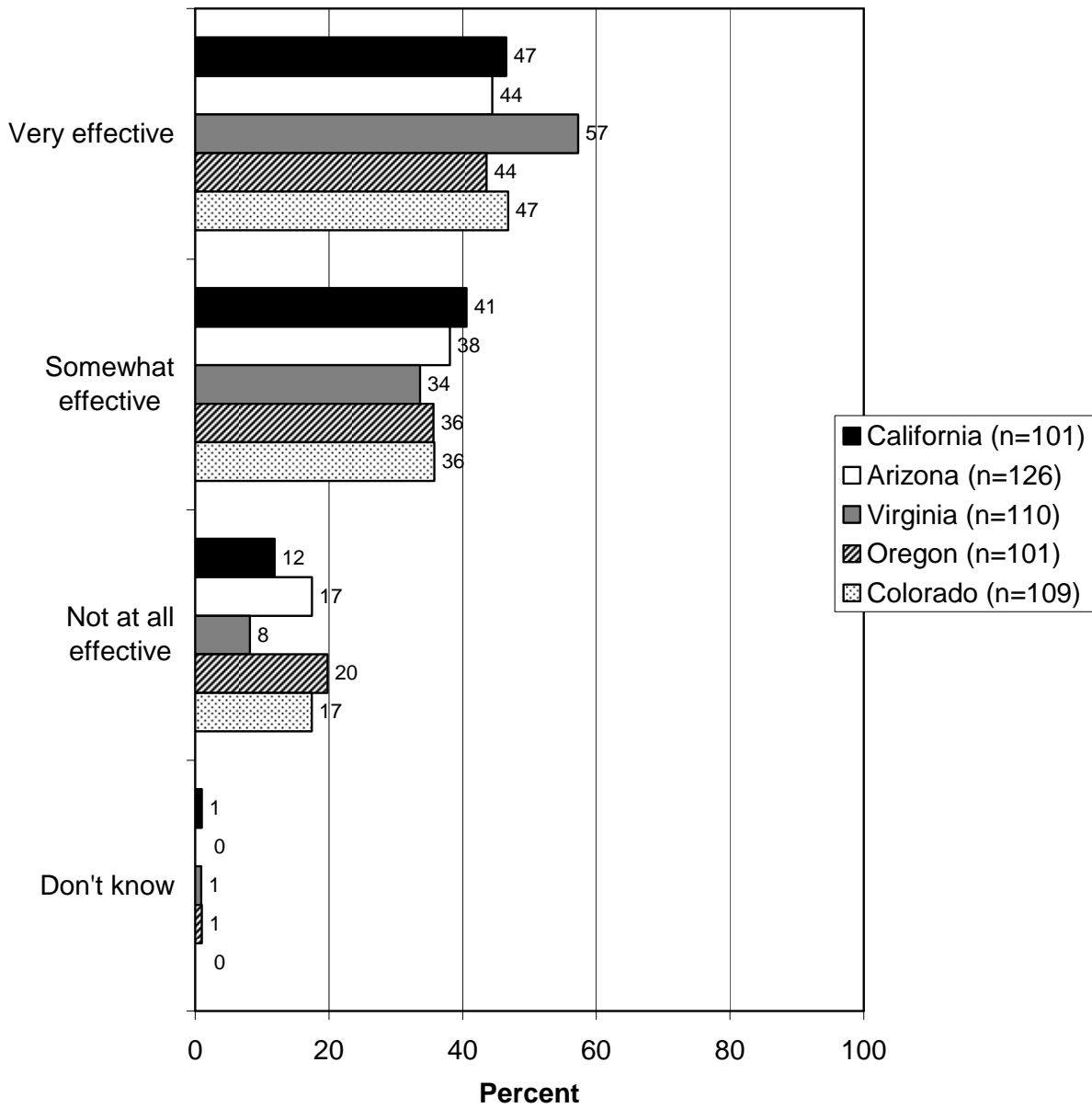
Q186. How effective do you think the message "Leaving your shooting debris at the shooting areas and ranges IS littering" would be at stopping you or other people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands?



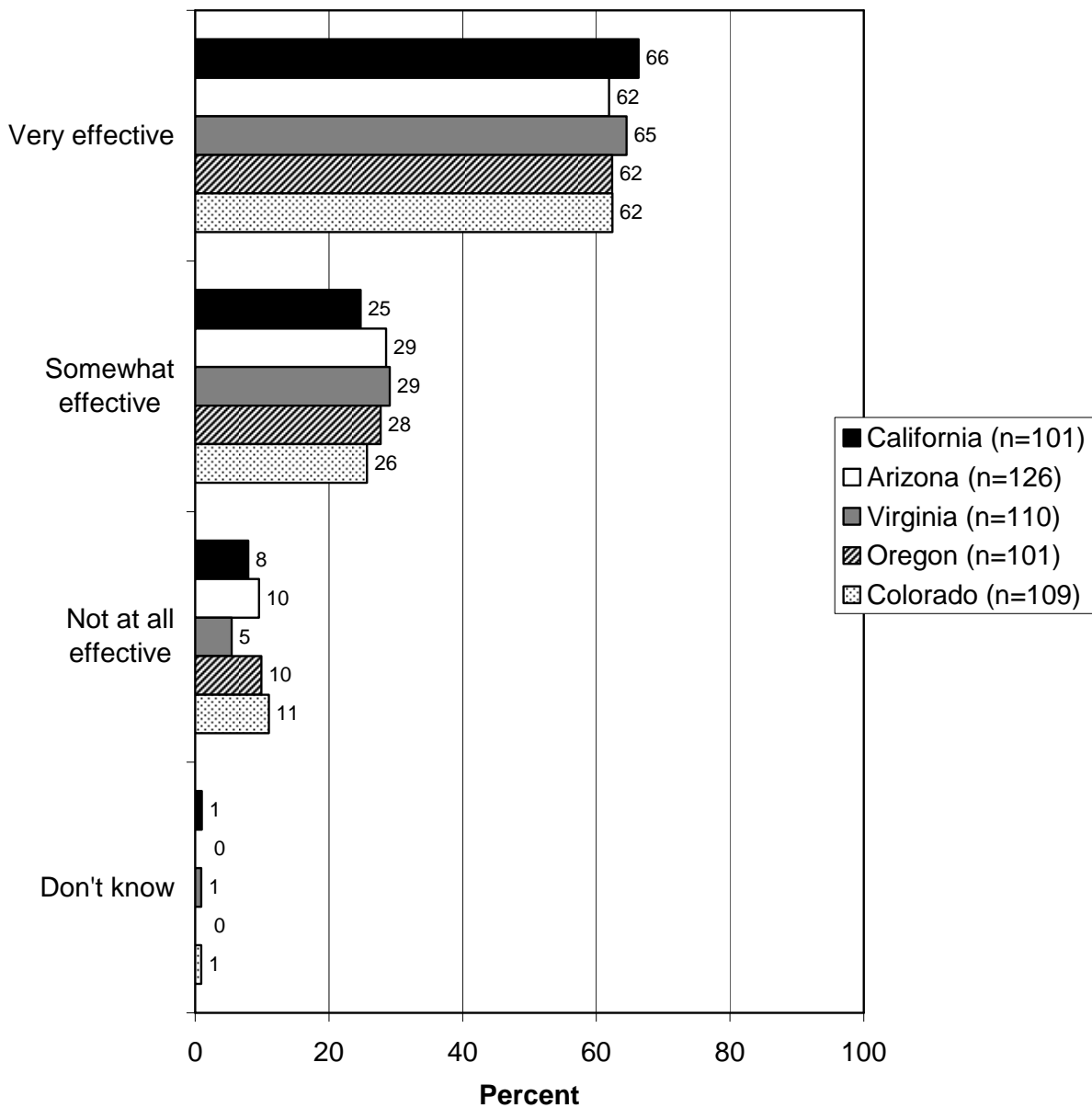
Q187. How effective do you think the message "You can be fined for not cleaning up your shooting debris and litter" would be at stopping you or other people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands?



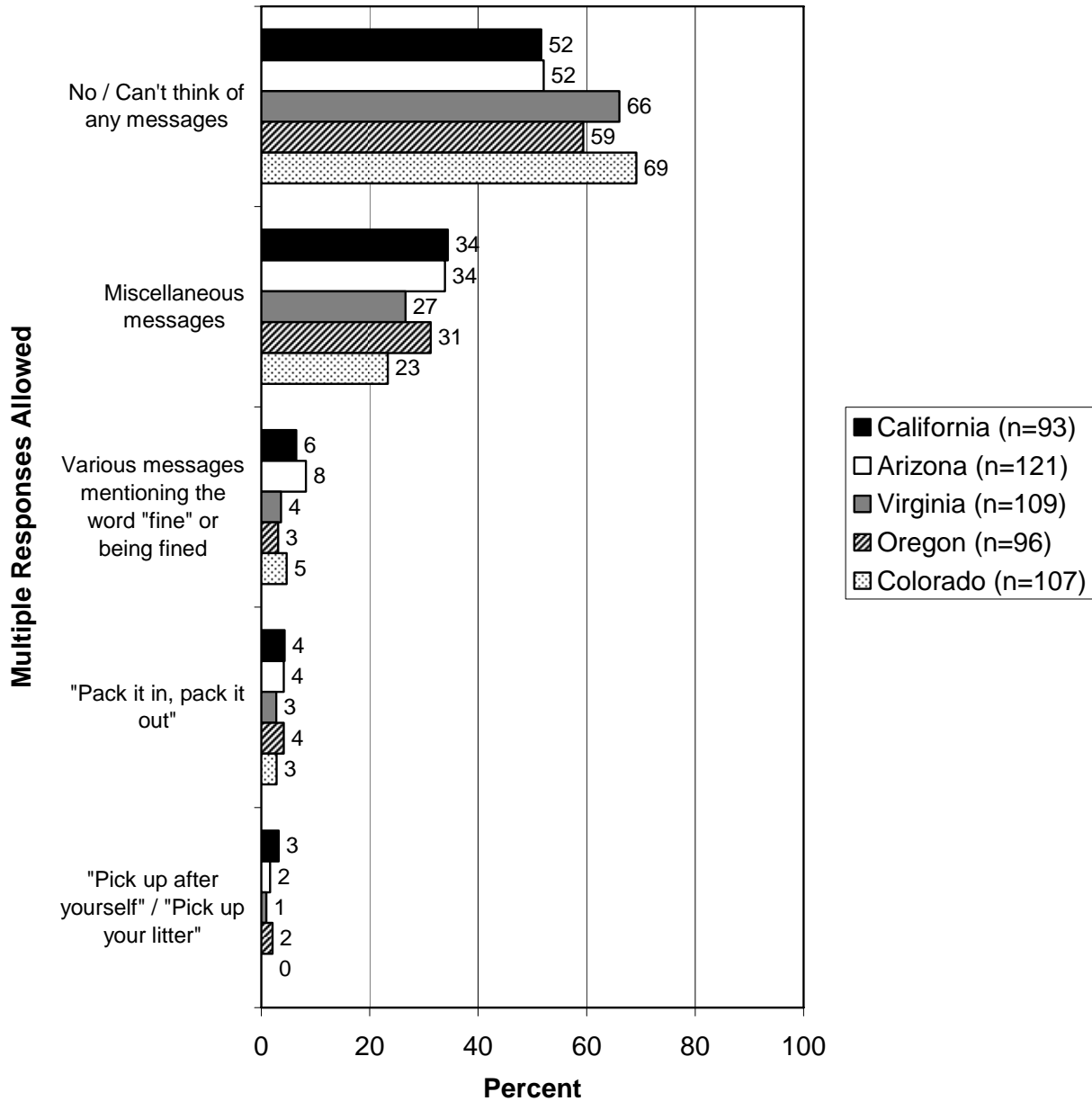
Q188. How effective do you think the message "Keep it Clean, Keep it Safe" would be at stopping you or other people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands?



Q189. How effective do you think the message "Keep it Clean, Keep it Open" would be at stopping you or other people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands?



Q190. Are there any other messages or statements that you think might be effective at stopping you or other people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands?



SOURCES OF INFORMATION ON RECREATIONAL SHOOTING

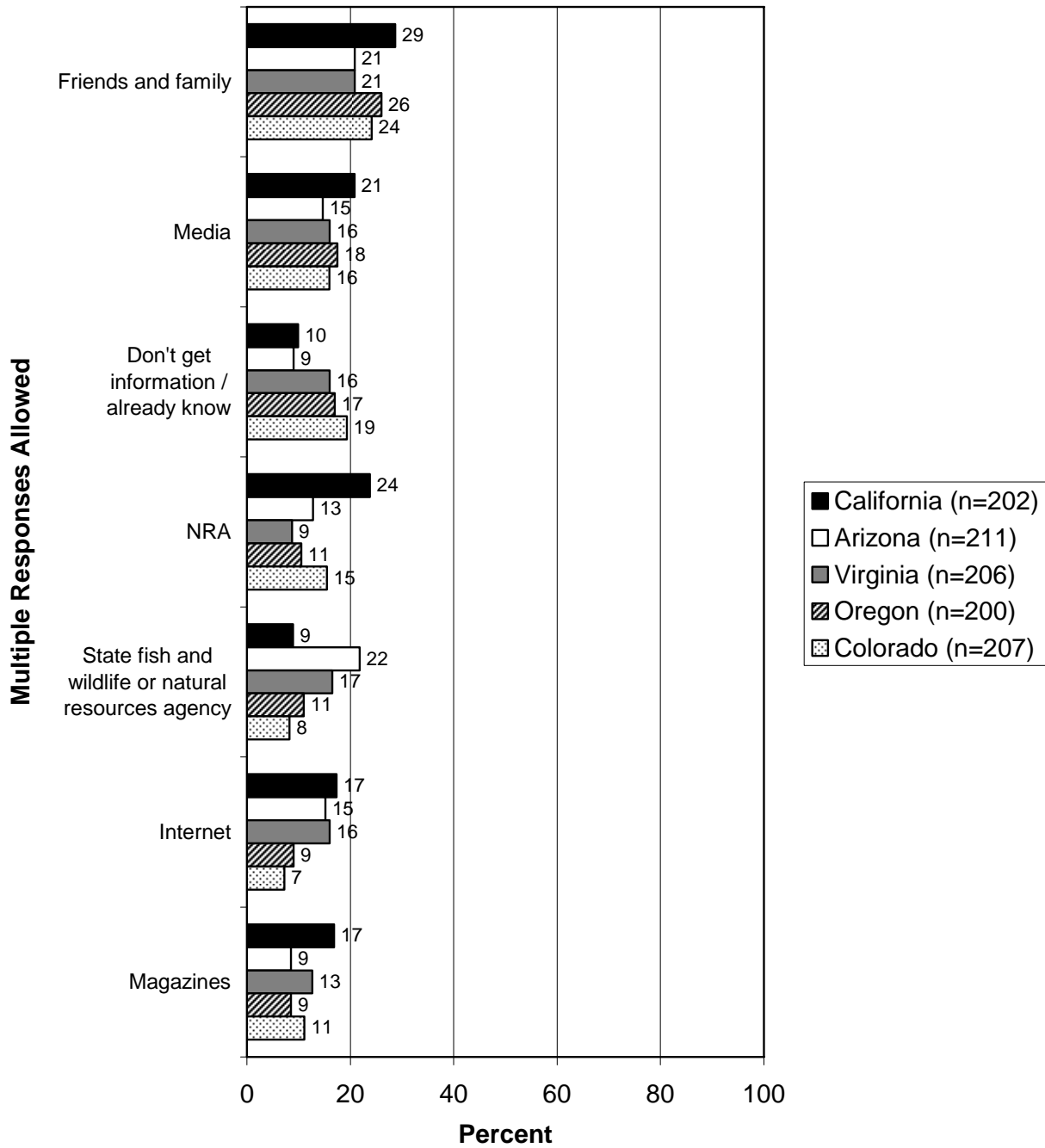
- When asked where they get information about recreational shooting in general, notable percentages of shooters from each state indicated that they do not seek information on recreational shooting (9-19% of all shooters). Otherwise, the top sources of information on recreational shooting in general include the following:
 - Family and friends (21-29% of all shooters);
 - The media (15-21%);
 - The National Rifle Association (9-24%);
 - State fish and wildlife or natural resource agencies (8-22%);
 - The Internet (7-17%);
 - Magazines (9-17%).

- Those who said they get information about recreational shooting from magazines were asked about the specific publications, and the most commonly named ones included miscellaneous hunting and shooting magazines (50-56% of those who get information about shooting from magazines), American Hunter/American Rifleman (13-31%, with Oregon shooters at the high end), various other publications from the National Rifle Association (12-24%), Guns and Ammo (4-13%), and Field and Stream (6-17%, with the exception of Oregon).

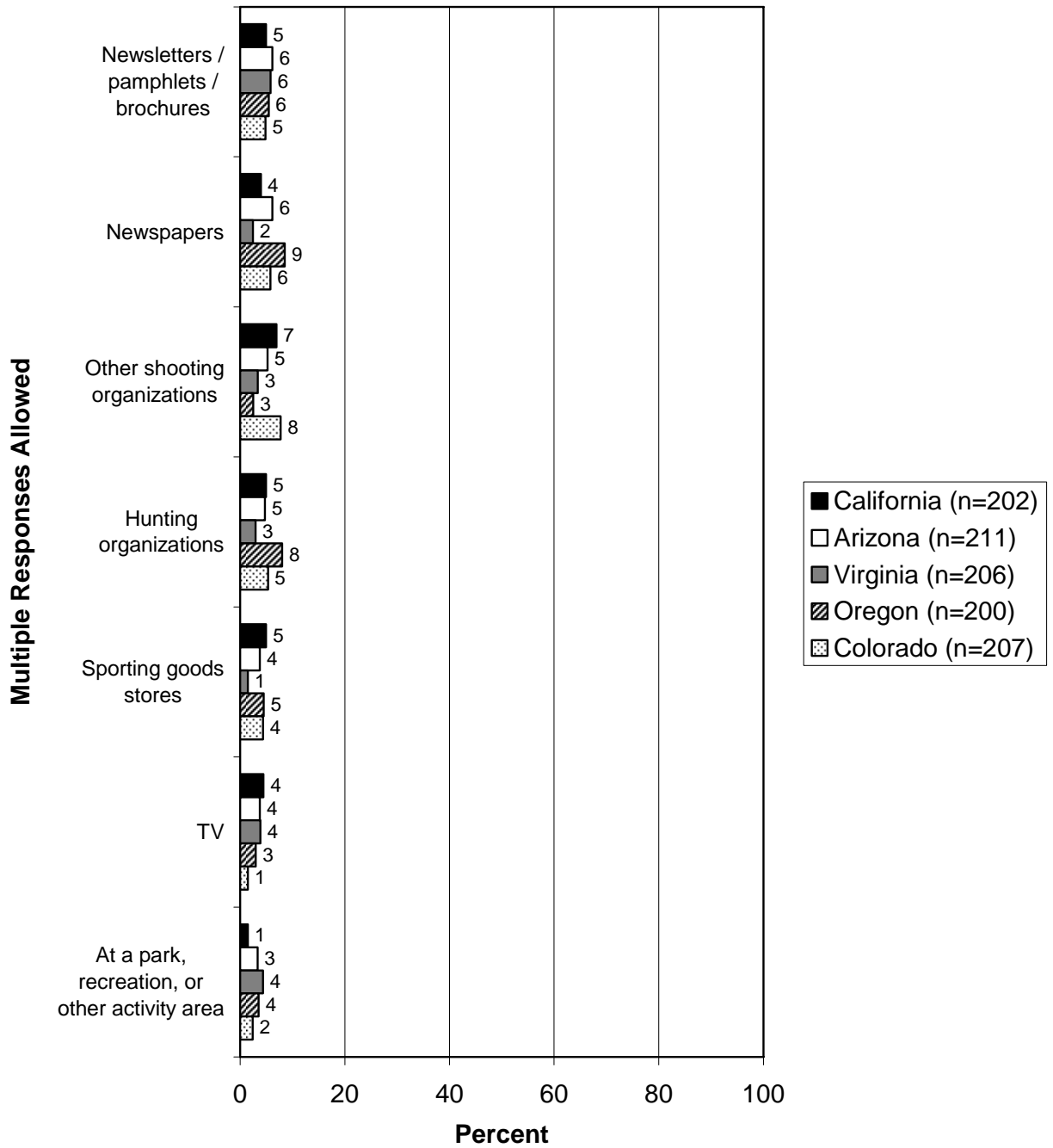
- The survey also asked respondents about where they get information about recreational shooting *specifically on federal lands*; as before, notable percentages indicated they do not seek such information (14-29% of all shooters). The other top sources of information on recreational shooting on federal lands included the following:
 - Friends and family (19-24% of all shooters);
 - The Internet (7-20%);
 - State fish and wildlife or natural resource agencies (8-21%);
 - The media (5-12%);

- The National Rifle Association (4-11%);
 - Newsletters/pamphlets/brochures (4-8%).
- As before, those who said they get information about recreational shooting on federal lands from magazines were asked about the specific publications, and the most commonly named ones included miscellaneous magazines (40-83% of those who get information about shooting on federal lands from magazines), Guns and Ammo (8-22%), various publications from the National Rifle Association (9-33%, with the exception of Virginia shooters), and Field and Stream (8-20%, with the exception of Arizona shooters).

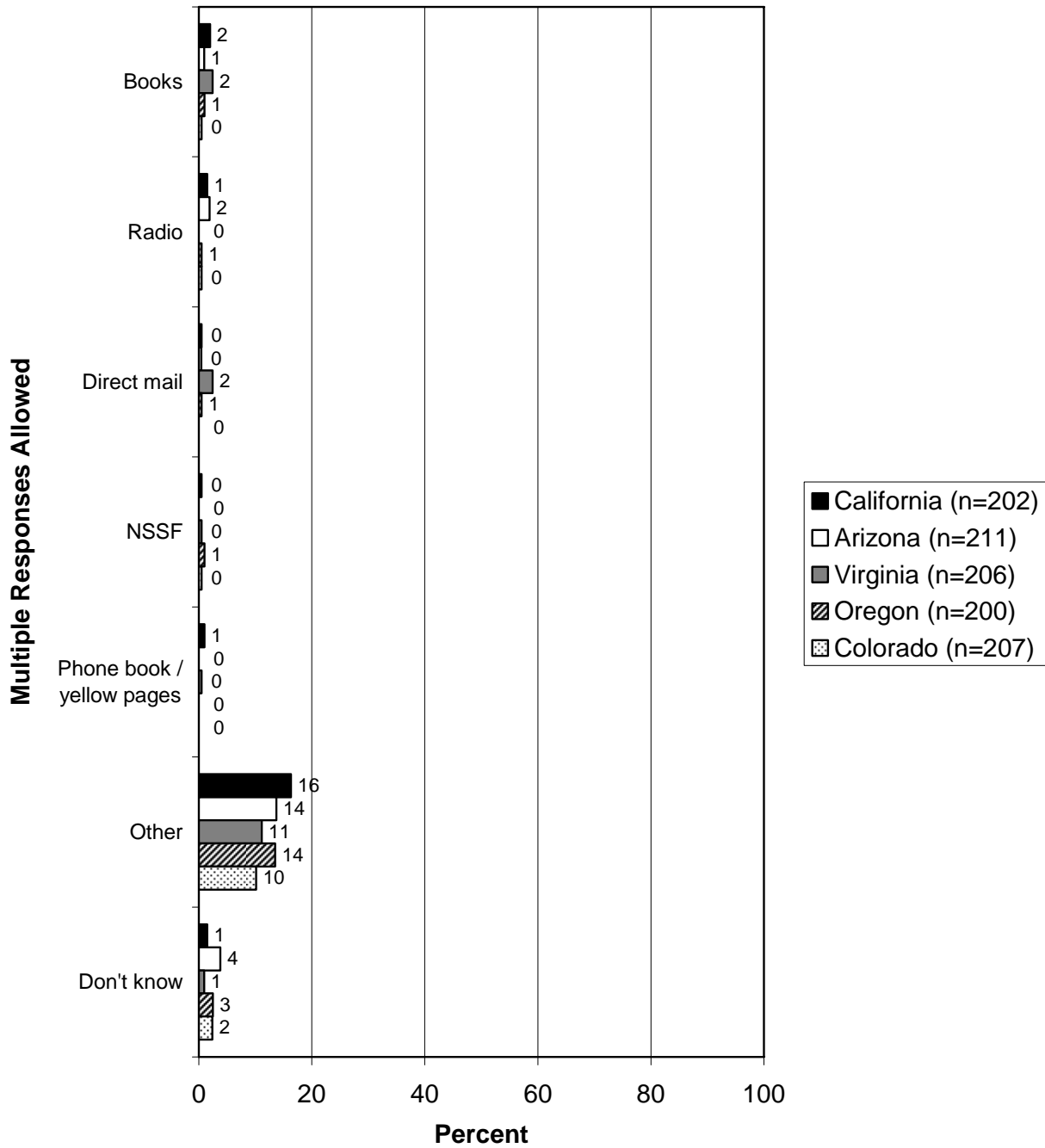
Q201. Where do you get your information about recreational shooting in general? (Part 1.)



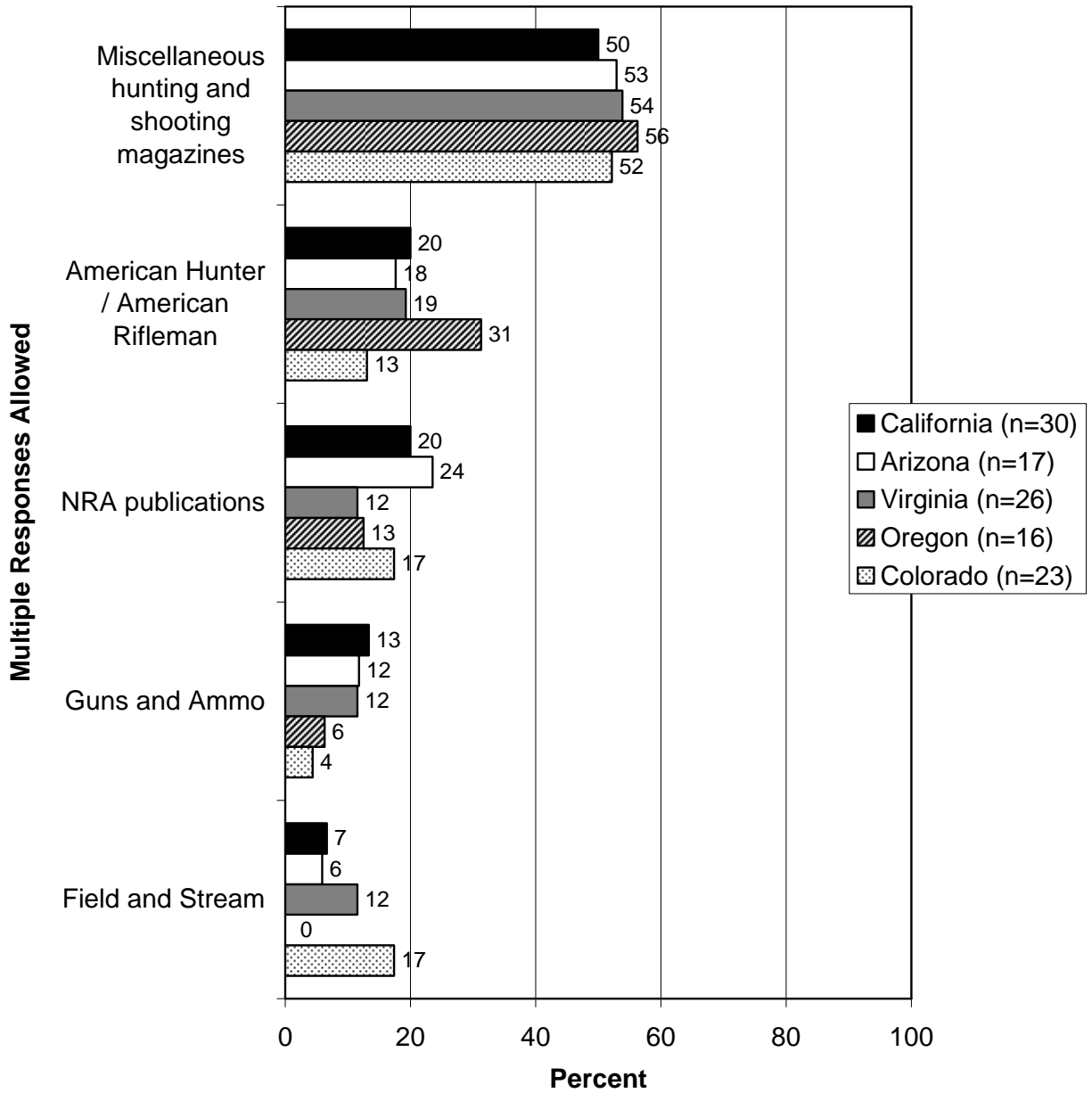
Q201. Where do you get your information about recreational shooting in general? (Part 2.)



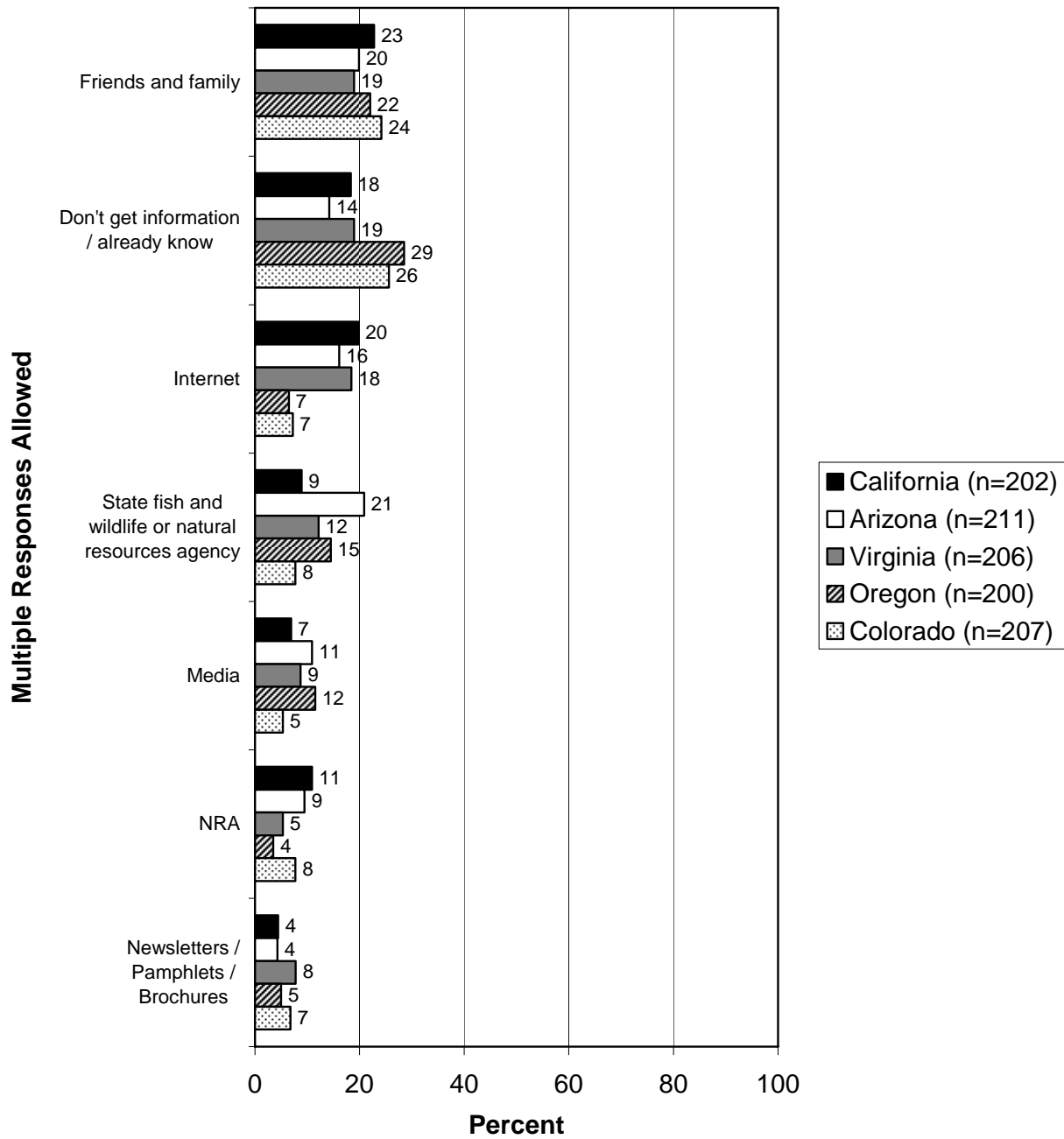
Q201. Where do you get your information about recreational shooting in general? (Part 3.)



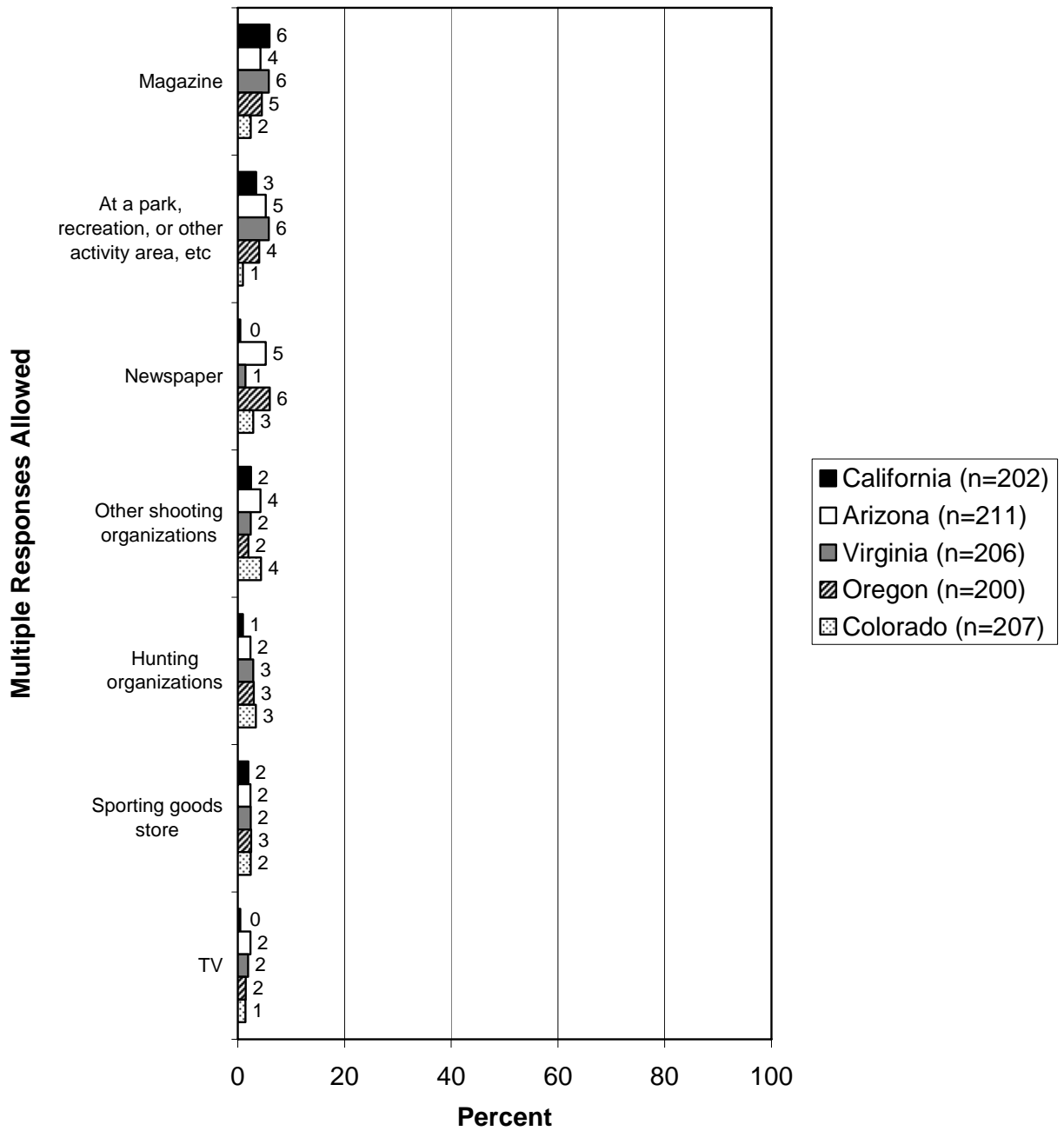
**Q205. From which magazines do you get information about recreational shooting in general?
(Those who get information from magazines.)**



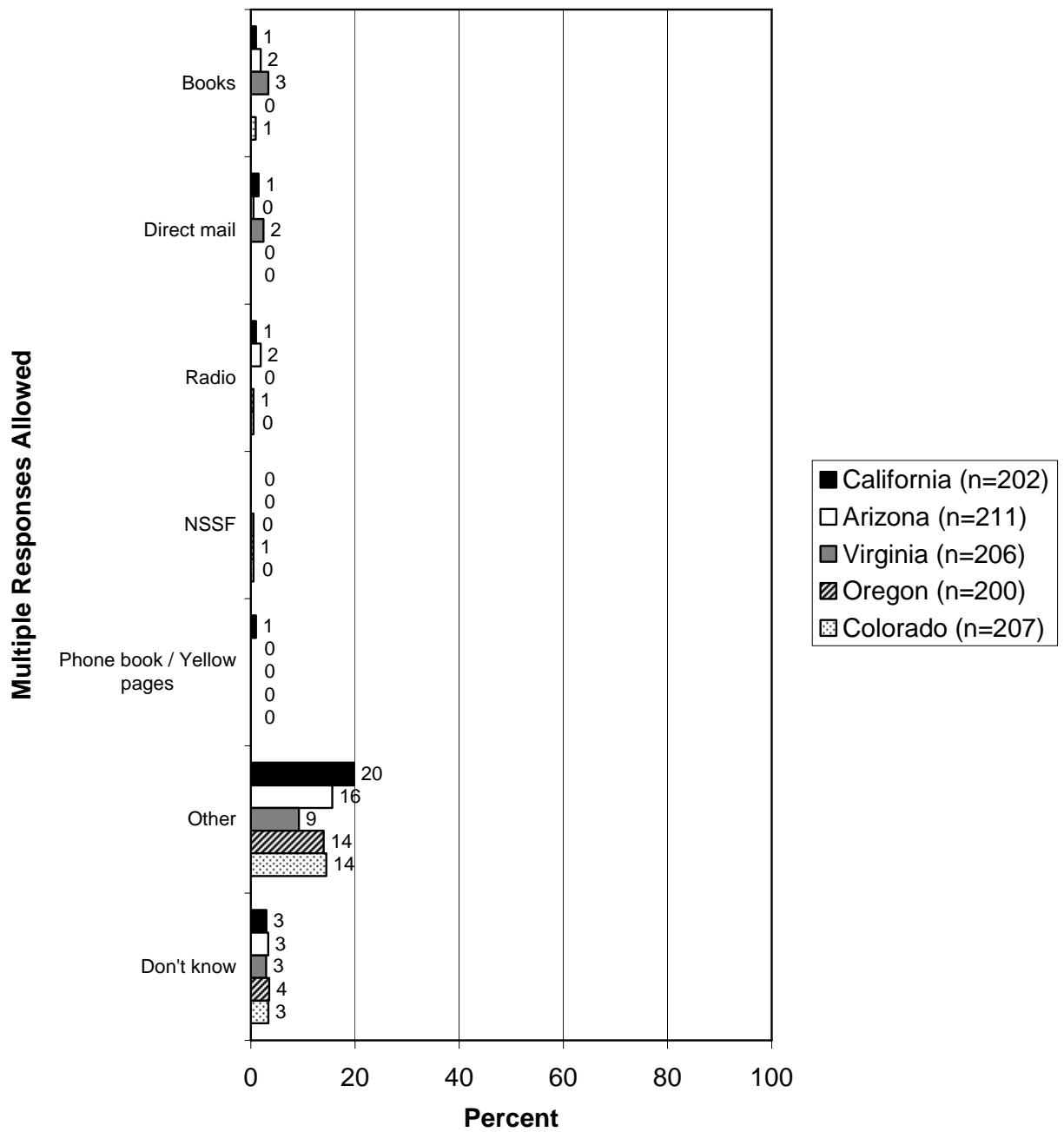
**Q208. Where do you get your information about recreational shooting on federal lands?
(Part 1.)**



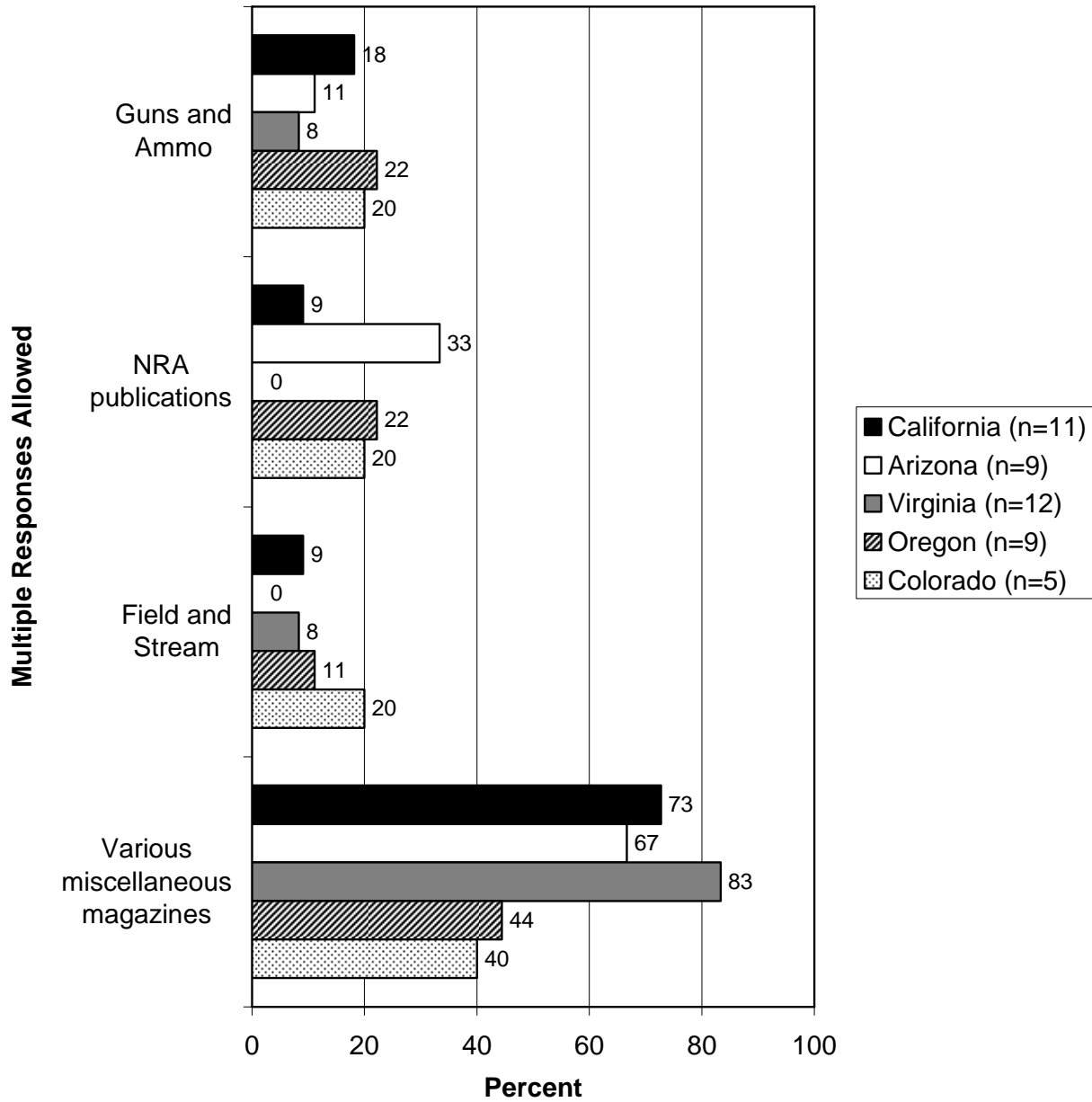
**Q208. Where do you get your information about recreational shooting on federal lands?
(Part 2.)**



**Q208. Where do you get your information about recreational shooting on federal lands?
(Part 3.)**



Q212. From which magazines do you get information about shooting on federal lands? (Those who get information from magazines.)



CREDIBILITY RATINGS OF INFORMATION SOURCES ON SHOOTING

➤ The survey examined ten potential sources of information on shooting and shooting issues, asking respondents to indicate if each was a very credible, somewhat credible, or not at all credible source of information. This examination first looks at all sources of information relative to each other in each state, then the report discusses each source of information in turn. The sources of information asked about are as follows:

- The Bureau of Land Management
- The Forest Service
- A professor of natural resources at a university in the respondent's state
- The National Rifle Association
- The Izaak Walton League of America
- SCI (formerly Safari Club International)
- The National Shooting Sports Foundation
- A local sportsman's organization
- A local conservation organization
- Other shooters

➤ This first examination looks at all sources of information relative to each other in each state. Overall, the National Rifle Association, local sportsman's organizations, the National Shooting Sports Foundation, and the Forest Service were consistently rated as the most credible sources of information.

- In California, a majority of shooters rated the National Rifle Association (79%) and local sportsman's organizations (67%) as being very credible.
- In Arizona, a majority of shooters rated the National Rifle Association (77%), local sportsman's organizations (68%), and the Forest Service (52%) as being very credible.
- In Virginia, shooters had similar perceptions of sources of information that could be considered very credible: a majority of shooters rated the National Rifle Association (76%), the Forest Service (63%), and local sportsman's organizations (56%) as being very credible.

- In Oregon, responses were similar: a majority of shooters rated the National Rifle Association (66%), local sportsman's organizations (66%), and the Forest Service (52%) as very credible sources of information on shooting and shooting issues.
- In Colorado, a majority of shooters rated the National Rifle Association (75%) and local sportsman's organizations (53%) as being very credible sources of information.
- Note that some sources, such as the Izaak Walton League and SCI, had relatively high "don't know" responses, which would lower their rank on the "very credible" and overall credible ratings. Therefore, it should be noted that a low rank on the "credible" graphs does not necessarily mean an information source is high on the "not at all credible" graphs.
- These results are shown in graphs that follow; they are also tabulated below for the reader's convenience. This tabulation allows a quick comparison among states.

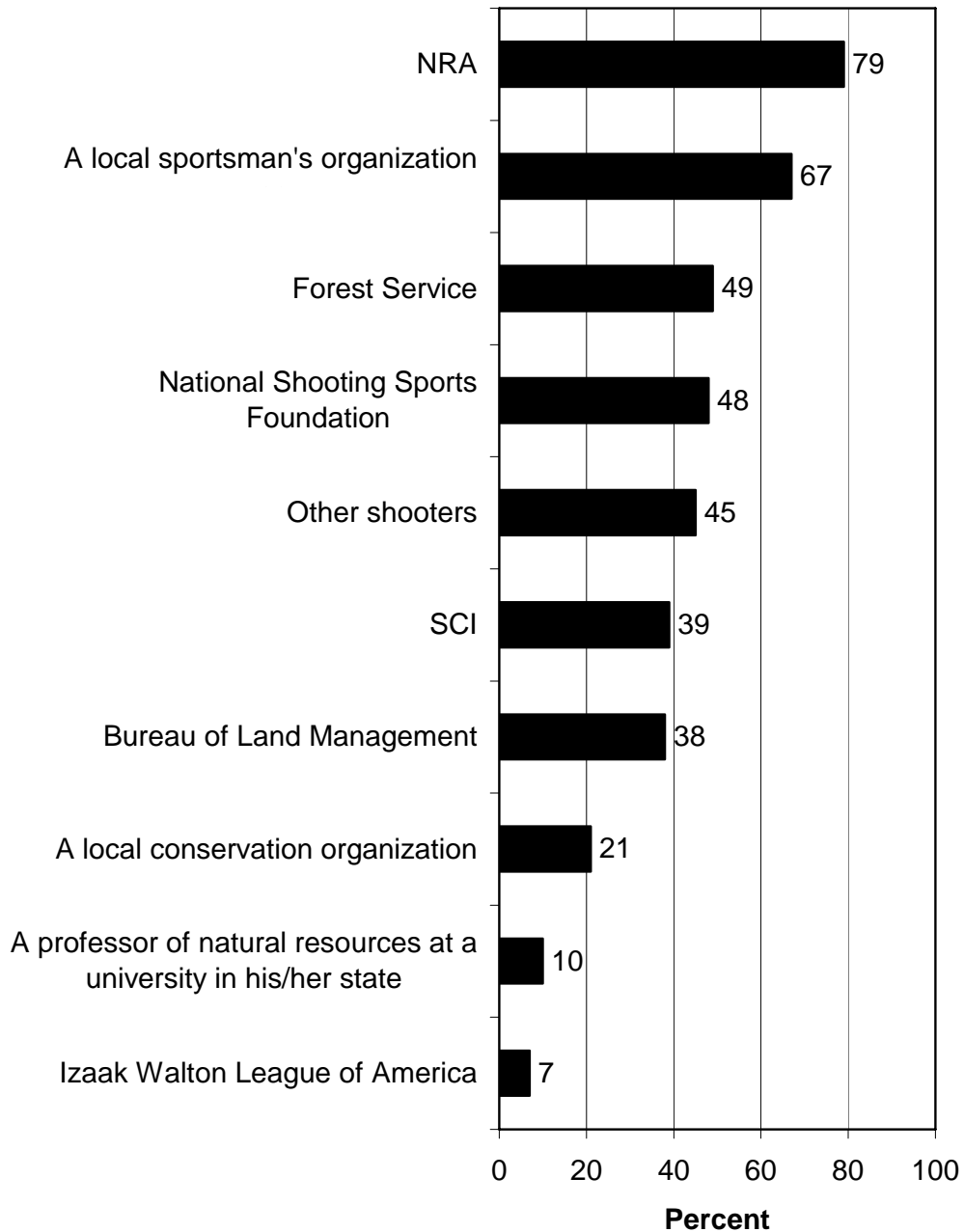
Comparison Among States of Questions on Credibility of Information Sources

Percent saying each is a <i>very</i> credible source of information	CA	AZ	VA	OR	CO
50% or more	- NRA - Local sportsman's org.	- NRA - Local sportsman's org. - Forest Service - National Shooting Sports Foundation	- NRA - Forest Service - Local sportsman's org.	- NRA - Local sportsman's org. - Forest Service - Bureau of Land Management	- NRA - Local sportsman's org.
40% to 49%	- Forest Service - National Shooting Sports Foundation - Other shooters	- Other shooters - Bureau of Land Management	- National Shooting Sports Foundation - Izaak Walton League - Other shooters	- Other shooters	- Bureau of Land Management - Forest Service - Other shooters - National Shooting Sports Foundation
30% to 39%	- SCI - Bureau of Land Management	- SCI - Local conservation org.	- Local conservation org. - Bureau of Land Management - SCI	- National Shooting Sports Foundation	NONE
20% to 29%	- Local conservation org.	NONE	- Professor of natural resources at state university	- SCI - Local conservation org.	- SCI - Local conservation org. - Izaak Walton League
10% to 19%	- Professor of natural resources at state university	- Professor of natural resources at state university	NONE	- Izaak Walton League - Professor of natural resources at university	- Professor of natural resources at state university
Less than 10%	- Izaak Walton League	- Izaak Walton League	NONE	NONE	NONE

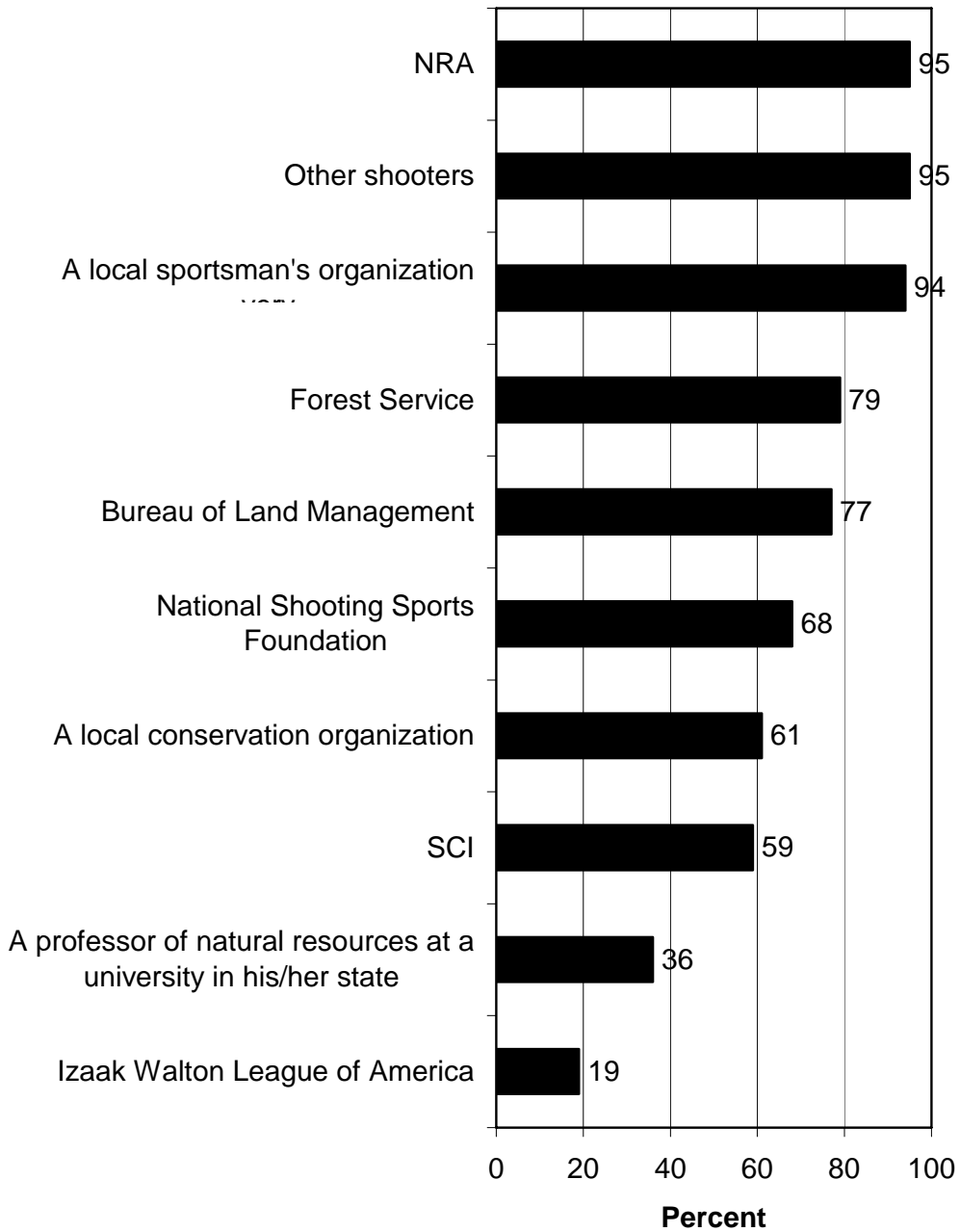
- This examination looks at marked differences among states in the survey (California, Arizona, Virginia, Oregon, and Colorado) regarding the ratings of credibility for each source of information on shooting and shooting issues.
- The Bureau of Land Management: This was considered credible by the overwhelming majority of respondents, though shooters in the five states were about evenly split in considering the BLM *very* credible (37-50% of all shooters) or *somewhat* credible (33-39%).
 - The Forest Service: Again, the overwhelming majority of respondents from the five states described the Forest Service as credible, with most calling it *very* credible (43-63%).
 - A professor of natural resources at a university in the respondent's state: Recreational shooters in California, Arizona, Oregon, and Colorado are all more likely to describe this source as being not at all credible; Virginia respondents are less likely, relative to other states' respondents, to say this is a not at all credible source of information (61% of Virginia recreational shooters said the source was credible).
 - The National Rifle Association: Large majorities of recreational shooters in each of the five states (66-79%) describe this source as *very* credible.
 - The Izaak Walton League of America: Recreational shooters in each of the five states appear unfamiliar with this organization, as 56-71% of them were unsure of how to assess the credibility of the Izaak Walton League. Virginia recreational shooters are the exception, as 45% of them say the League is *very* credible (though 33% of them also answered "don't know").
 - SCI (formerly Safari Club International): Similarly, there appears to be a substantial lack of familiarity with SCI, as 25-45% of recreational shooters were unsure of how to assess SCI's credibility on shooting and shooting issues. However, notable percentages described the organization as being credible (43-67% of all recreational shooters).

- The National Shooting Sports Foundation: The states are not markedly different on this question, with most shooters describing the NSSF as being credible (among them, 58-70% call it *very* credible).
- A local sportsman's organization: An overwhelming majority of respondents from each of the states described this source of information as being credible, with most calling it *very* credible (53-68%).
- A local conservation organization: Across the five states, Virginia recreational shooters appear the most likely to consider a local conservation organization as being *very* credible; meanwhile, other shooters appear most likely to consider such an organization *somewhat* credible.
- Other shooters: There are no marked differences between the states on this question, as substantial majorities consider other shooters to be credible (42-47% think other shooters are *very* credible, while 45-50% of those surveyed think other shooters are *somewhat* credible).

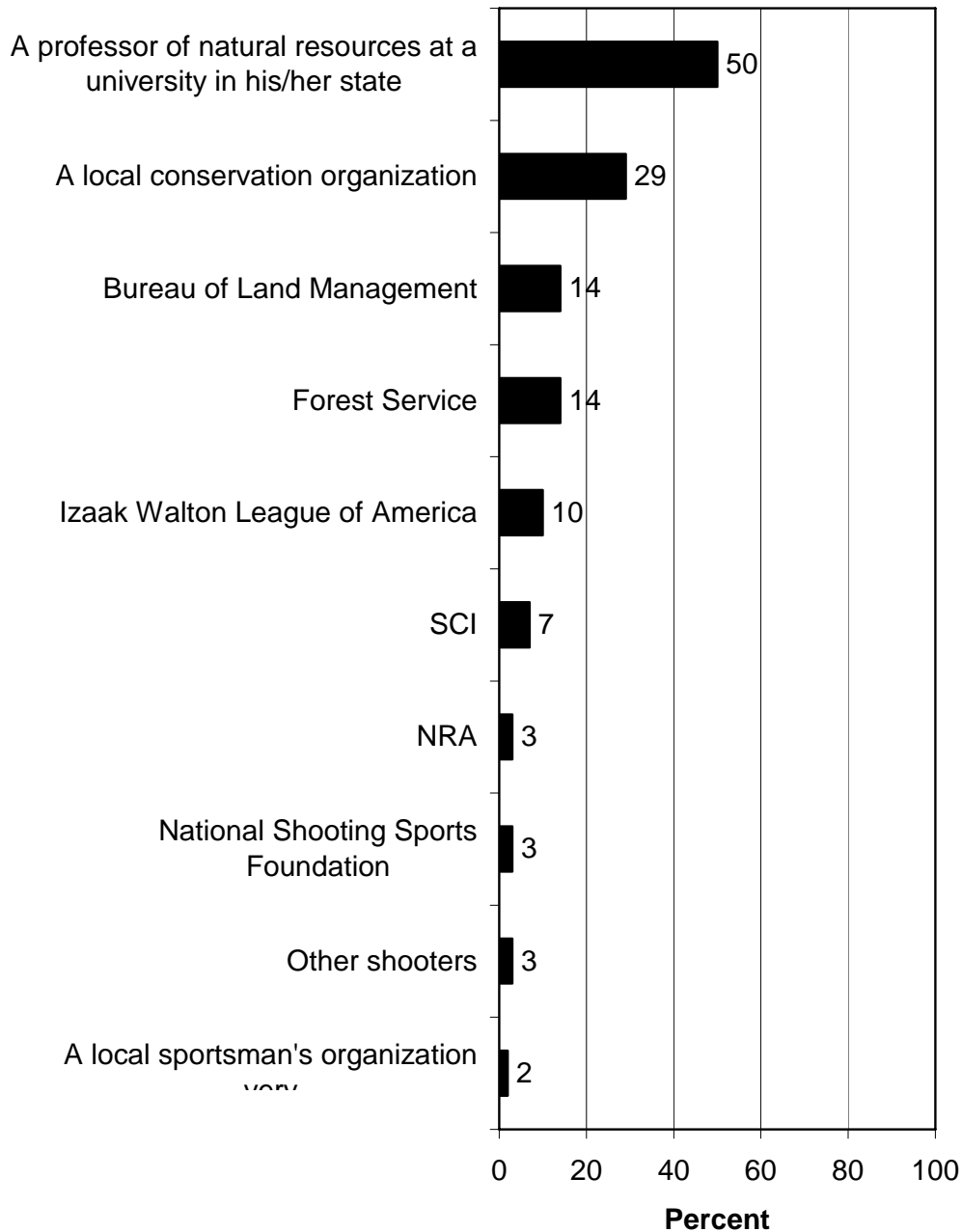
**Percent who think the following sources are very credible for information on shooting and shooting issues.
(California)**



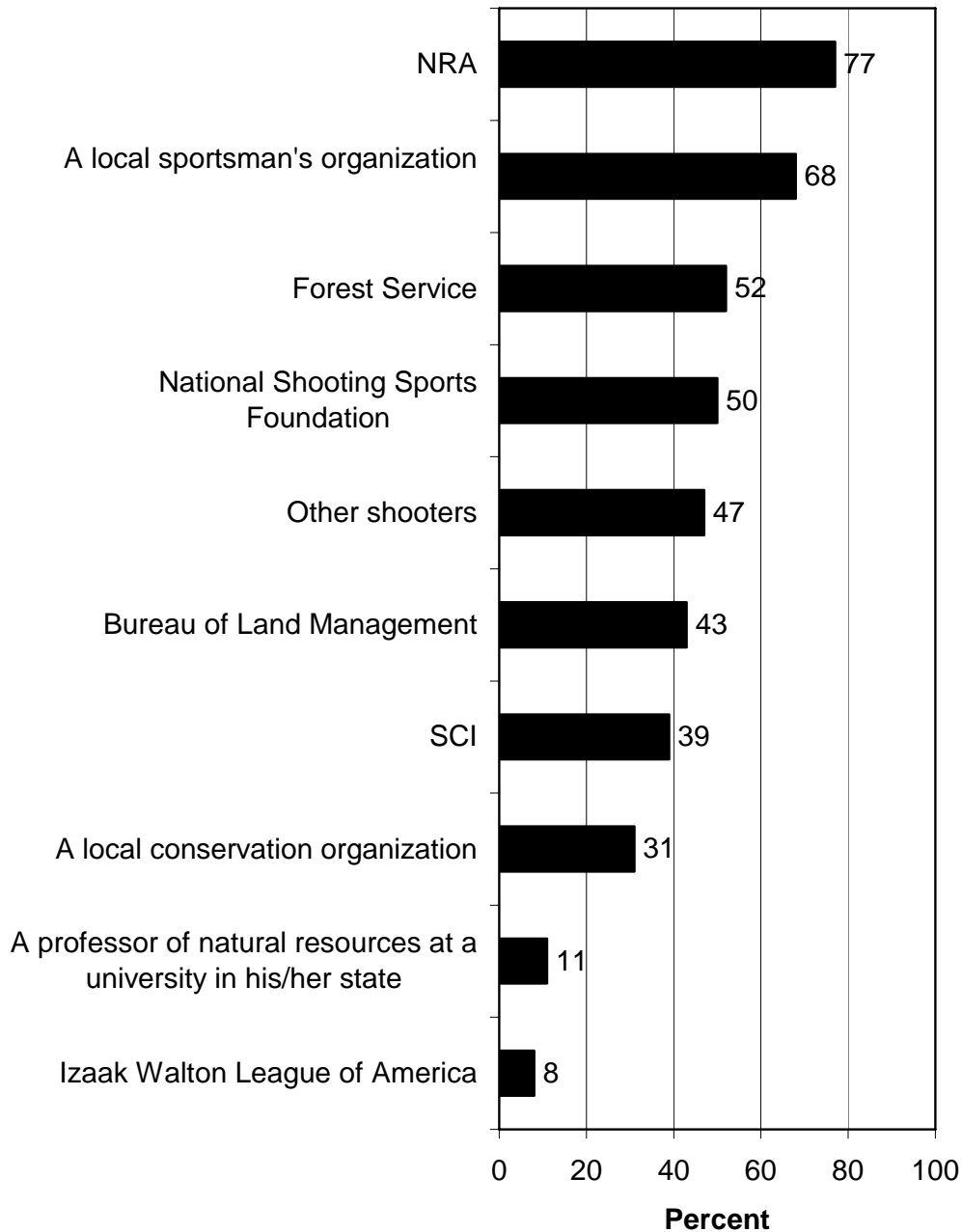
**Percent who think the following sources are very or somewhat credible for information on shooting and shooting issues.
(California)**



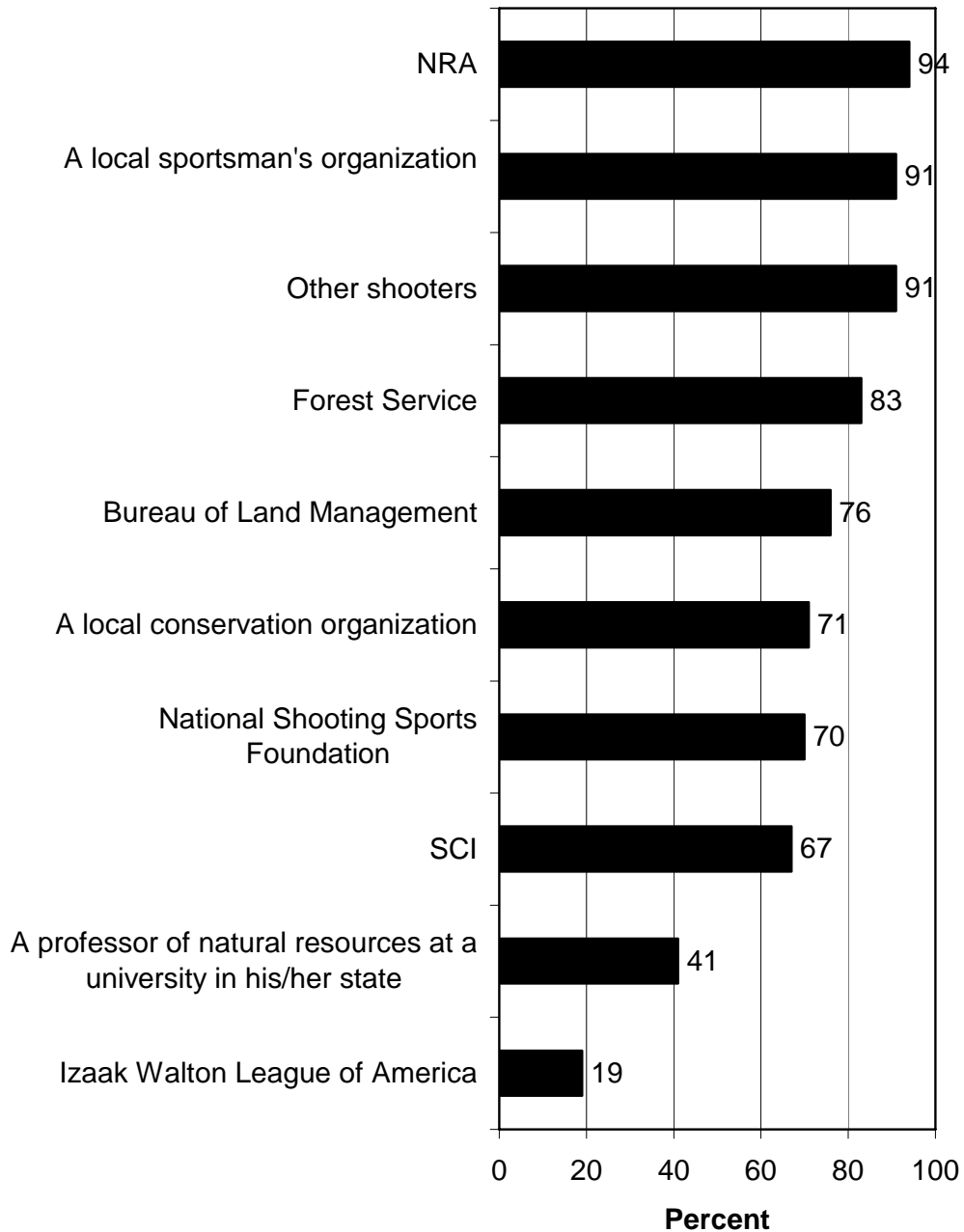
**Percent who think the following sources are not at all credible for information on shooting and shooting issues.
(California)**



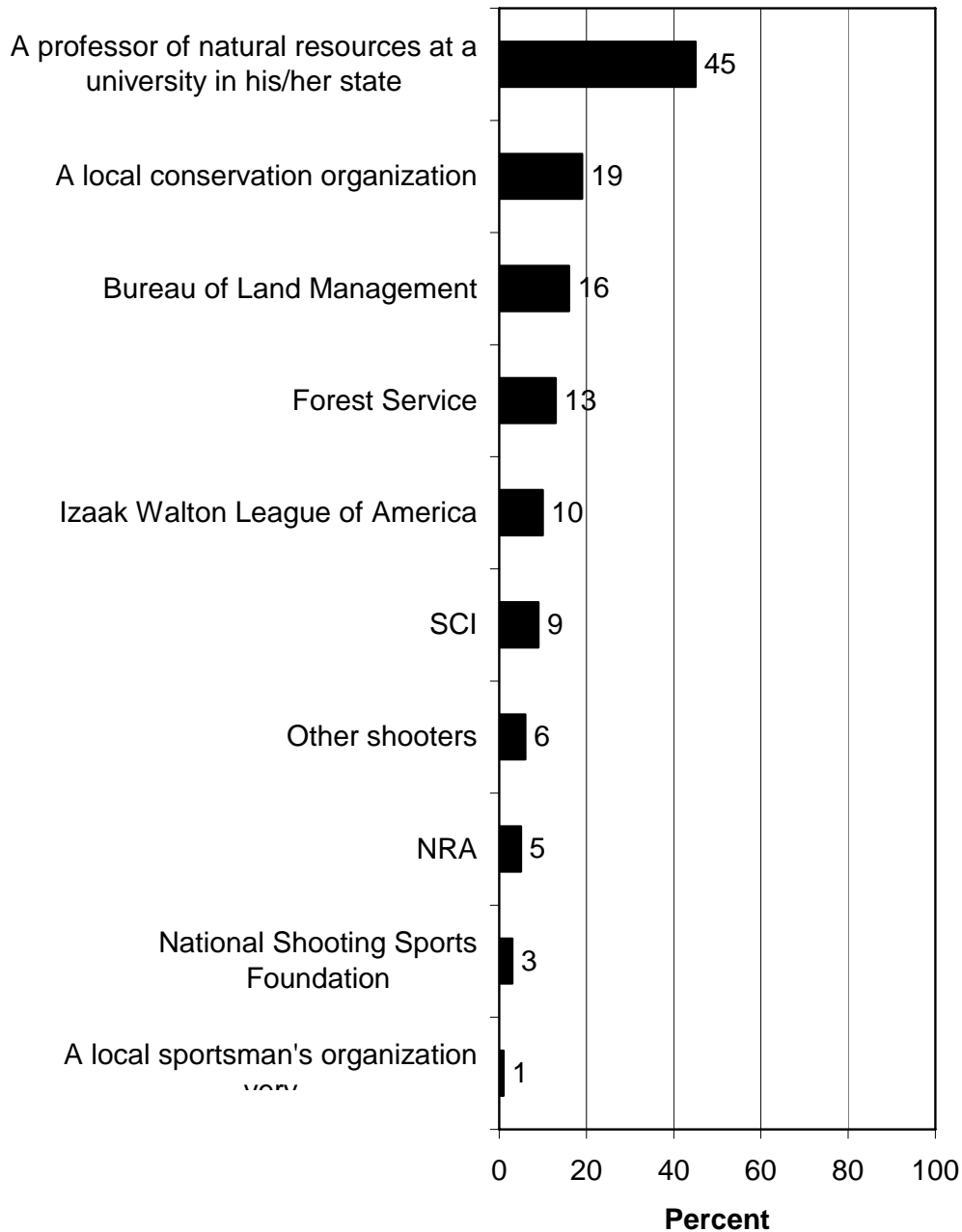
**Percent who think the following sources are very credible for information on shooting and shooting issues.
(Arizona)**



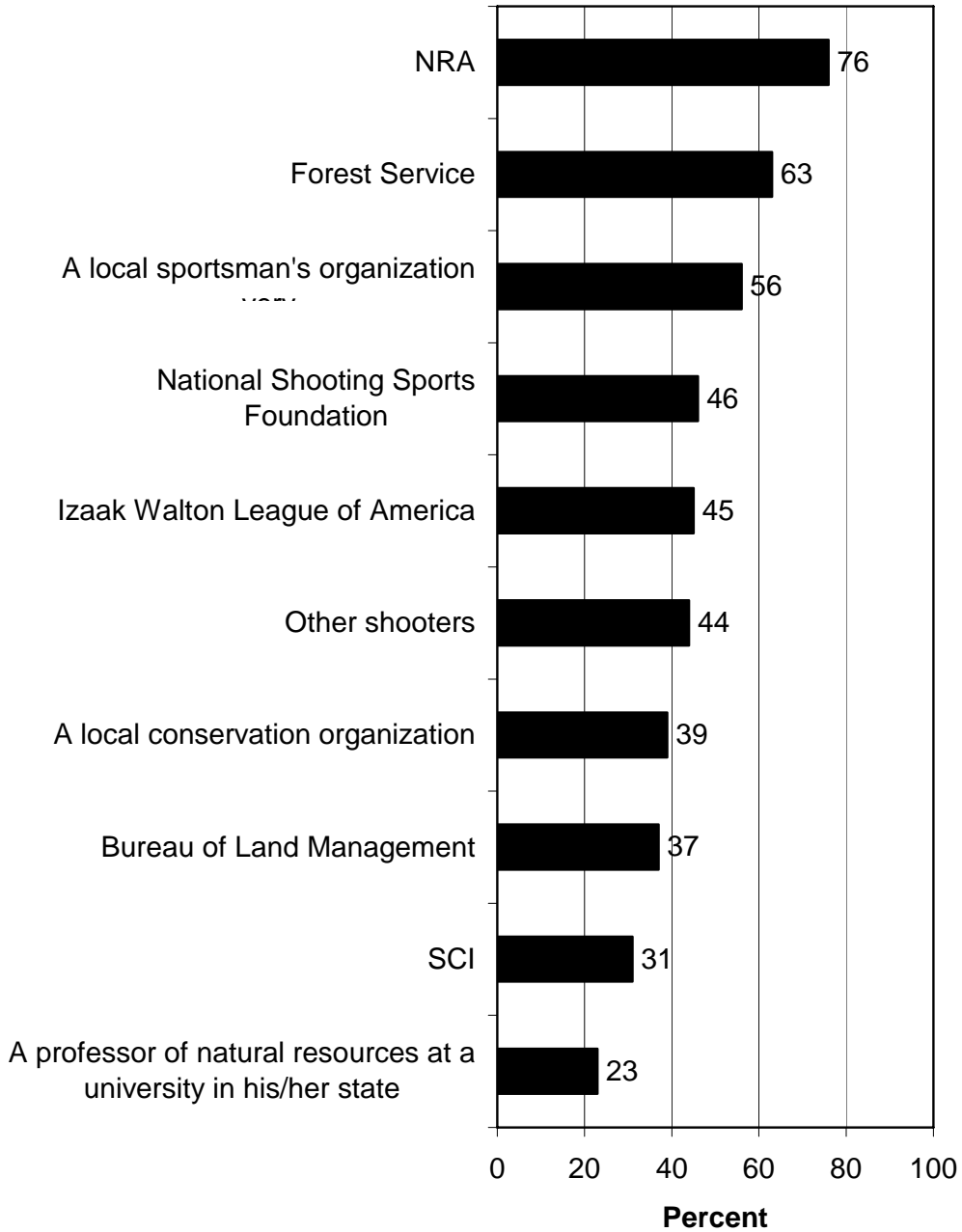
**Percent who think the following sources are very or somewhat credible for information on shooting and shooting issues.
(Arizona)**



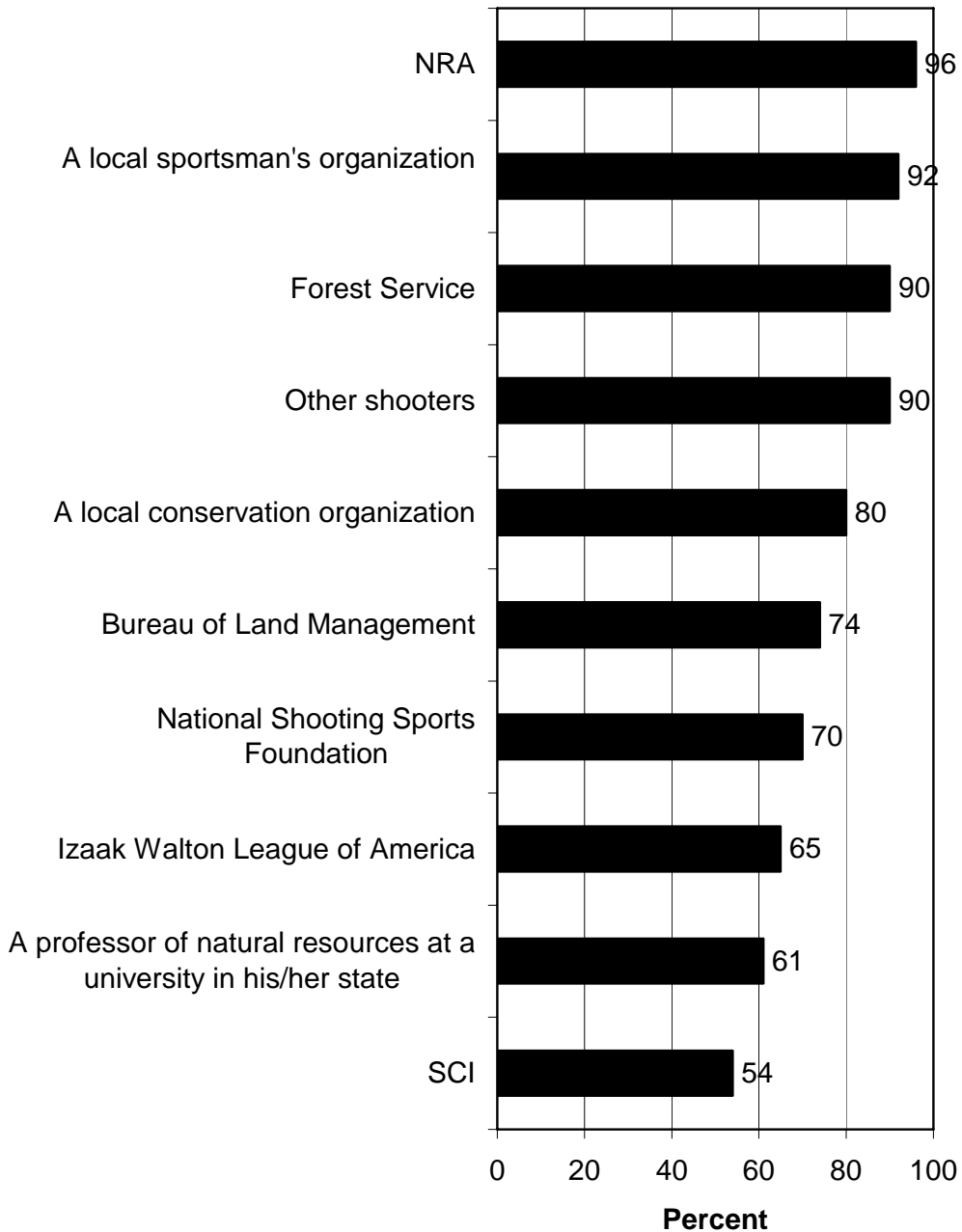
**Percent who think the following sources are not at all credible for information on shooting and shooting issues.
(Arizona)**



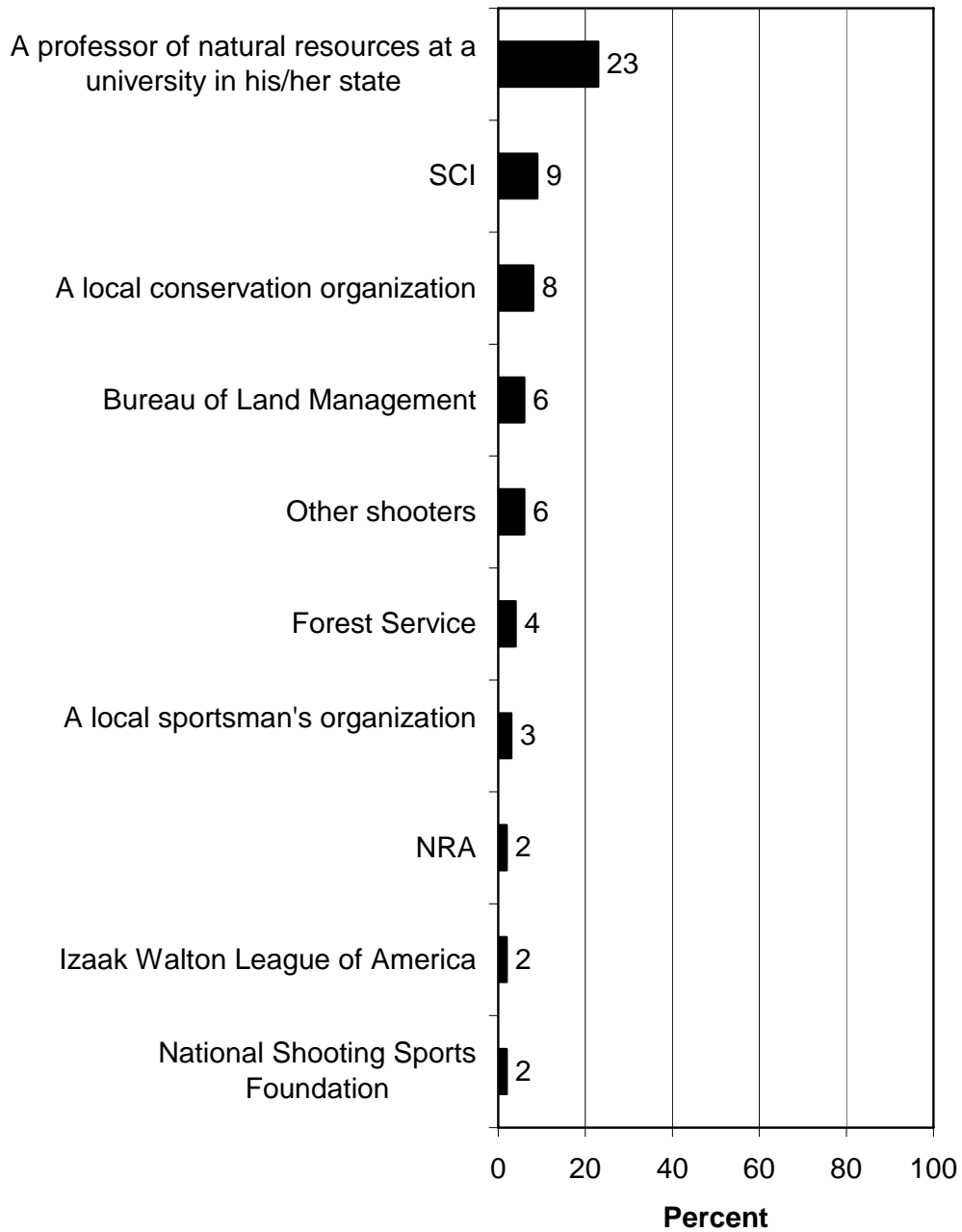
**Percent who think the following sources are very credible for information on shooting and shooting issues.
(Virginia)**



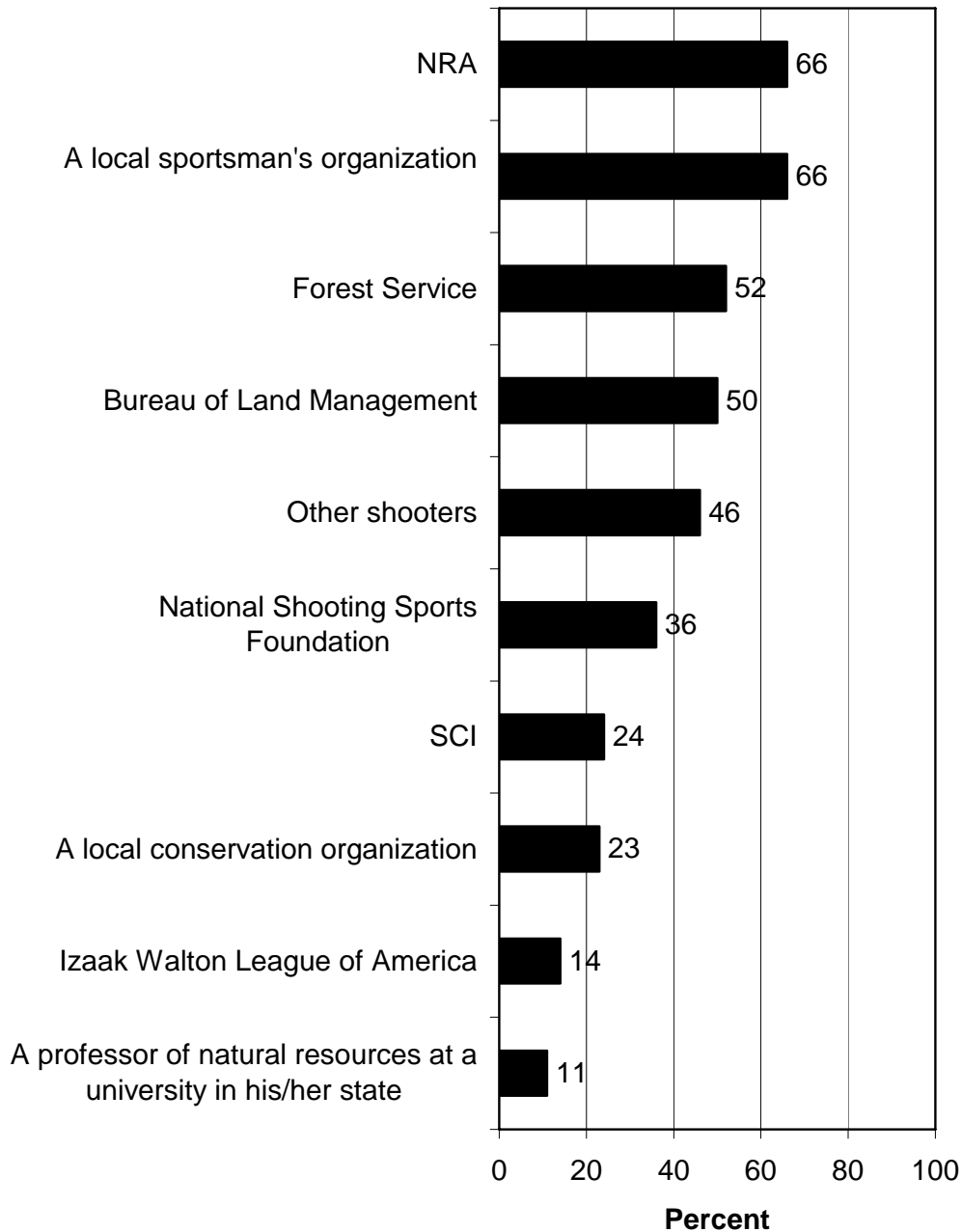
**Percent who think the following sources are very or somewhat credible for information on shooting and shooting issues.
(Virginia)**



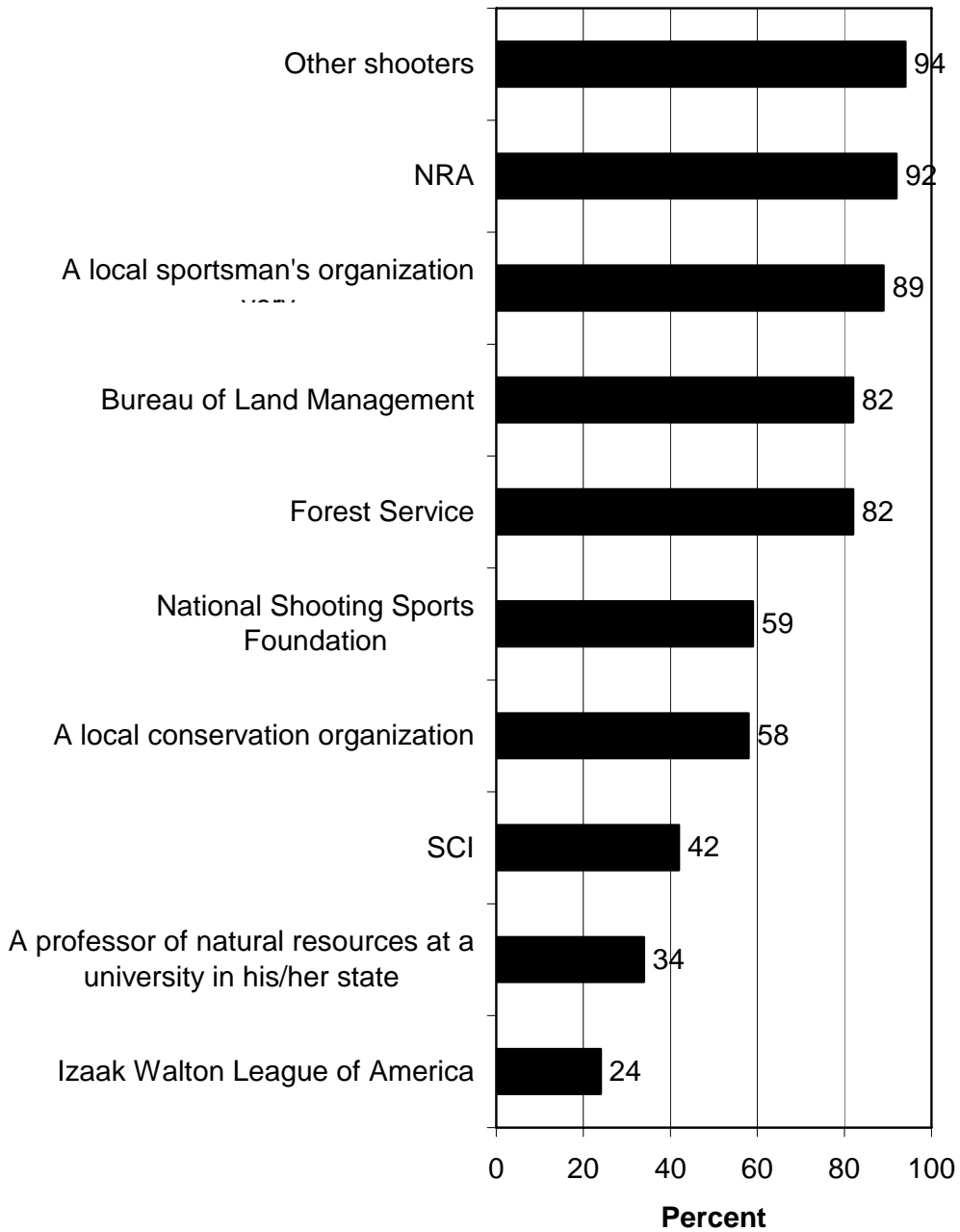
**Percent who think the following sources are not at all credible for information on shooting and shooting issues.
(Virginia)**



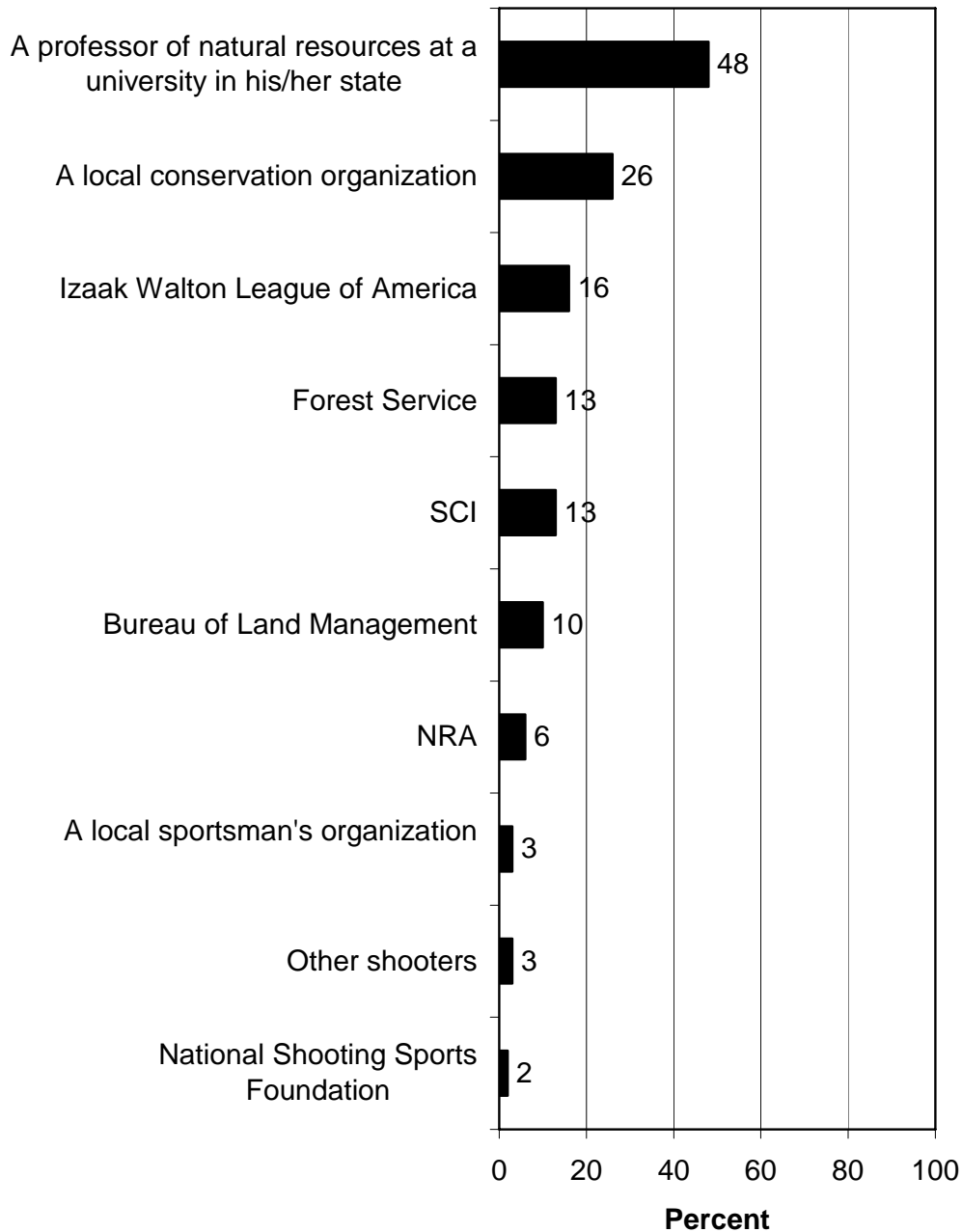
**Percent who think the following sources are very credible for information on shooting and shooting issues.
(Oregon)**



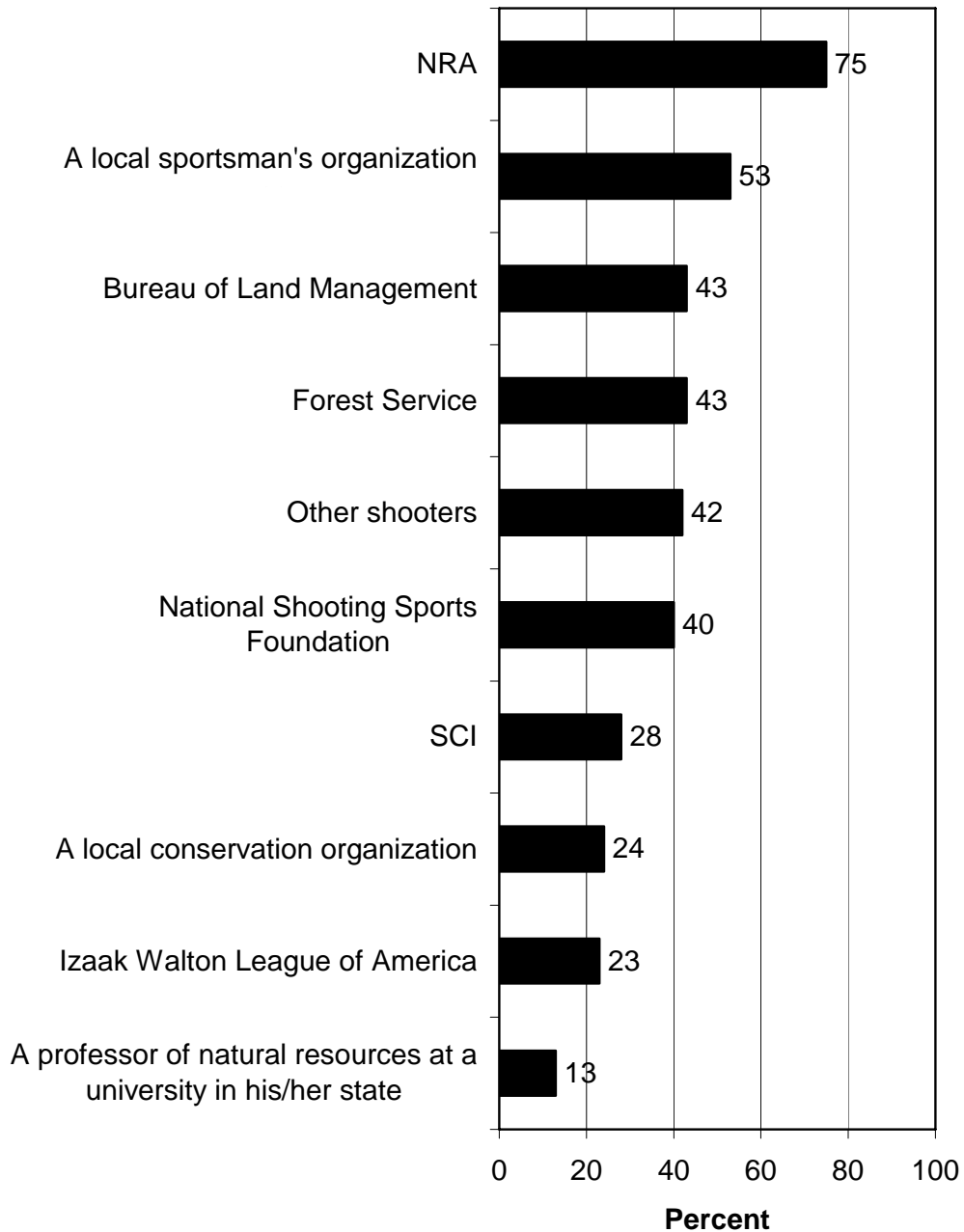
**Percent who think the following sources are very or somewhat credible for information on shooting and shooting issues.
(Oregon)**



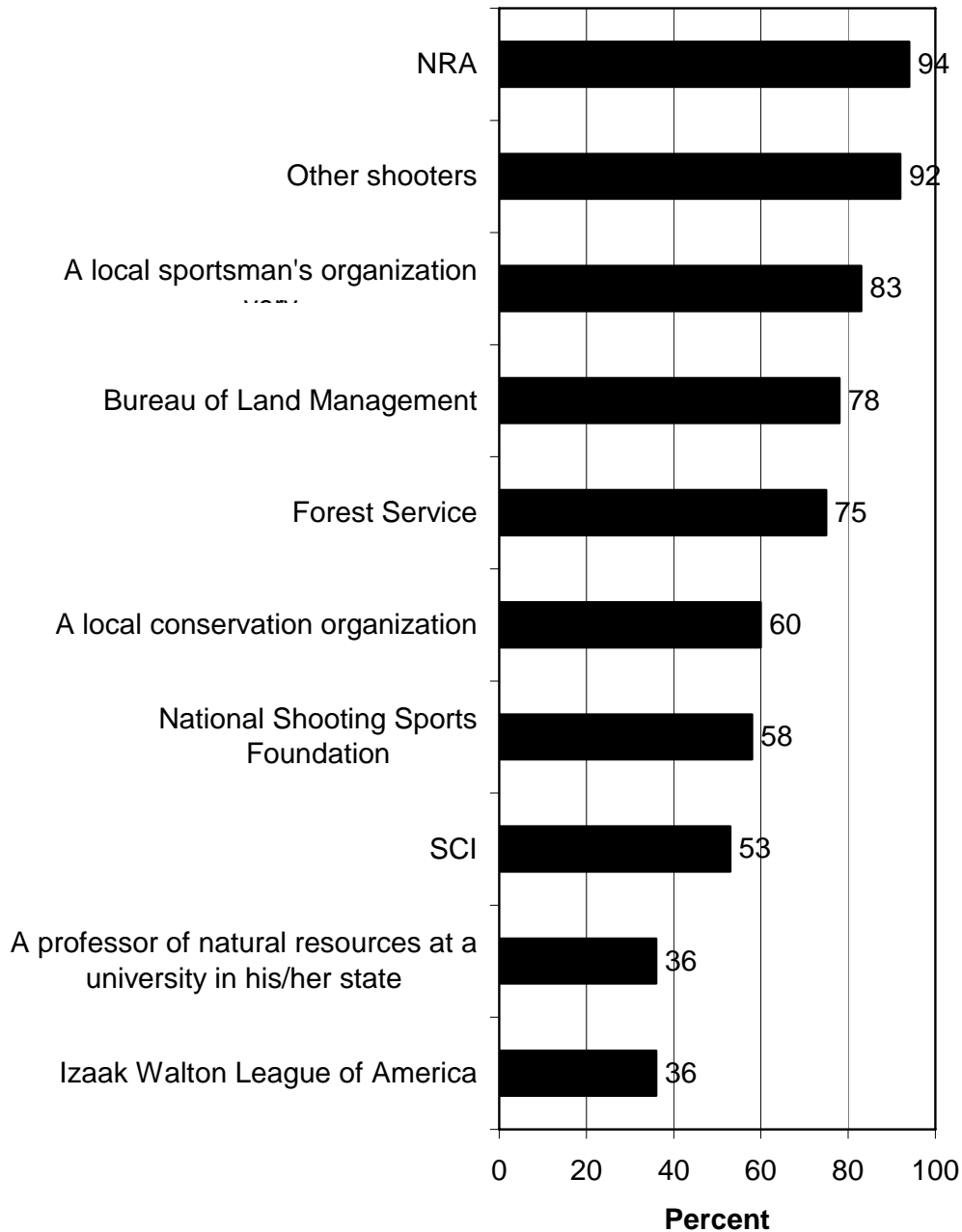
**Percent who think the following sources are not at all credible for information on shooting and shooting issues.
(Oregon)**



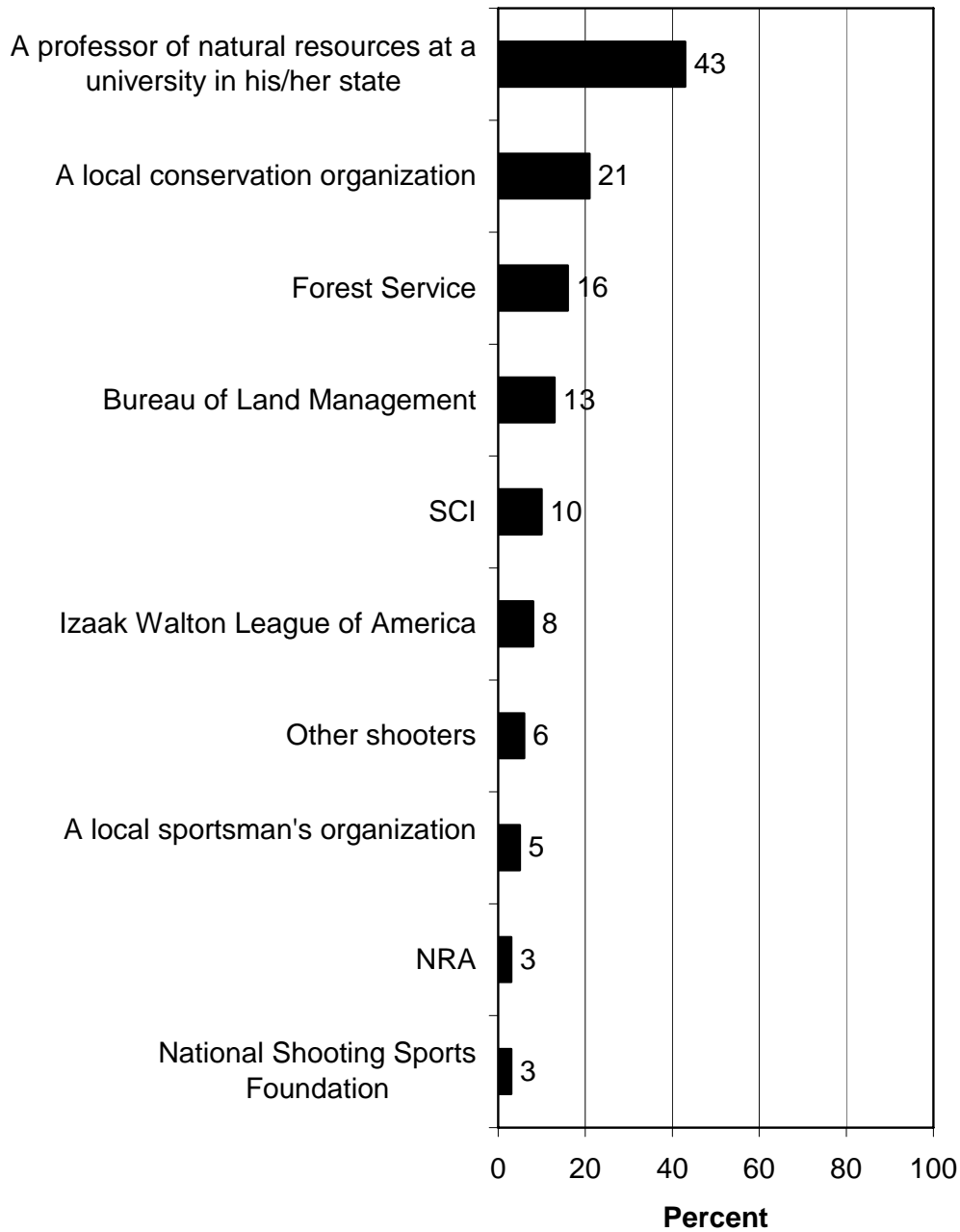
**Percent who think the following sources are very credible for information on shooting and shooting issues.
(Colorado)**



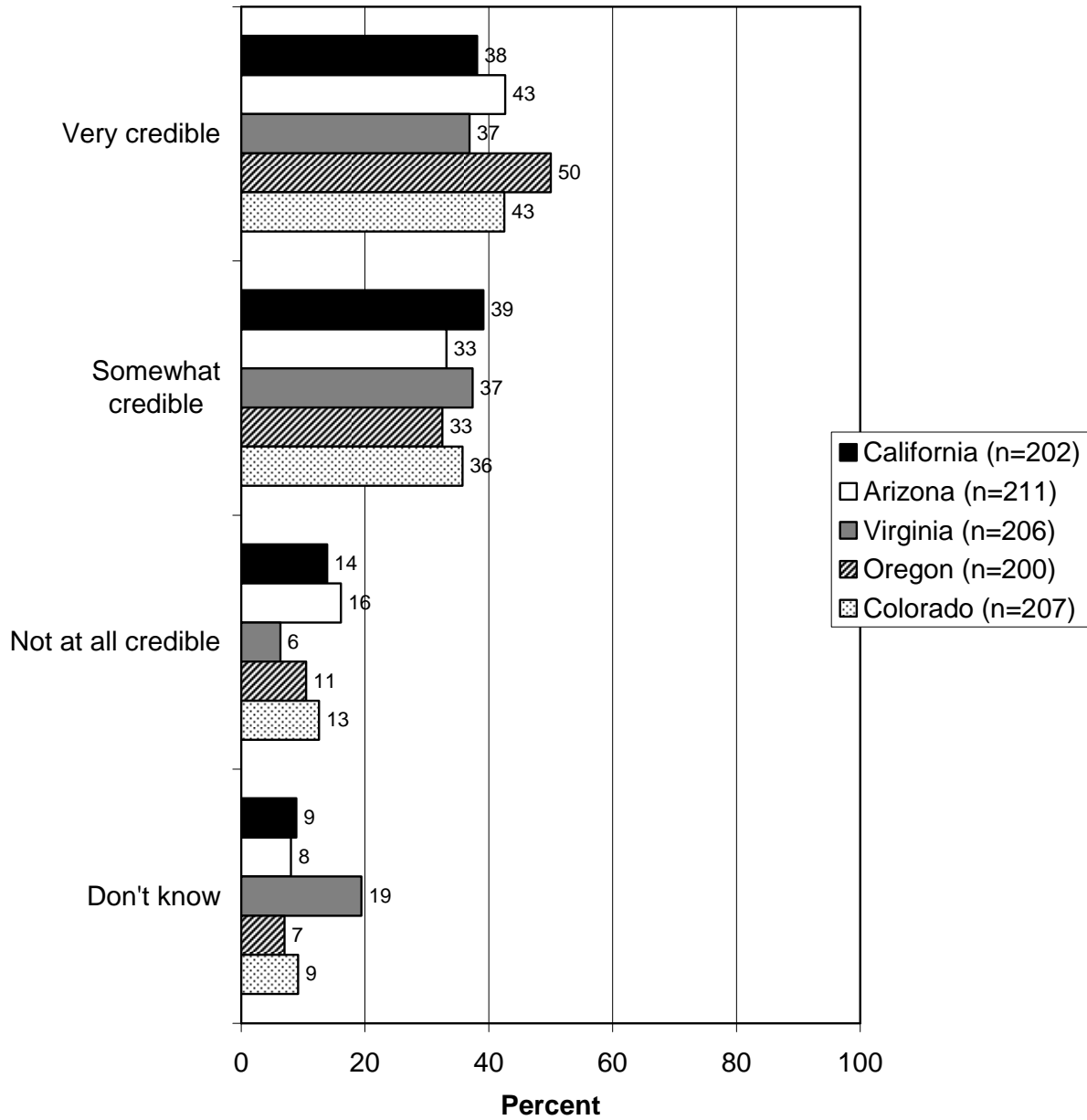
**Percent who think the following sources are very or somewhat credible for information on shooting and shooting issues.
(Colorado)**



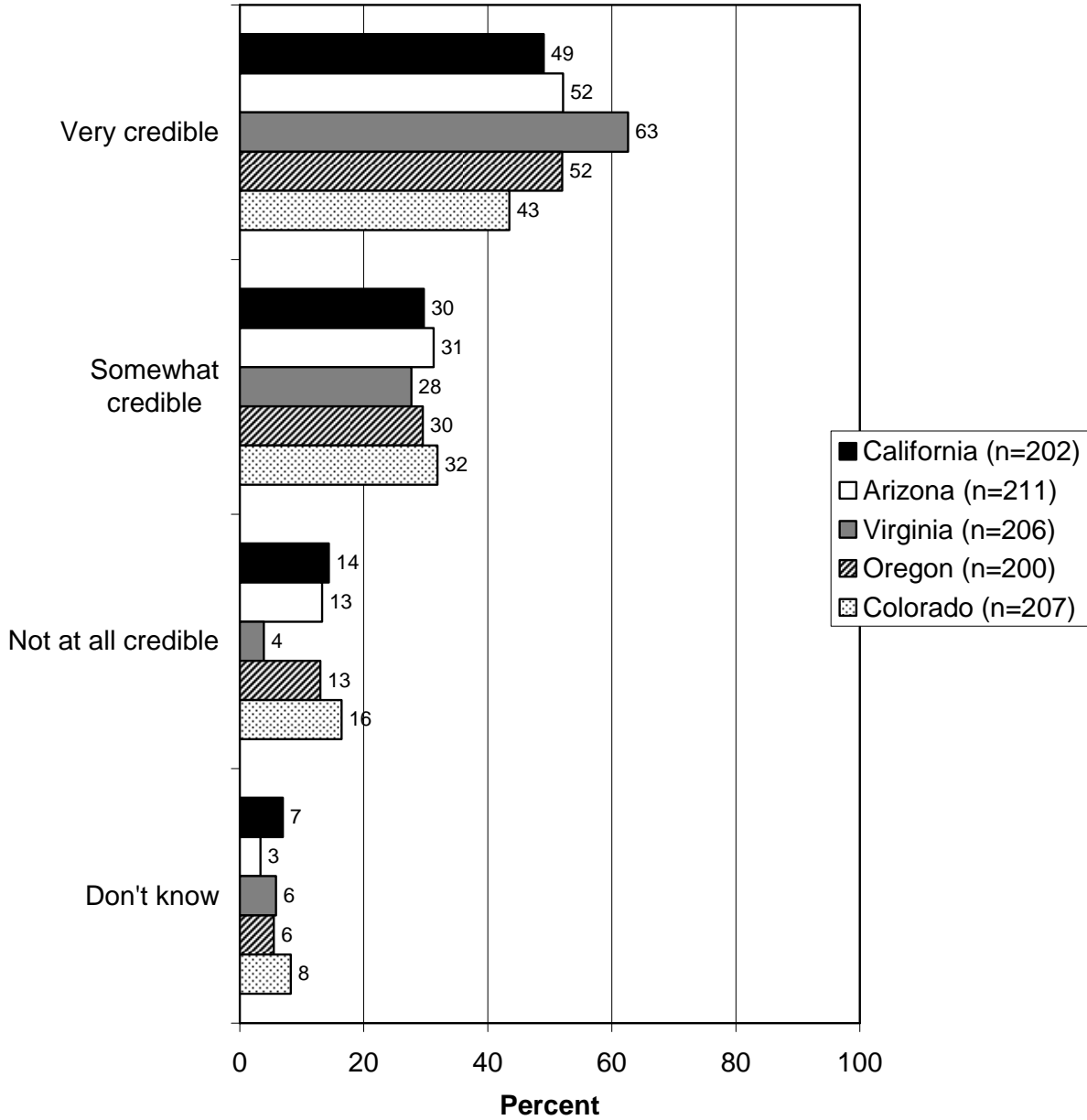
**Percent who think the following sources are not at all credible for information on shooting and shooting issues.
(Colorado)**



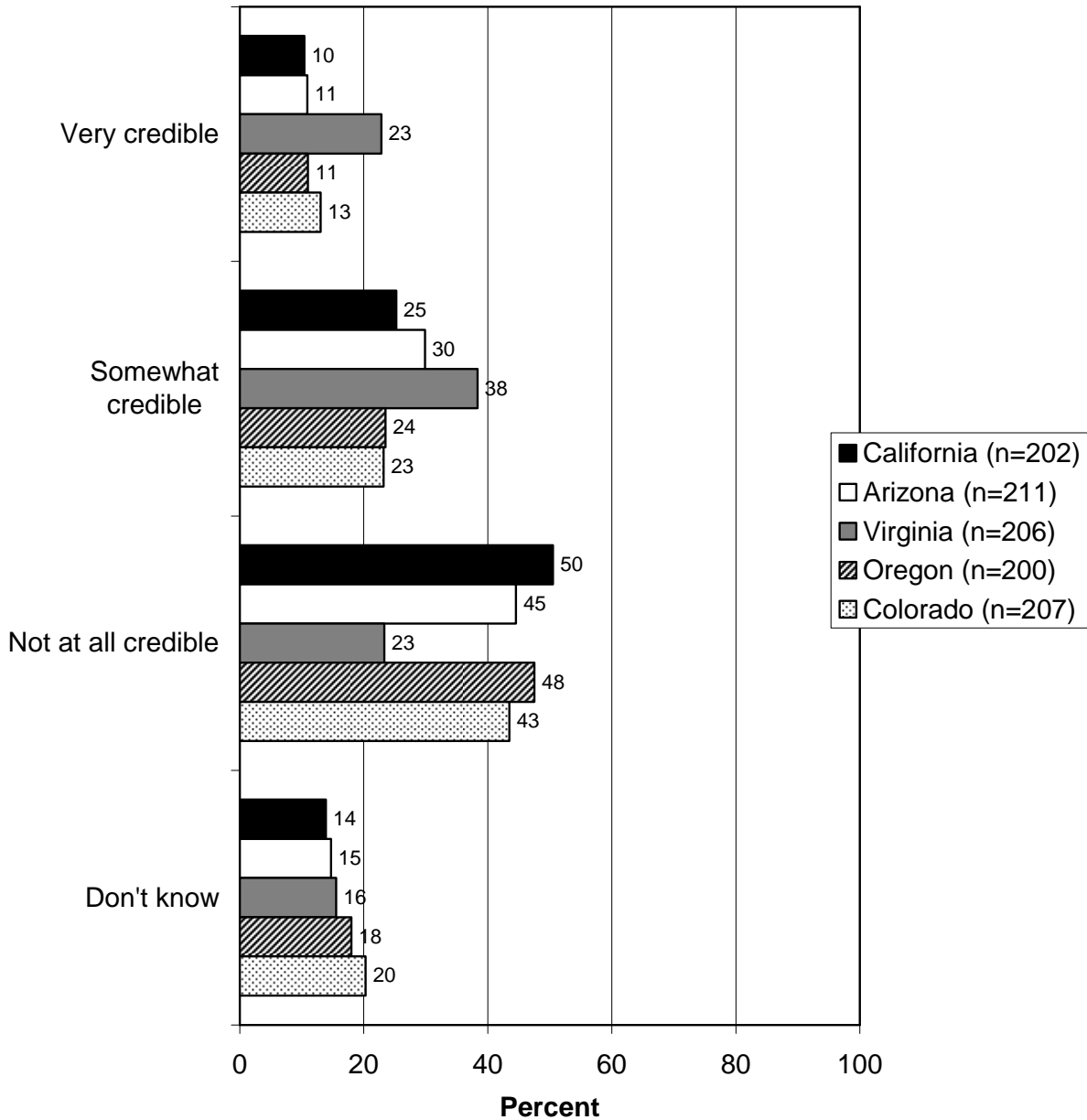
Q215. Is the Bureau of Land Management very credible, somewhat credible, or not at all credible as a source of information on shooting and shooting issues?



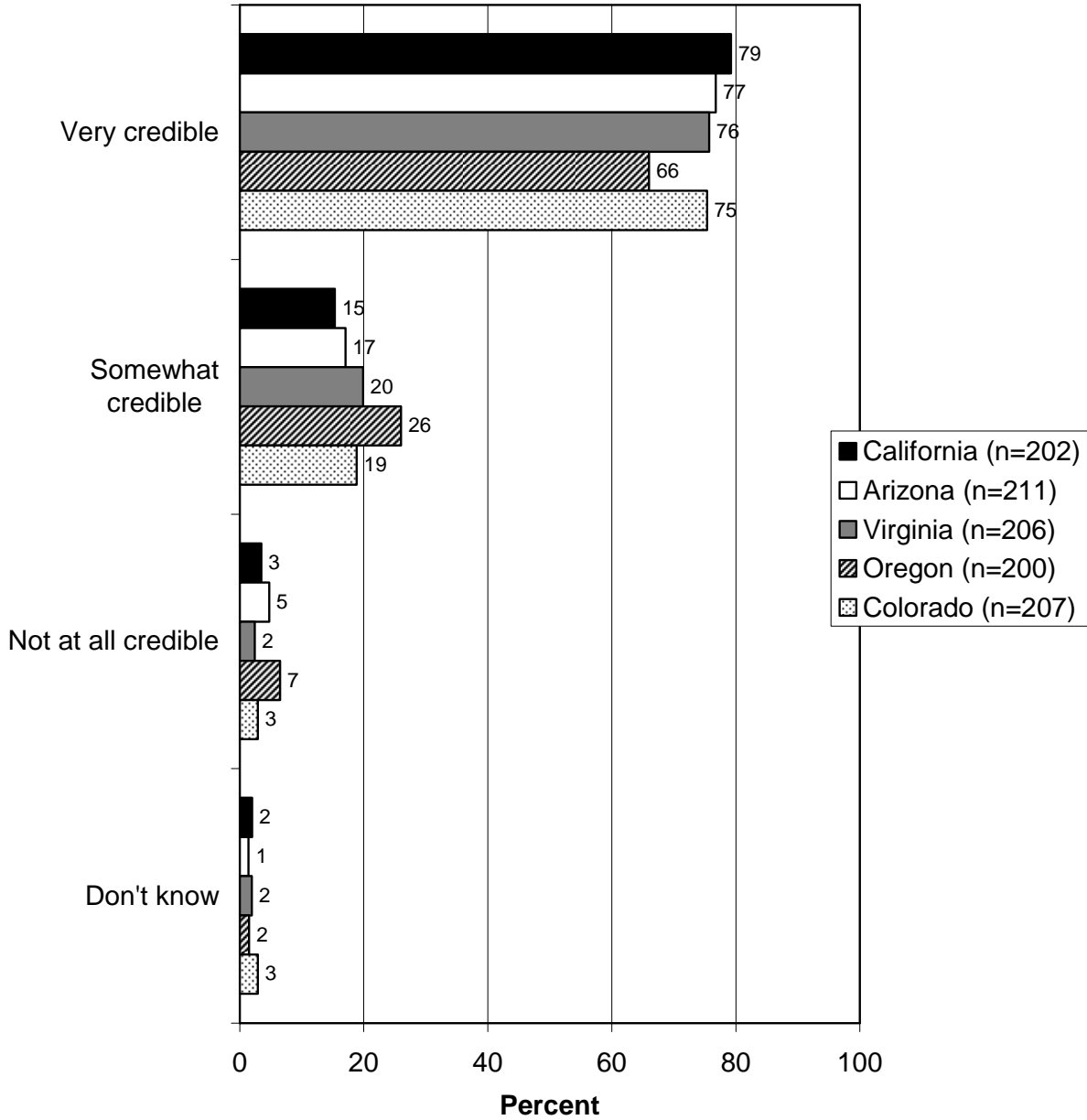
Q216. Is the Forest Service very credible, somewhat credible, or not at all credible as a source of information on shooting and shooting issues?



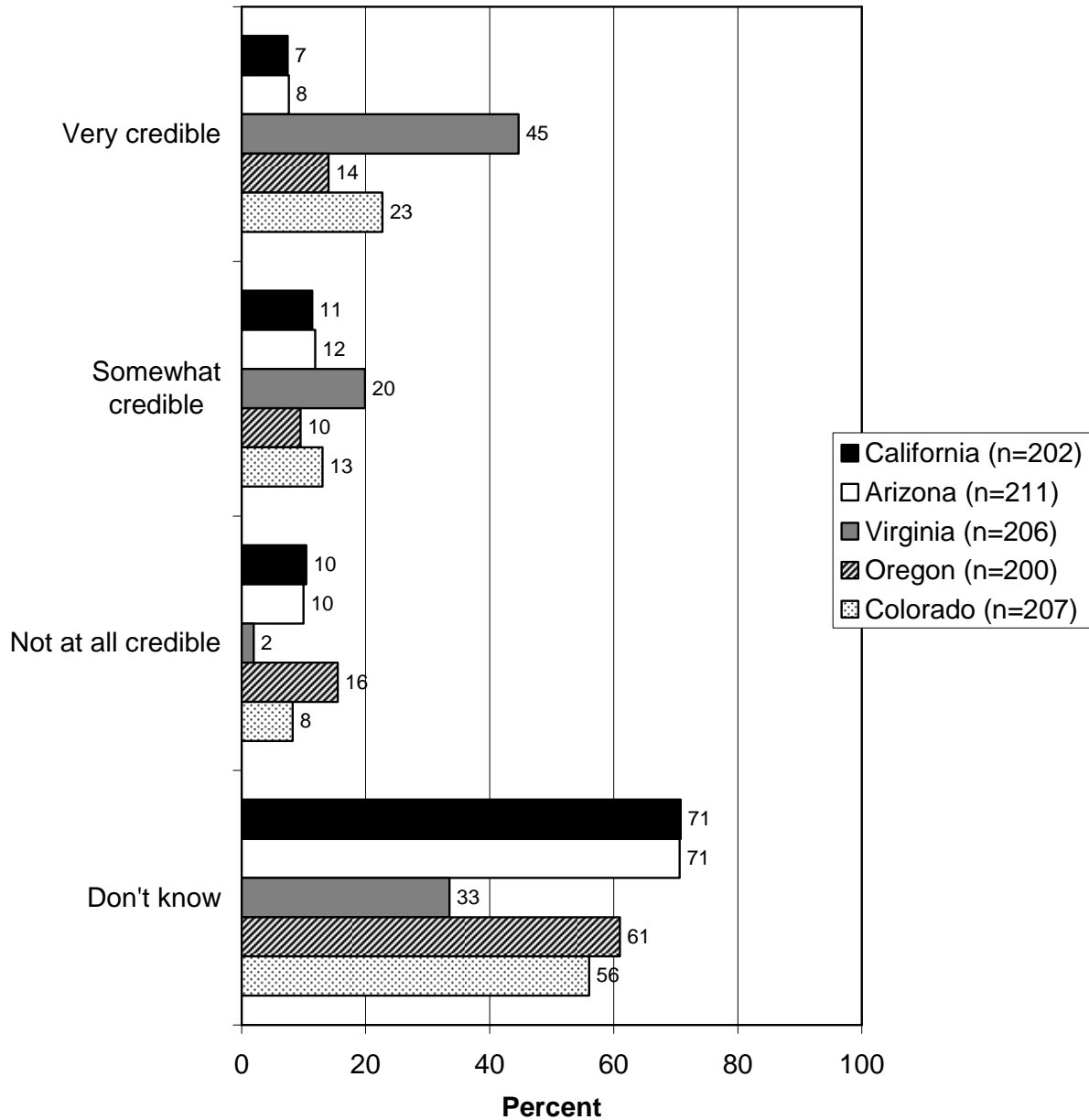
Q217. Is a professor of natural resources at a university in your state very credible, somewhat credible, or not at all credible as a source of information on shooting and shooting issues?



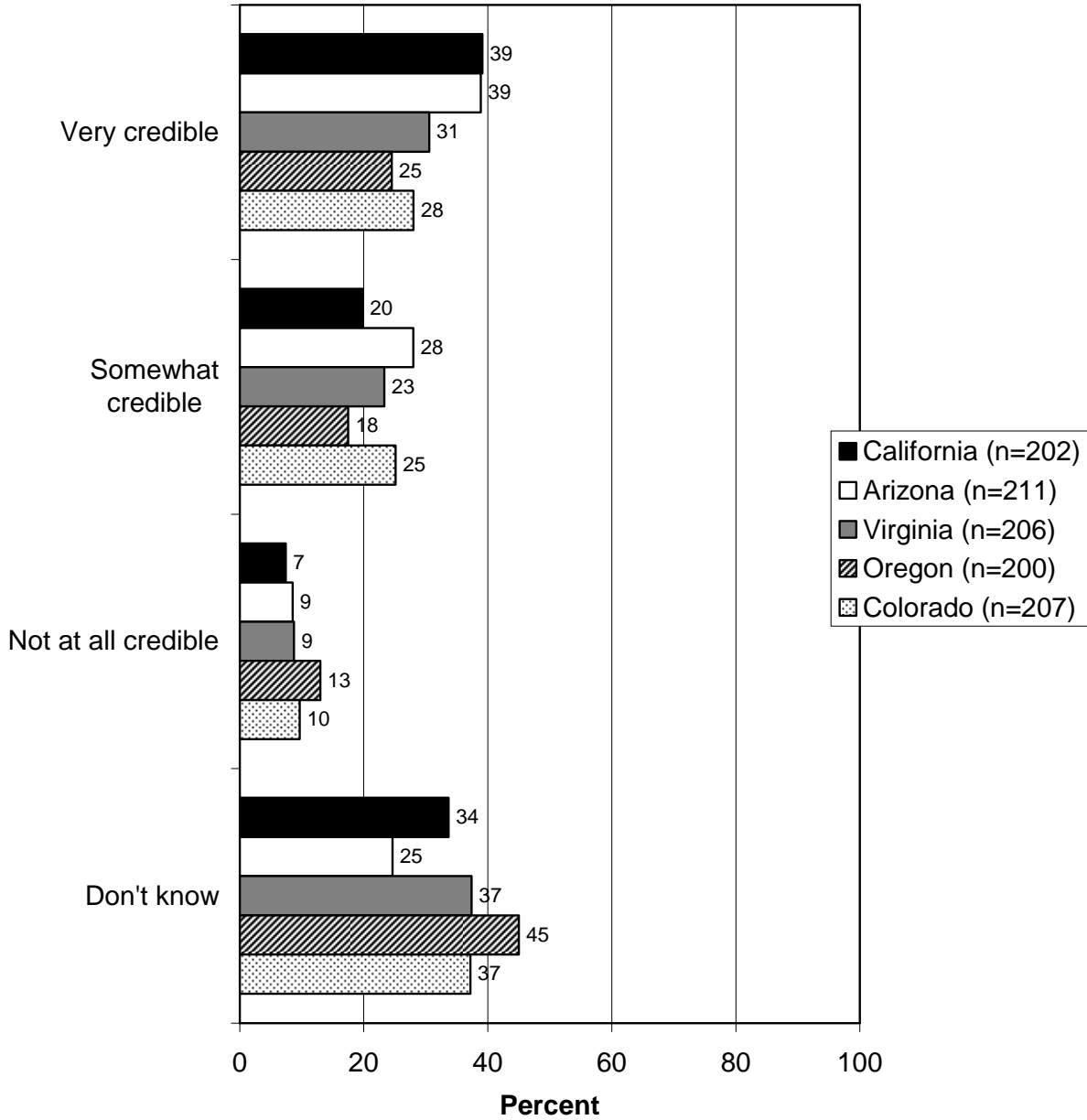
Q218. Is the NRA very credible, somewhat credible, or not at all credible as a source of information on shooting and shooting issues?



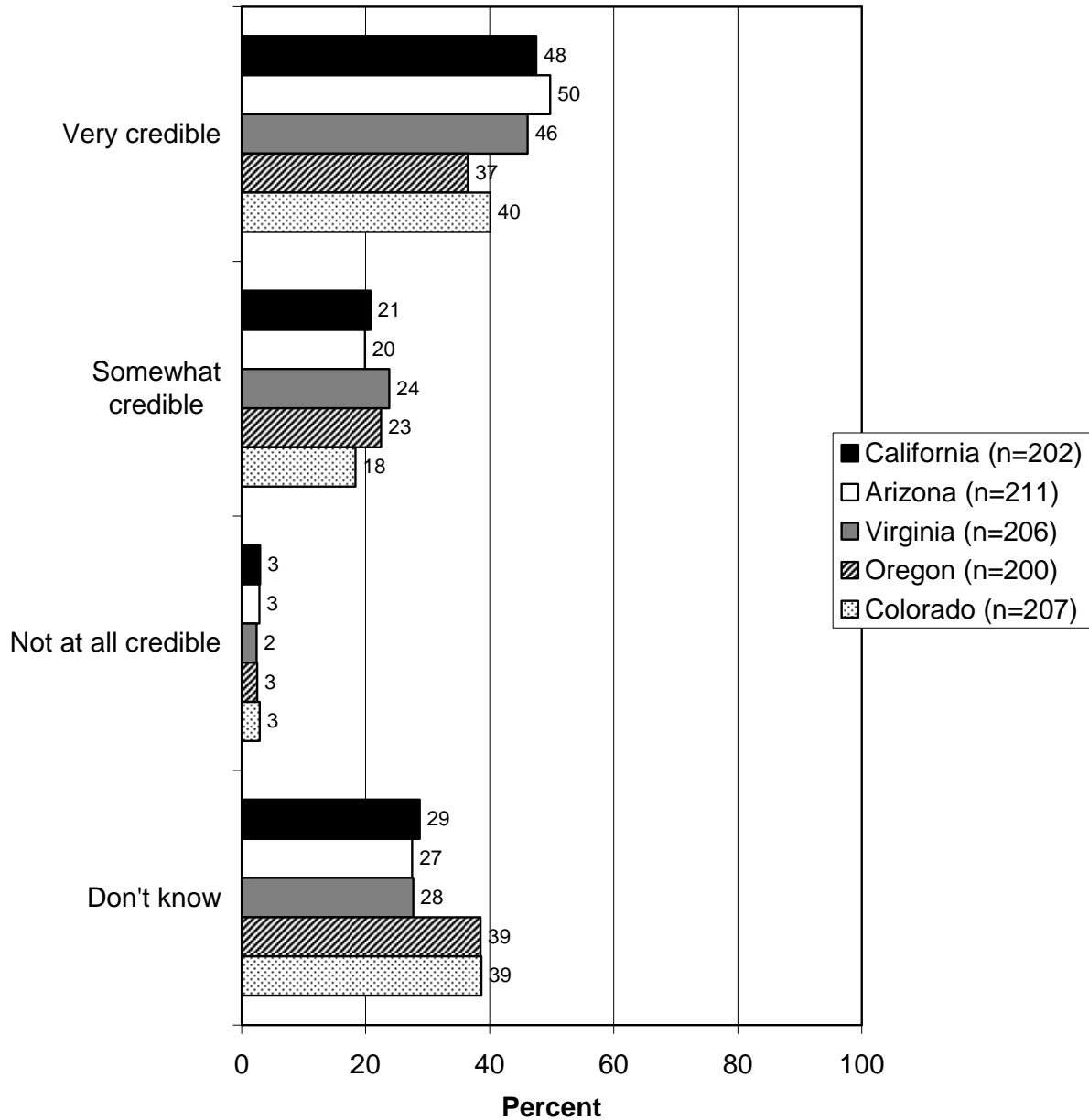
Q219. Is the Izaak Walton League of America very credible, somewhat credible, or not at all credible as a source of information on shooting and shooting issues?



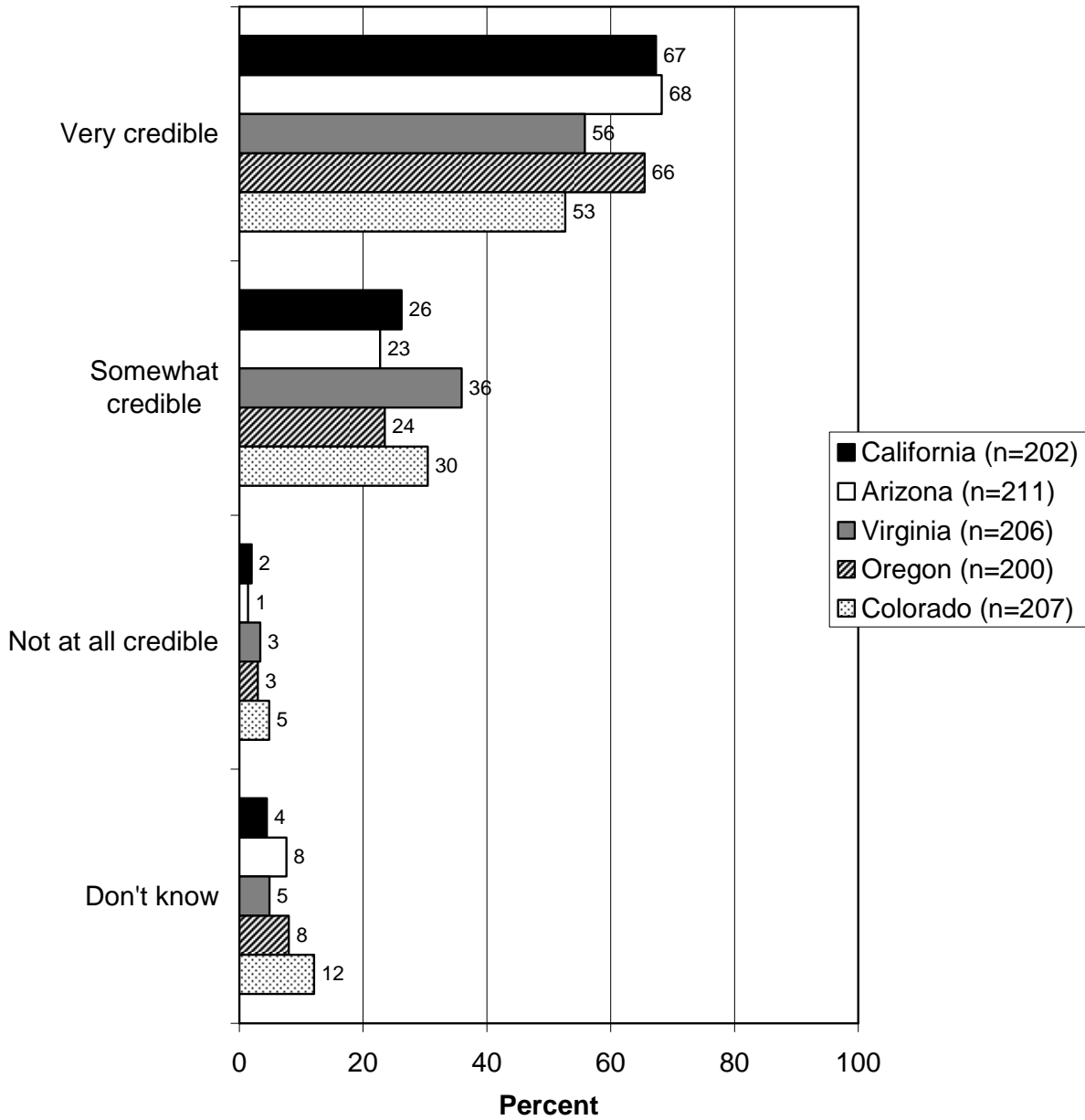
Q220. Is SCI very credible, somewhat credible, or not at all credible as a source of information on shooting and shooting issues?



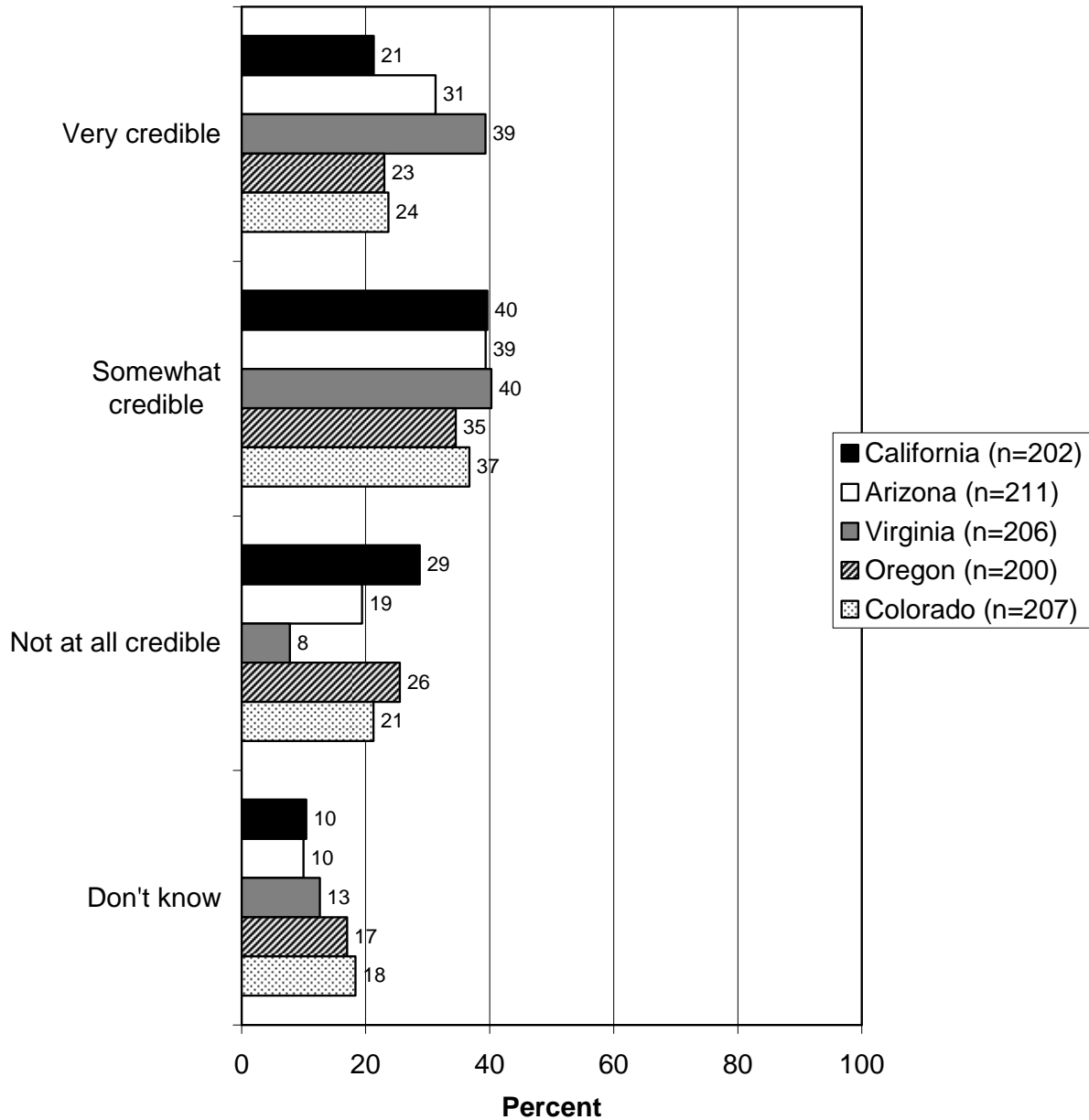
Q221. Is the National Shooting Sports Foundation very credible, somewhat credible, or not at all credible as a source of information on shooting and shooting issues?



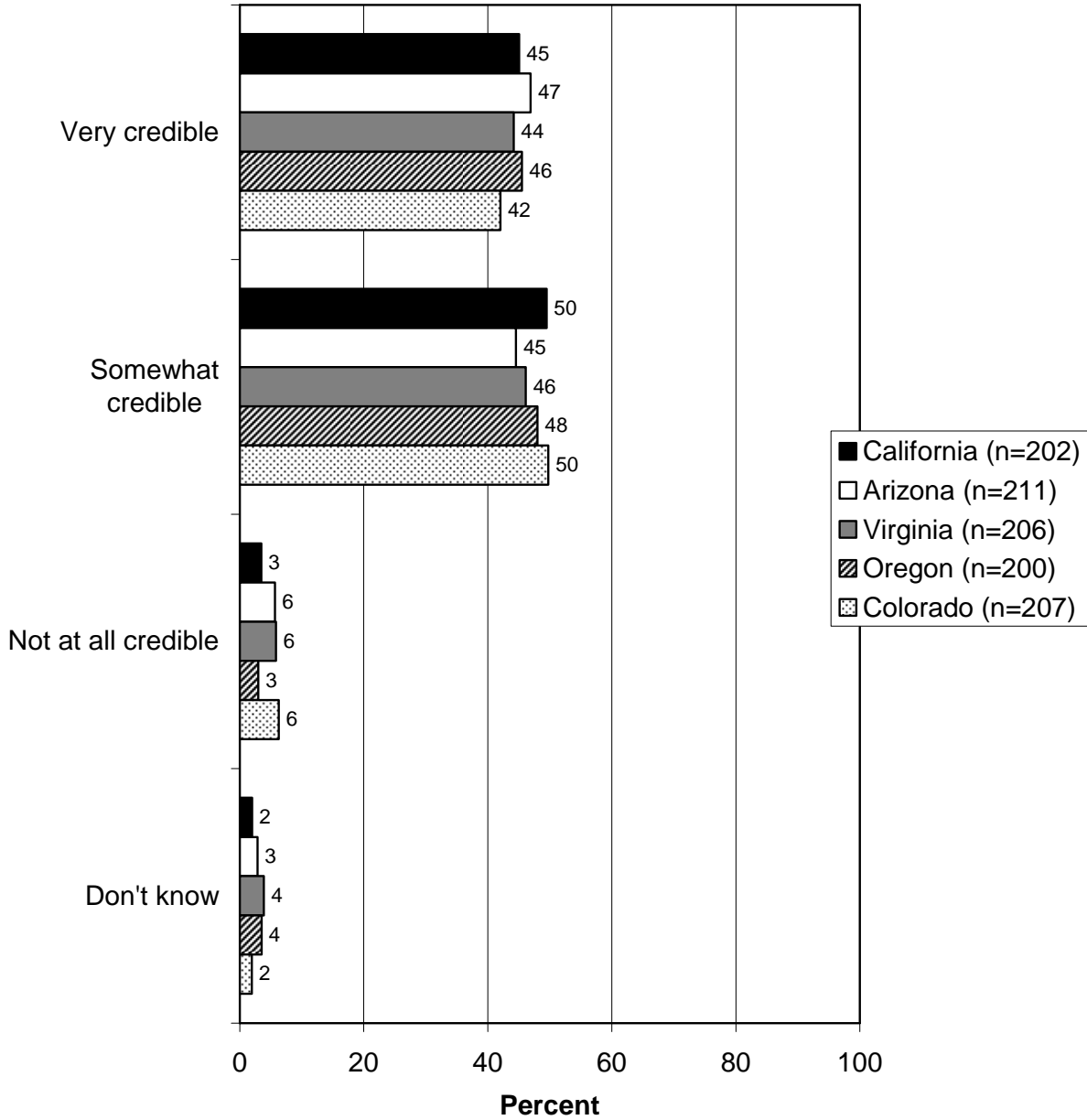
Q222. Is a local sportsman's organization very credible, somewhat credible, or not at all credible as a source of information on shooting and shooting issues?



Q223. Is a local conservation organization very credible, somewhat credible, or not at all credible as a source of information on shooting and shooting issues?



Q224. Are other shooters very credible, somewhat credible, or not at all credible as a source of information on shooting and shooting issues?



DEMOGRAPHIC DATA

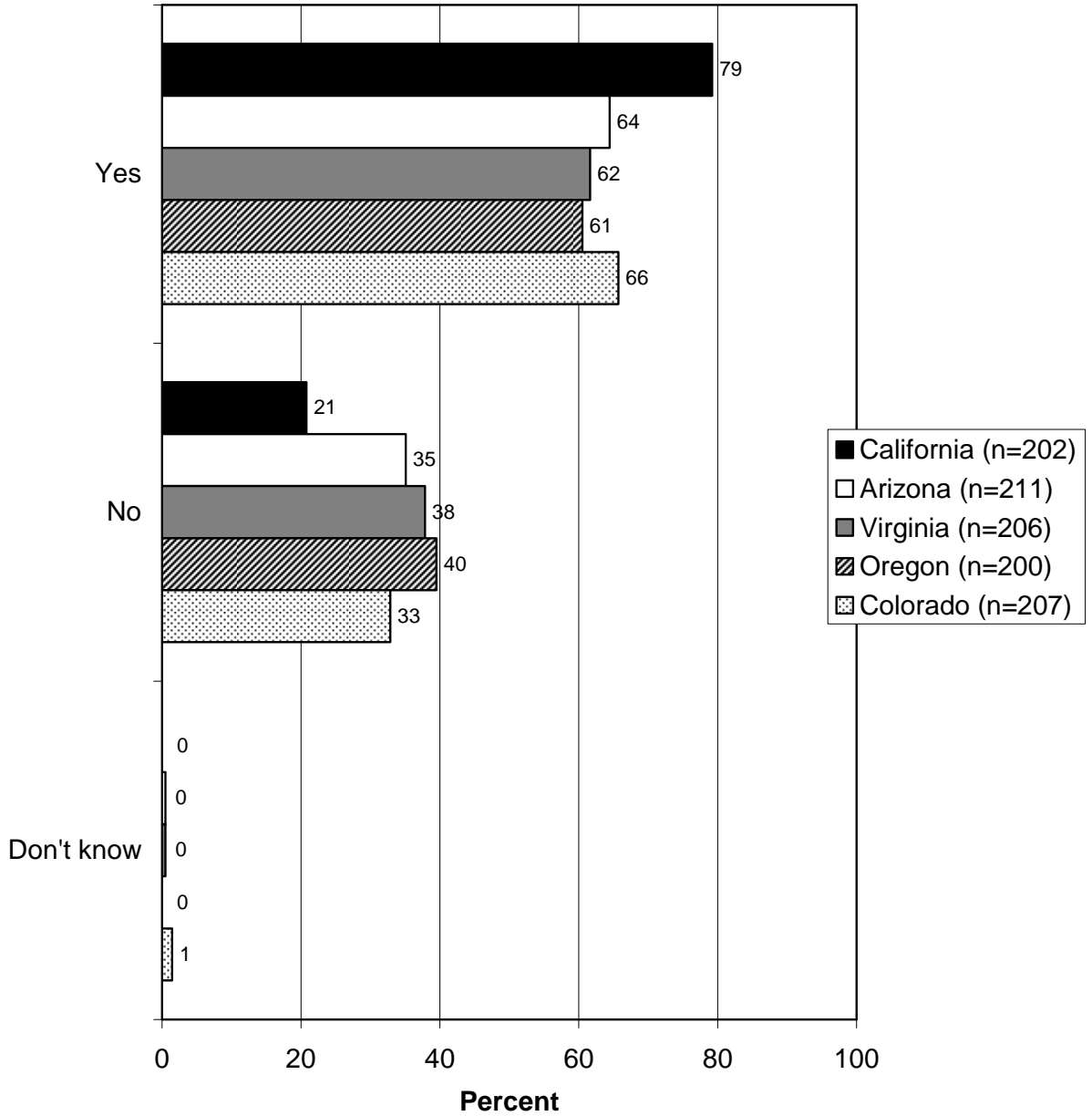
- The majority of recreational shooters surveyed (61-79%) are members of or donate to conservation/sportsman organizations, of which the most common are the National Rifle Association, the Rocky Mountain Elk Foundation, and Ducks Unlimited.

- California and Arizona had the most respondents from urban areas.

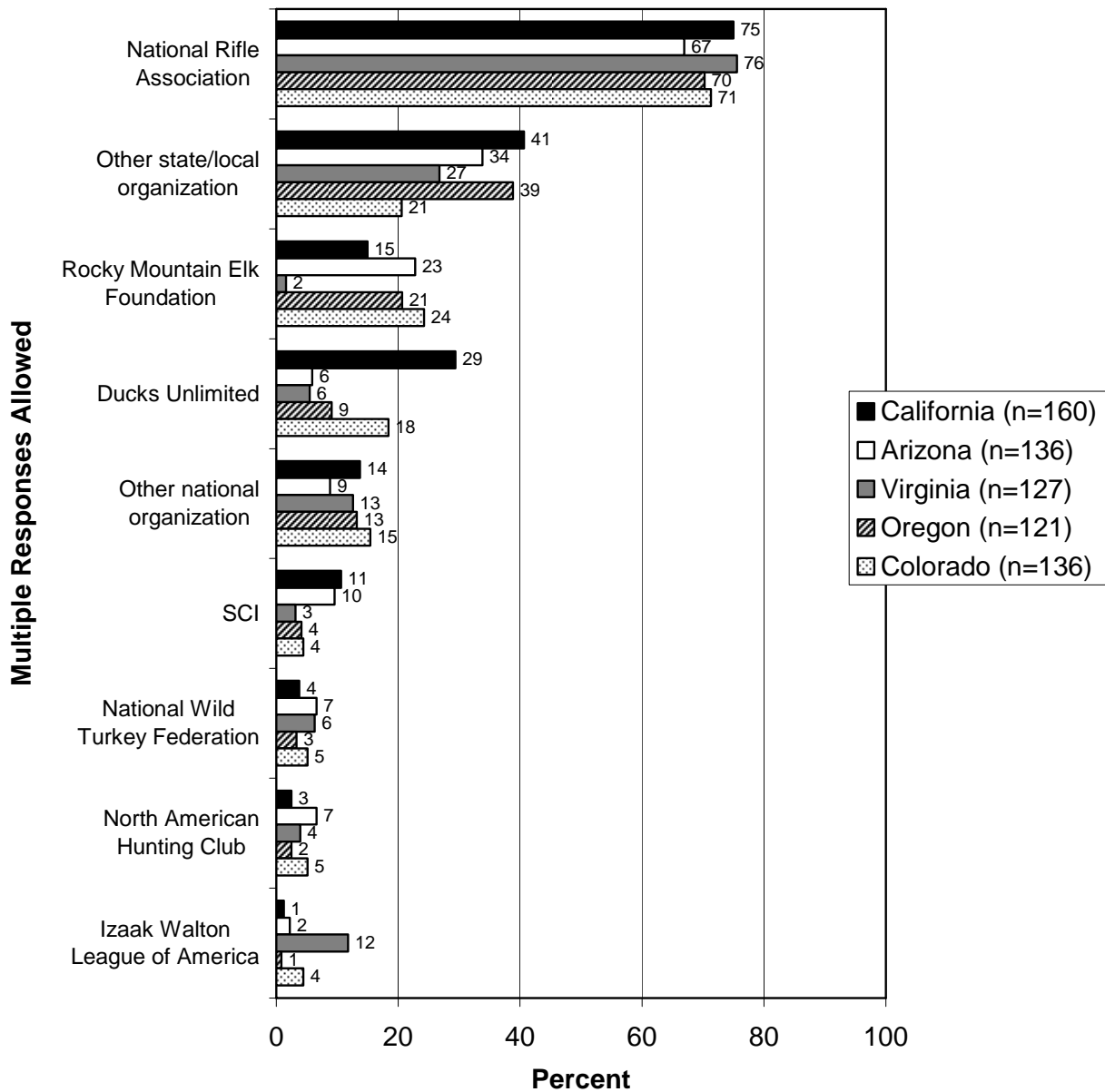
- Education levels and ages of respondents are shown.

- Males make up the overwhelming majority of shooters.

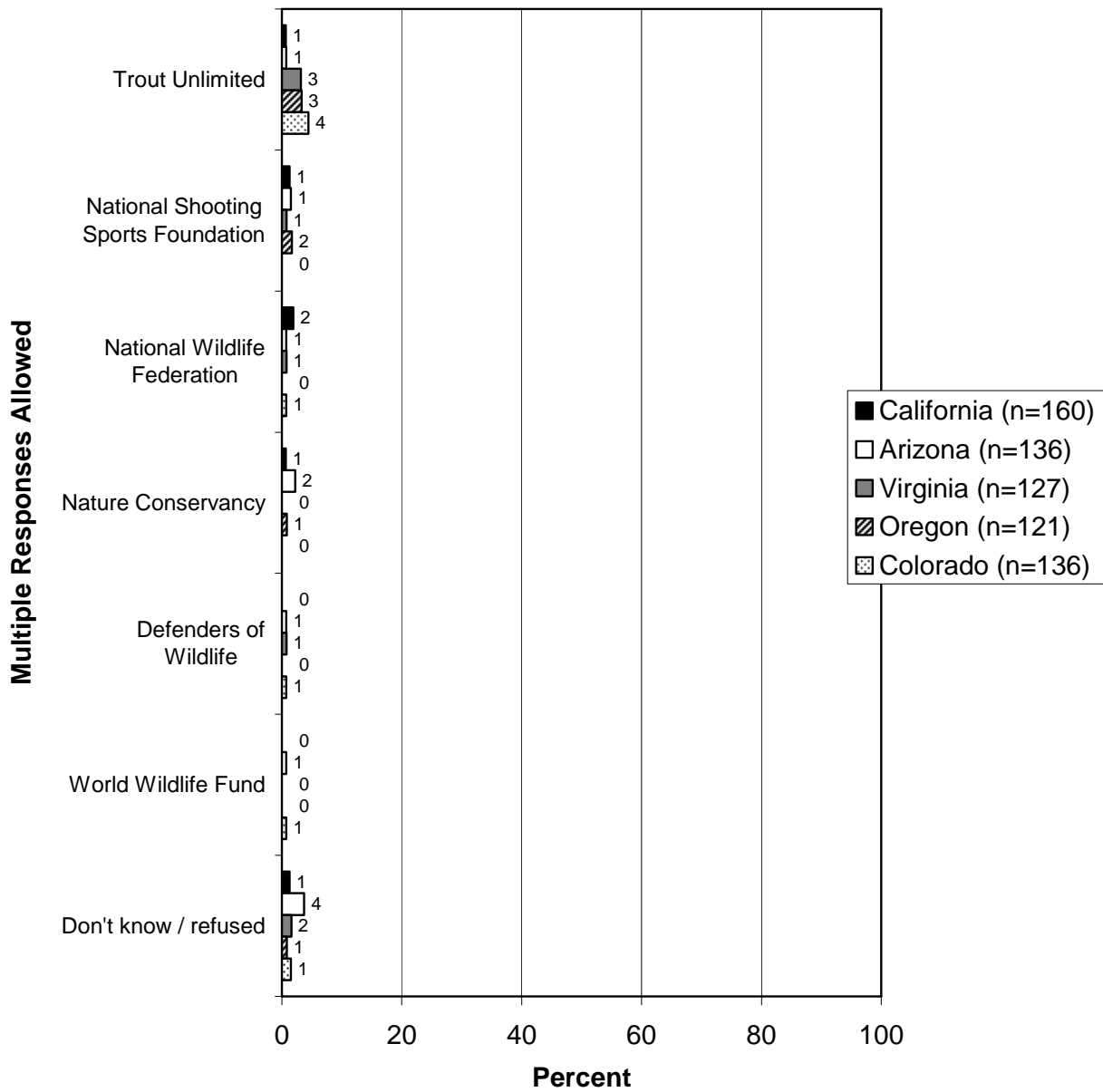
Q225. Are you currently a member of or have you donated to any conservation or sportsman's organizations in the past 12 months?



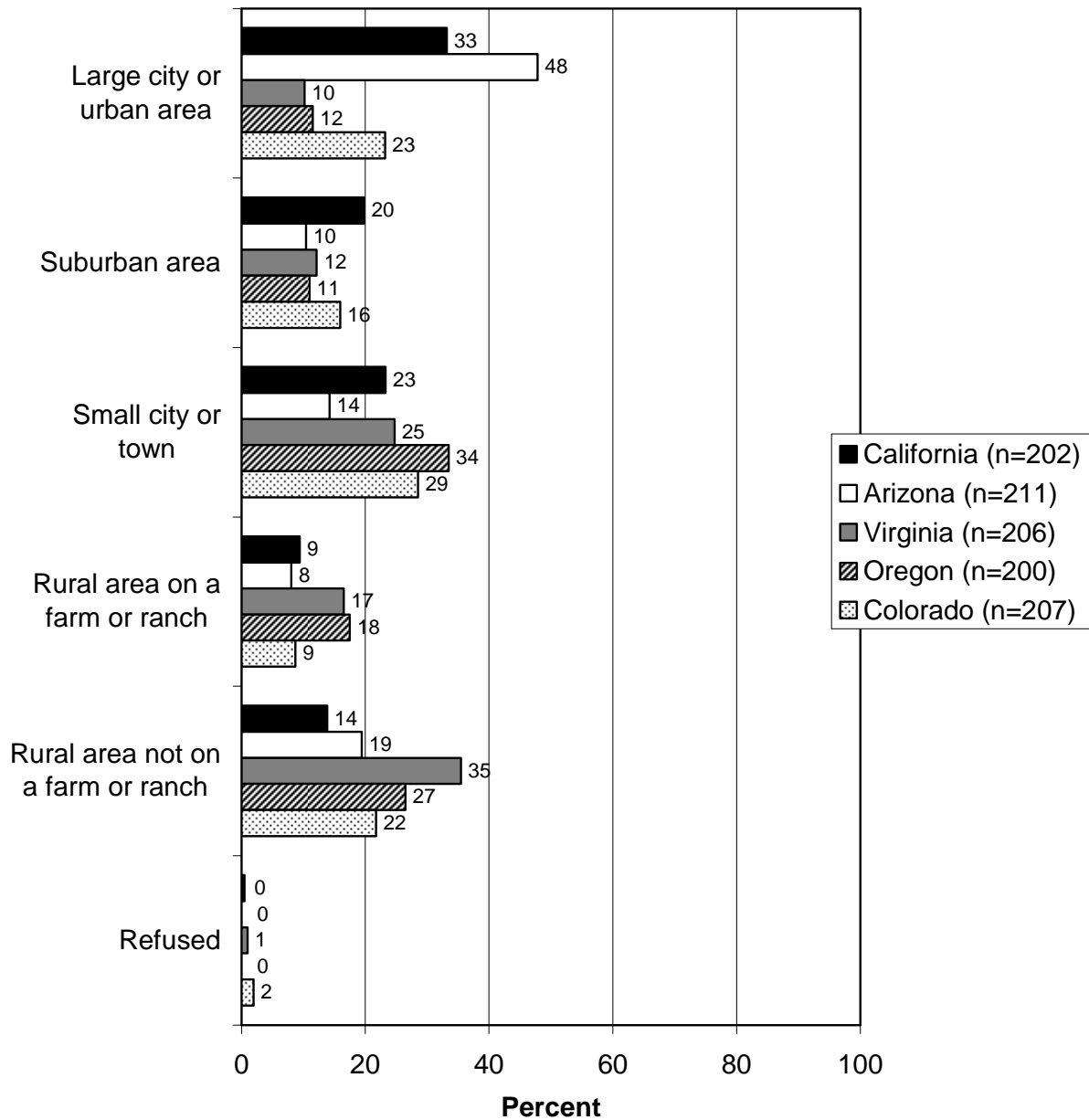
Q228. Which conservation or sportsman's organizations are you currently a member of or have donated to in the past 12 months? (Asked of those who are currently members of or have donated to any conservation or sportsman's organizations in the past 12 months.)
(Part 1.)



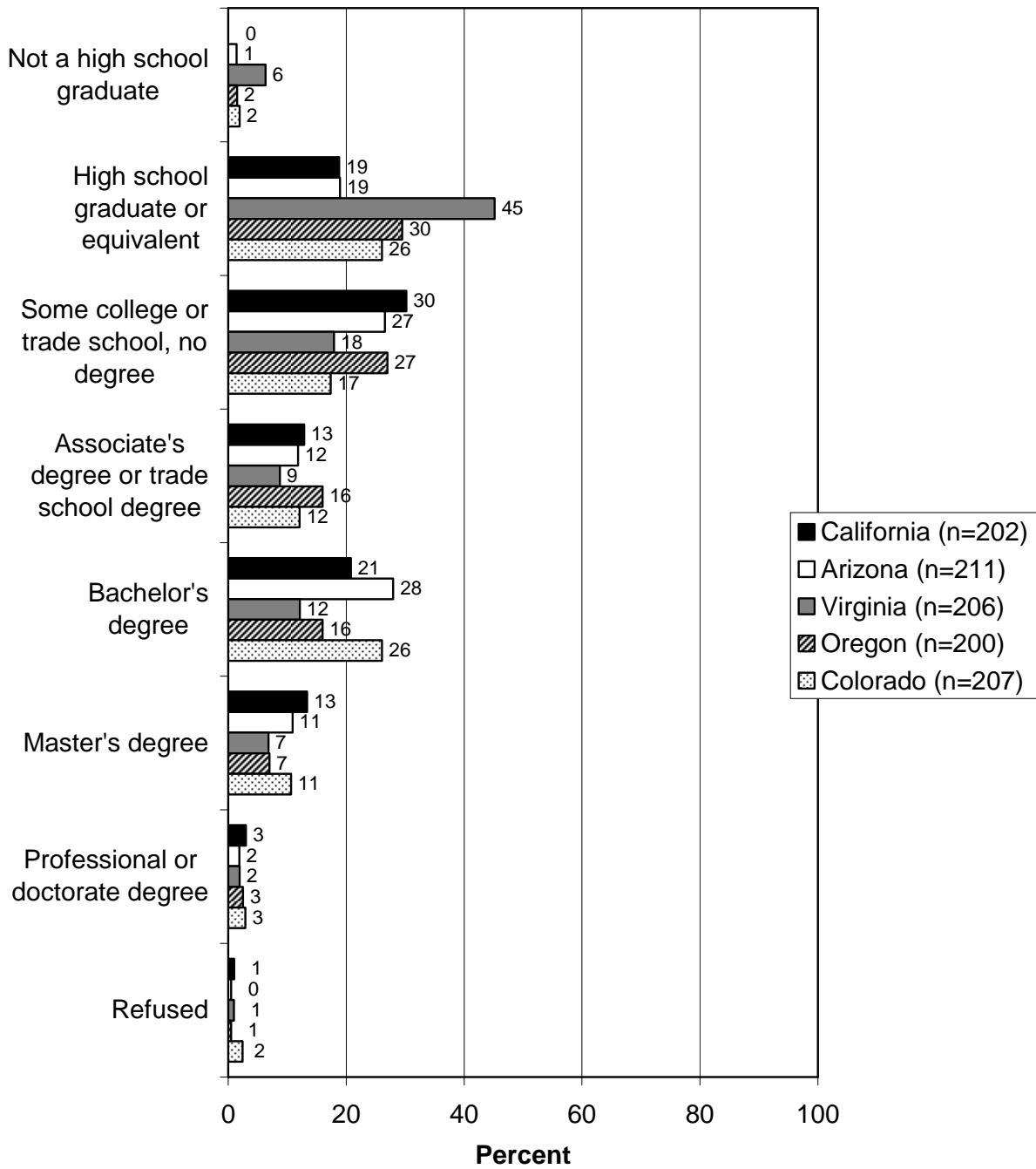
Q228. Which conservation or sportsman's organizations are you currently a member of or have donated to in the past 12 months? (Asked of those who are currently members of or have donated to any conservation or sportsman's organizations in the past 12 months.)
(Part 2.)



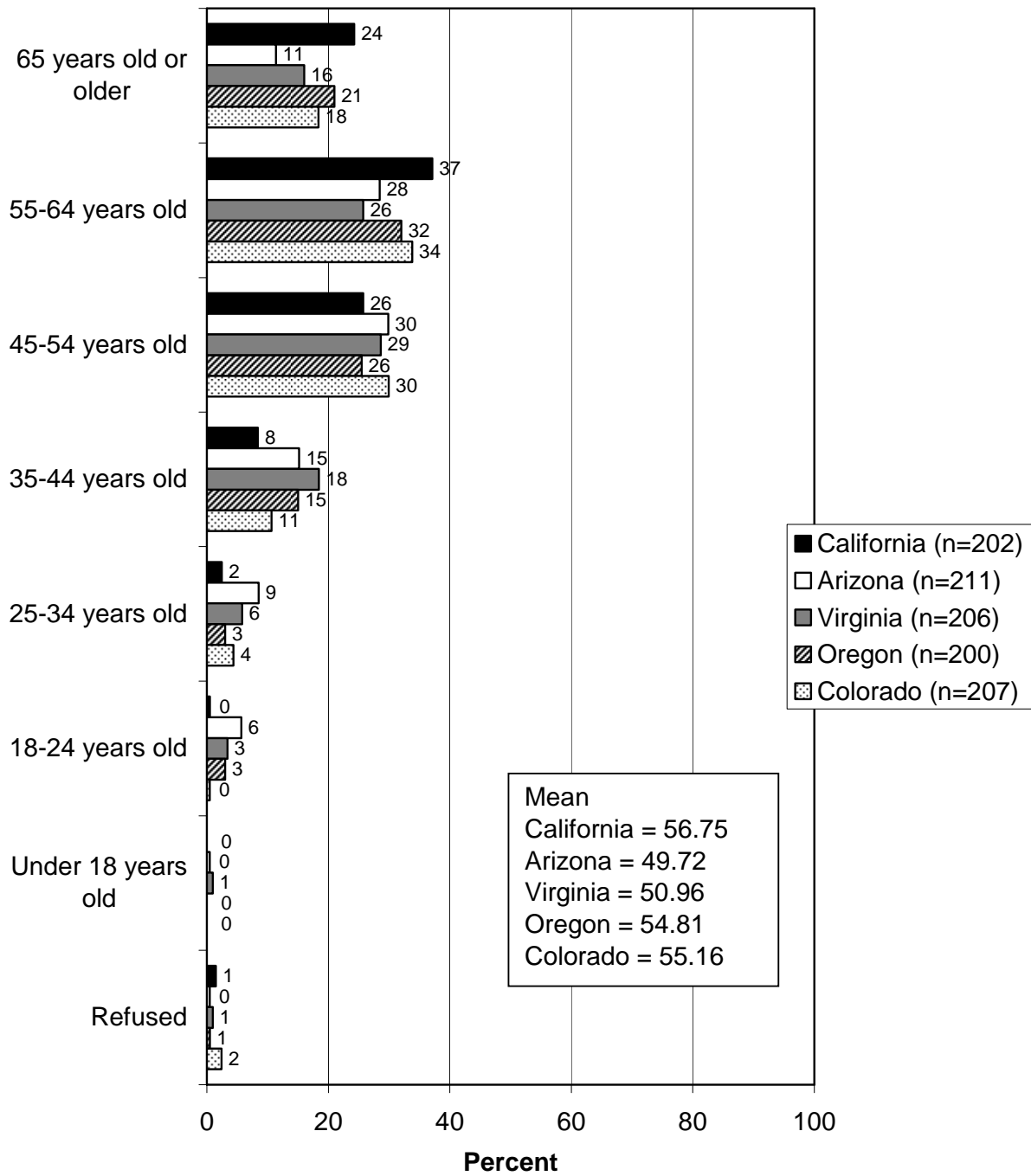
Q232. Do you consider your place of residence to be a large city or urban area, a suburban area, a small city or town, a rural area on a farm or ranch, or a rural area not on a farm or ranch?



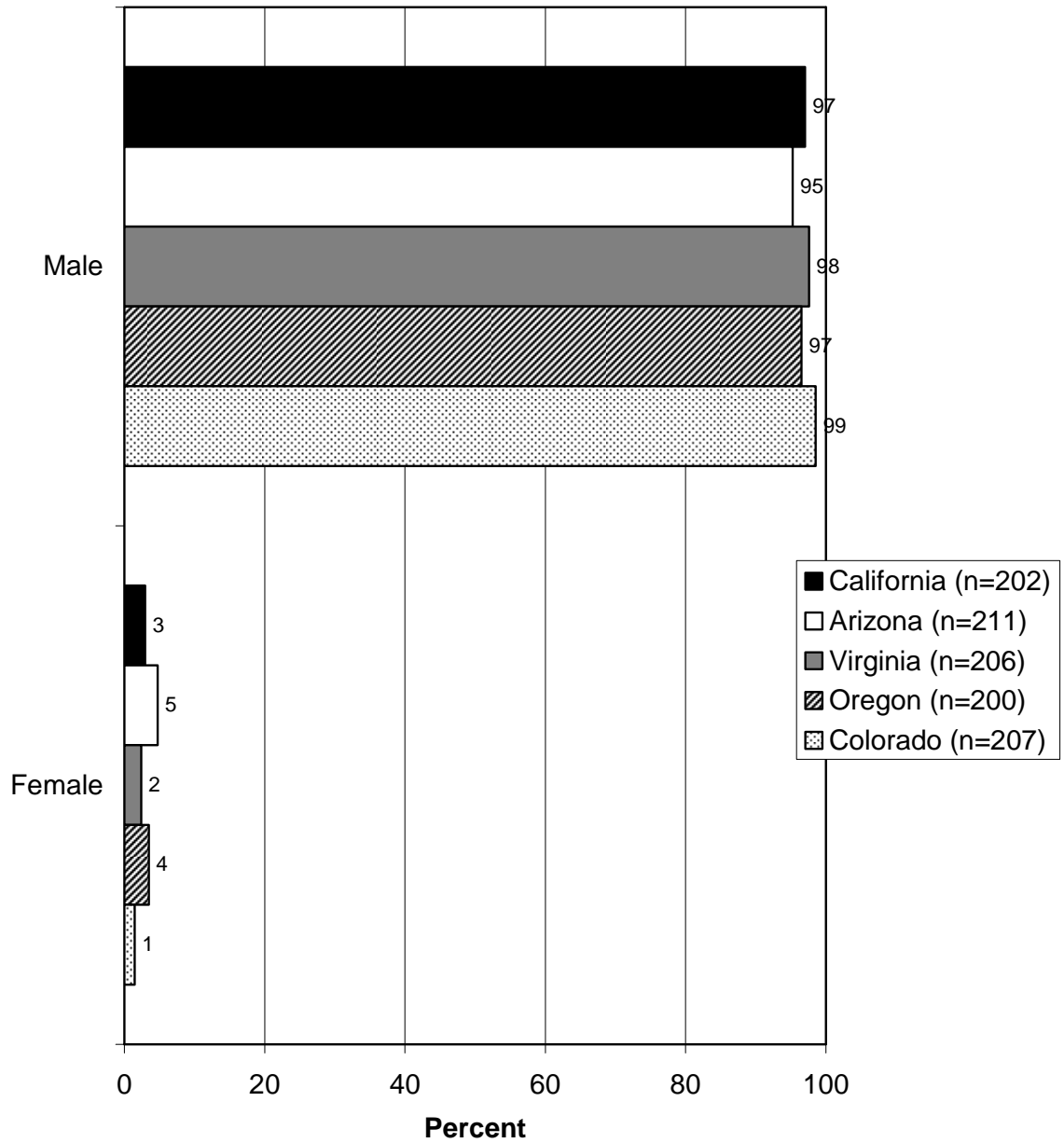
Q233. What is the highest level of education you have completed?



Q234. Respondent's age.



Q240. Respondent's gender (observed by interviewer, not asked).



FOCUS GROUP RESULTS

This section discusses the results of the focus groups conducted in Phoenix, Arizona and Denver, Colorado in June 2008. The focus groups were recorded for further analysis. The most important use of the focus groups was in the testing of findings from the survey. Throughout this section, direct quotations from shooters in the focus groups are listed in order of topic (topic headings appear in bold throughout).

EXPERIENCES WITH CLOSURES OF SHOOTING AREAS AND RANGES ON FEDERAL LANDS

The moderator began by asking focus group participants to describe their experiences at shooting areas and ranges, and to discuss any experiences with areas and ranges being closed to shooting.

- Several participants said they recalled ranges or facilities they had previously used being closed; in some cases, these individuals said they were unsure of the reasons for the closures. One participant said that he thought an undesignated shooting area had been closed because of hazardous waste, while another participant said that urbanization and growth were leading to ranges and shooting areas being shut down.
- One participant mentioned that greater restrictions on shooting areas generally made access more difficult, and another participant mentioned a private range whose shooting range underwent lead abatement issues.
 - In general, Phoenix shooters did not report difficulties with access, as it was mentioned that Arizona shooting areas are fairly easy to reach in most instances.
- During the discussion about possible trends in shooting areas and ranges being shut down, several shooters in each group remarked about the need to share land and recreational areas with other recreationists (i.e., not recreational shooters). Some

participants in the groups speculated that such a need could probably lead to shooting being forbidden in certain areas in order to accommodate all recreationists.

- A majority of participants recognized the issue of people littering and leaving behind trash at shooting sites and designated/non-designated shooting areas. A number of shooters in the groups mentioned ethical standards and/or the proper or expected decorum of recreationists (shooters and non-shooters alike) while on public lands. On this point, several participants remarked that it was unfortunate that litter and environmental damage happened to be a product of “people holding guns.”
- Some participants mentioned to the moderator the need to distinguish recreational or sports shooters from casual visitors to public lands who happen to shoot firearms. It should be noted that one of the major themes in this early discussion was the need to separate “true sportsmen” from other, careless recreationists who litter or cause property or environmental damage. Equally important is the fact that many shooters from the groups mentioned instances in which they themselves picked up trash or litter after other recreationists, which some related to the idea of “true sportsmen” being stewards of the land and their natural resources.
- In general, shooters in the groups appeared to prefer non-designated shooting areas over designated or formal ranges. This was primarily for reasons of convenience (e.g., time issues), as well as the fact that non-designated areas tended to be what most shooters in the groups are accustomed to.

Experience with federal lands or ranges being closed to shooting:

“There are areas that were once public lands, but because of public growth, are now within city limits and [closed].” -- Phoenix recreational shooter

"Some of the ones in fire hazard areas [are the only ones I know of that have been closed]."

-- Phoenix recreational shooter

"Right outside of an old quarry, which has been a shooting place for many years, was just closed. It was run by the U.S. Forest Service. I wasn't given any reason why it was closed. The ranger said there were some issues with local landowners." -- Denver recreational shooter

"Lefthand Canyon near Boulder has been a popular plinking spot forever. That was closed because they said there was too much waste and too hazardous. That was a piss-poor excuse, I thought." -- Denver recreational shooter

"There aren't that many shooting ranges [on public lands] anymore." -- Denver recreational shooter

Concern about the trend of shooting areas being closed down:

"They just shut down [a range I've used] for off-road use; you can only get in through the main road now. That makes it so that you can only get in by walking. And if they do that, it's going to mess it up for everybody." -- Phoenix recreational shooter

"The last few years we've seen the rent at our range in Bailey go up and we lease from the Forest Service. It's a 1940's-era rifle range, put together by engineers in World War II, and the gun club was started in the sixties. They decided to up the cost of our rent, and then told us we had to shut down because of lead abatement. After some negotiation, our club was forced to make it a public shooting area on a per diem rate." -- Denver recreational shooter

Potential reasons why agencies would close ranges or prohibit shooting in some areas:

"I think a lot of [range closings] have to do with the environmentalists. You get people abusing [the lands] and tearing them up, and that causes problems for all of us." -- Phoenix recreational shooter

"I've heard a number of comments about shutting down recreational shooting and I think it's primarily related to the overall increase in the use of public land by other people. You used to be able to go out recreational shooting in Echo Canyon, up against Camelback Mountain. If you walked in there with a gun now, you'd probably be arrested. You set up to start shooting and the next thing you know there's people walking and driving around you. [These days], there's just a lot more people and less space." -- Phoenix recreational shooter

"I think there are more people now: I know every time I try to set up [for recreational shooting], I got hot air ballooners landing, I got all kinds of weird stuff happening around me." -- Phoenix recreational shooter

"I've noticed a lot of sites where people shoot recreationally that are covered with trash people leave behind. Whatever they shoot up, they just leave it behind." -- Phoenix recreational shooter

"The code of ethics of picking up after yourself as gone by the wayside. Not necessarily by us in this room, but there's a lot of people out there [who do litter]. It's the same way with my neighborhood: I have to go when I walk my dog and police everybody by picking up trash. And that says a lot more about people than it does about shooters." -- Phoenix recreational shooter

"I'll handle my firearm the right way, shoot my paper target, and bring it home with me. The guy next to me, he's got a television [that he's shooting at] that he's leaving there. But it's not because he's a shooter; it's because he's an irresponsible person. He probably throws his McDonald's out the window when he leaves there." -- Phoenix recreational shooter

Problems on public lands while shooting:

"We were [at a site for shooting] about three weeks ago and there was a tree just covered with bottles and cans that were shot up. And obviously it was a shooter, somebody with a firearm. So, because I was the last one there, I picked up everything to get it out of there." -- Phoenix recreational shooter

"It just so happens that [the people littering and causing environmental damage] are holding guns." -- Phoenix recreational shooter

"The concerns [among state agencies and the Bureau of Land Management] aren't about shooters [specifically]; the concerns are with people using these [shooting] sites for trash dumps. People would drive an extra ten miles out of town to throw out their refrigerator." -- Denver recreational shooter

"Where I-70 and Sixth Avenue meet, it was the county dump. It was open to shooting, and everyone would sight in their rifle. Well, when they moved the dump, the county sheriff's department refused to keep the area open to public shooting. A public service company promised to establish another range, and that was twenty years ago and I haven't seen zip." -- Denver recreational shooter

Preference for non-designated shooting areas over designated shooting areas:

"There are areas where people go and shoot that have wonderful backstops and in areas conducive to that kind of behavior. I don't go to a fresh spot every time." -- Phoenix recreational shooter

"I think the structure [has a lot to do with the preference for non-designated shooting areas]: if you've been to Ben Avery [Shooting Facility], they're really concerned with safety features, because they're dealing with a hundred people. But a lot of us take friends, family – it's more of a social environment than just shooting." -- Phoenix recreational shooter

"Some of it is an issue of time: if you go to Ben Avery [Shooting Facility], and you want to shoot a hundred rounds, you're going to be there for three or four hours. Whereas you can go out in the desert and be in and out in an hour. You go sight in your rifle out in the boonies really easily." -- Phoenix recreational shooter

"I think one major need is some formal, designated, supervised shooting area open to the public. That's an important need." -- Denver recreational shooter

"[Some shooters] go to these places and just trash everything, and hunters' and shooters' reputations take a beating anyway. [A formalized range] might help avoid that kind of thing from happening." -- Denver recreational shooter

"My preference would be just to go to a public place where I can shoot. I don't care about clay pigeons and all that. I just care if it's open." -- Denver recreational shooter

"I prefer just to go shoot where I want to shoot. And not have to deal with the mess that a lot of [shooters] leave. Somebody should put a sign up that says 'Clean your trash up,' but I don't want to deal with that." -- Denver recreational shooter

"You always have to have someone in charge. People aren't going to obey a rule because they see a sign." -- Denver recreational shooter

"You can have an area set aside for general all-around shooting, and then another area with a range master. You can have both." -- Denver recreational shooter

Access issues:

"I think we have [in Arizona] a lot of accessible land – the land is available." -- Phoenix recreational shooter

“If they shut down a piece of the forest, they’re going to take another piece, and another. They’re going to make it so that we have just a limited amount of area to hunt and shoot in.” -- Phoenix recreational shooter

EXPOSURE TO UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR ON FEDERAL LANDS

The moderator asked focus group participants to describe their exposure to any unsafe shooting practices or irresponsible behavior on federal public lands.

- As previously mentioned, nearly all the participants in the focus groups identified the major issues associated with irresponsible behavior on public lands without prompting (with much of these mentions occurring in the earlier discussion on range/shooting area closures). Shooters in the two groups mentioned trash and litter, the dumping of large items such as appliances and televisions, and environmental damage.
- Throughout the discussion, and as previously mentioned, the groups reiterated the difference between responsible recreational shooters and careless or ignorant visitors to public lands who routinely behave irresponsibly.
- In general, trash, litter (particularly the dumping of appliances and televisions, which was cited several times throughout the groups), and environmental damage were more often mentioned by the group participants than reports of unsafe behavior, such as reckless shooting. Though some participants did mention accounts of unsafe behavior by other shooters or recreationists, the majority of the discussion was devoted to trash, litter, and environmental damage.

Opinions on trash and litter:

"When I go out shooting, there are guys who know where I go shooting and where other groups go. And they follow us and wait until we leave, and go and pick up every cartridge case behind us because they can get a buck or two bucks a pound. ...People generally take care of their own problems." -- Phoenix recreational shooter

"If trash is the big problem with people shooting on federal lands – hunters generally clean up their sites; cowboys don't. Is closing land really going to make a difference?" -- Phoenix recreational shooter

"On state land in Kansas, there was a lot of trash there. It was just boxes and all kinds of makeshift targets that people neglected to pick up. People brought stuff specifically to shoot and then didn't take it out with them." -- Denver recreational shooter

"Rampart Range by Colorado Springs is a real mess. There's trash, trash, trash, trash. I had some stuff that we threw in bags but we barely made a dent: there's old televisions, so much crap. Why do people do that? In my opinion, as sportsmen, if we see somebody doing stuff like that, we shouldn't keep our mouths shut." -- Denver recreational shooter

Opinions on the dumping of large items:

"Computers and TVs are favorite [things for people to shoot], for some reason." -- Phoenix recreational shooter

"I see more people shooting things that have been left. I think that's the predominant problem, and it's kind of the chicken and the egg thing: did somebody bring it out to shoot it, or did somebody shoot it because it was out there? I think that more often than not, you're seeing trash that's been shot, rather than people bringing out trash to shoot." -- Phoenix recreational shooter

"People like to shoot at old propane cylinders. And sometimes there's some gas still in them, and it gets exciting, but then they just leave them there." -- Denver recreational shooter

Opinions on unsafe behavior:

"When somebody sets up a target in the middle of the road, I'd bet money that that person learned that from their dad. You've got to raise your kids right. When you get out in the boonies, you're going to have a rotten apple in every batch." -- Phoenix recreational shooter

Opinions on trash from other recreationists:

"There's just more people, and the campers use the campgrounds and the majority of the outdoorsmen go away from that, and take care of it themselves and clean up after themselves." -- Phoenix recreational shooter

"Yeah, I've experienced that. Some people would put their trash in small dumpsters, and when those disappear [it's unlikely that people will seek out proper places to dispose of trash]." -- Denver recreational shooter

Opinions on environmental damage:

"Some areas are terrible, [in terms of] holes being shot in everything. I think a lot of younger kids [are responsible] – you don't see a lot of adults doing that crap." -- Phoenix recreational shooter

"I've seen a lot of shot-up trees around designated shooting areas. We always try to avoid them; there's plenty of dead ones." -- Denver recreational shooter

"My wife and I rode our motorcycles down to New Mexico and saw a lot of cacti full of holes [from people shooting at them]. Those things take a long time to grow, too." -- Denver recreational shooter

OPINIONS ON DETERRENCE OF UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR ON FEDERAL LANDS

The moderator asked participants to describe what they would consider feasible or appropriate methods of deterrence of unsafe shooting practices and irresponsible behavior. The discussion involved deterrence methods from both an agency point of view as well as steps shooters could take themselves to curb such problematic behavior.

- Several participants in each group were largely supportive of increased enforcement and/or supervision at shooting ranges and sites. These participants indicated that enforcement and the assessment of fines were likely to be the most effective ways to eliminate irresponsible behavior.

- At the same time, other participants in the groups emphasized the need to bolster public awareness of environmental damage in the form of education, effective messaging campaigns (some cited the “Don’t mess with Texas” campaign as a successful example of anti-littering efforts in that state), and agency outreach. It should be noted that such suggestions did not appear to be in conflict with those advocating increased enforcement; rather, participants emphasizing the need for education and awareness of the effects of litter spoke of complementing enforcement efforts with communication.

- When asked about the probable willingness of recreational shooters to report those they observed causing property damage or behaving irresponsibly, nearly all focus group participants responded that they would be willing to report others if the circumstances called for it. Several shooters in the groups mentioned that the prevalence of cellular phones ought to make it easier for sportsmen to quickly report instances of property damage, irresponsible behavior, etc.

- In general, though participants in the groups appeared supportive of voluntary clean-up days (with several shooters saying they had participated in such events in

the past), they also remained somewhat pessimistic about the tendency for litter to return rather quickly to ranges and shooting areas relatively soon after such clean-up events taking place. Still, it should be said that most shooters in the groups remained in support of such events.

- The moderator brought up the issuing of fines through enforcement as a means of curbing irresponsible behavior, and many participants in the groups were again strongly supportive of such a measure. It was noted by some that a heavy fine tends to be the only thing that gets across to those breaking the law (“sure and certain punishment,” as one participant put it). Several shooters in the focus groups said that the threat of heavy fines should be spelled out on signage in shooting areas and designated and non-designated sites.
- Throughout this discussion, a few participants reiterated the need for proper firearms training and increased education. One participant suggested that manufacturers place anti-littering or responsible shooting messages on ammunition boxes, similar to warnings on cigarettes packages. A hotline was also suggested as a way for members of the public to quickly report instances of property damage, irresponsible behavior, etc.
- One aspect of the discussion concerned the manner in which shooters would be likely to respond to public service announcements and messages. As an example, the moderator asked for opinions of the word “lazy” being used in anti-litter messages or messages designed to curb irresponsible behavior. In general, participants were not enthusiastic about this term, with several suggesting that messages go in the opposite direction, such as using the word “responsible” and/or emphasizing the concept of responsibility. Several participants also noted the likely tendency for shooters to instantly brush off messages (e.g., “It doesn’t apply to me”),

and that the word “lazy” would therefore be unlikely to help bring about the intended effect of decreased litter and irresponsible behavior.

Regarding agencies’ increasing enforcement or supervision as a means of preventing property damage and unsafe behavior:

“There are tens of millions of dollars spent on conserving animals in other countries that we’ll never go to; the least they could do is spend a little time cleaning up here for our taxpayers. I don’t see how [the occasional irresponsible shooting on public lands] is a serious threat to the universe.” -- Phoenix recreational shooter

“They could shut the whole forest down and it’s not going to solve everything.” -- Phoenix recreational shooter

“There should be public service announcements about everything, like ‘Remember to find a good backstop when you’re shooting in the field,’ ‘Kindness counts’ – it’s just simple stuff like that.” -- Phoenix recreational shooter

“I don’t have a problem with more enforcement. In the last couple of years, Game and Fish has started citing people for leaving shotgun shells. They’ll cite you for every shell they find that you don’t pick up. Has that improved peoples’ attitudes? I think it has. I don’t have any problems with more enforcement.” -- Phoenix recreational shooter

“If you go outside in New Mexico, Idaho, Wyoming, they’re very good about identifying which areas are public, when you’re leaving public land, that kind of thing. And they’ll keep you from making a mistake and shooting on someone’s private property. Arizona is not good about identifying what’s public and what’s private. There’s a big problem with people that have private land that blocks access to public land.” -- Phoenix recreational shooter

“Dumpsters would be a start [to fixing the problem of trash].” -- Denver recreational shooter

“Public awareness, too: when I was growing up you had ‘Give a hoot, don’t pollute,’ and the forest fire bear; you don’t see that anymore.” -- Denver recreational shooter

“If they had more money, they should hire more staff. Some people do the right thing because they’re afraid to get caught. If you had more staff, more rangers, you could have volunteers to come out and check on people.” -- Denver recreational shooter

“We need a watchdog, but we have to start in the schools.” -- Denver recreational shooter

“It’s interesting that we talk about enforcement: we used to think of the friendly neighborhood guy who would come and talk to you, and now we think of enforcement as cops who go out and

stop people from [breaking the law]. ...There should be a different focus. Those guys would rather spend their time on biology than be an officer with a sidearm." -- Denver recreational shooter

On shooters reporting unsafe behavior, irresponsible behavior, littering and other problems to authorities if they knew it would help prevent some recreational shooting areas and ranges on federal lands from being closed:

"I've seen a guy bring a car out on a tilt bed, roll it off, cover it with gas, set it on fire, and take off. I called 911, told them to get a hold of state police, and they weren't interested – I couldn't get enforcement." -- Phoenix recreational shooter

"I've seen a guy remodeling his camper, and he tore everything out and just threw it on the ground. I called the enforcement department and they found the guy, who cleaned it all up." -- Phoenix recreational shooter

"Give us the ability to report it, and we'll do it." -- Phoenix recreational shooter

If we did have one [hotline] number, and it was known that people needed to call the number – it shouldn't be our responsibility to go out there and fix the problem." -- Phoenix recreational shooter

"If I see any [damaging or irresponsible] behavior, then yes, I will report it. But I'm just saying, a shooter is a shooter if he has a firearm in his hand, and I'm kind of in that same category." -- Phoenix recreational shooter

"If we did have one [hotline] number, and it was known that people needed to call the number – it shouldn't be our responsibility to go out there and fix the problem." -- Phoenix recreational shooter

"Yes but we also have the problem of confronting a person with a gun. I'd report someone breaking the law or littering though." -- Denver recreational shooter

"I'd report [people breaking the law] to anyone: local sheriff, Fish and Game." -- Denver recreational shooter

"Everybody in the country has a cell phone with a camera: take a picture of the license plate, of people [littering or breaking the law]. Could even put it on YouTube." -- Denver recreational shooter

Opinions on scheduled 'clean-up' days at both formal and informal shooting areas:

"I'll do [an informal clean-up day] on my own." -- Phoenix recreational shooter

"The guys who do the clean up do a great job, but it's literally just weeks later [that the sites are covered with trash] again." -- Phoenix recreational shooter

"Enforcement is an issue too – I've seen county sheriffs out on the roads but if you talk to them about [problems on] Bureau of Land Management lands, they say something like, 'It's not my responsibility.'" -- Phoenix recreational shooter

"I've done a Boy Scouts clean-up day." -- Denver recreational shooter

"You have to keep it ingrained in people that littering will be enforced with \$10,000 fines."
-- Denver recreational shooter

On the imposition of fines as penalties:

"If the enforcement's not out there, they're not giving fines." -- Phoenix recreational shooter

"I think fines and enforcement will be effective to the younger generations over time."
-- Phoenix recreational shooter

"Again, it's not the shooter with etiquette who's out there doing this stuff; it's the random guy who's just popping off a few rounds, taking his TV or his computer – it's not sportsmen. You can tell who's a sportsman and who's somebody who just took something out to shoot."
-- Phoenix recreational shooter

"The problem is always someone who has a very peripheral interest in shooting; they probably got their first gun two weeks ago and have no formal training." -- Denver recreational shooter

"The cure for any social ill is sure and certain punishment. I don't know the mechanism that might put this into motion, but I would think that if you get caught littering, you're looking at a \$5,000 or \$10,000 fine. Hit them in the pocketbook." -- Denver recreational shooter

"[Signs should talk about] preserving your right to shoot; and then, on the same sign, say that if you do not respect this, you're subject to a fine of so-and-so. And then we're talking about having these Game and Fish guys enforce it." -- Denver recreational shooter

"There are certain folks who are going to poach and violate the laws regardless. There has to be a better sense of education, of gun safety and responsibility – these are dangerous weapons, and there's so little education." -- Denver recreational shooter

"You could make a portion of hunting education just about conduct on public lands, and then require people on public shooting areas to have that hunter safety." -- Denver recreational shooter

"I think the education idea is one of the most important things. A lot of kids aren't fortunate enough to have a dad who taught them responsible use. ...You wouldn't think about giving to a sixteen-year-old kid the keys to a Corvette if he hadn't had driving training or a license."
-- Denver recreational shooter

Opinions on potential messages that might work to encourage shooters to assist the land agencies in the management of shooting ranges and shooting areas:

"Any public service announcement that promotes awareness [would be a big help]." -- Phoenix recreational shooter

"We haven't talked about education: teaching our kids about respect and proper gun handling – I think that's the absent factor in this equation. The irresponsible shooter is one who has received no education or mentoring. You've got parental or supervisory education, or through a hunter education process." -- Phoenix recreational shooter

"It's an issue of money. If the people who make ammunition were to put something on each box, and put it on a prominent place, like the surgeon general's warning on cigarette boxes – then a reminder would be on every box. But the people who are buying boxes of ammunition [for the first time] – it would have a chance of stopping the 'borderline' people [from littering]."
-- Denver recreational shooter

On curtailing illegal dumping:

"Everybody knows illegal dumping is wrong – even with a million TV ads, you're still going to have people dumping all over the place." -- Phoenix recreational shooter

"When Game and Fish set up their hotline for poaching, it had a serious impact on poaching. If somebody made a conscientious effort to make the public aware that there's a way to report things like that, [it might work]." -- Phoenix recreational shooter

"I don't think it would hurt to have some public service announcements about cleaning up after yourself outdoors." -- Phoenix recreational shooter

"I think identifying specific violated areas and assigning some sort of enforcement to them [is necessary]." -- Denver recreational shooter

Curtailing property damage – such as shooting at signs, trash cans, or structures – and unsafe shooting practices, such as target shooting with no backstop or using inappropriate targets:

“When you start targeting people with specific messages, [a lot of people] will start saying, ‘Well, that doesn’t pertain to me.’” -- Phoenix recreational shooter

“Many people with firearms have an attitude in the field, and it’s tough to go up and talk to them. So is bringing in law enforcement really the answer?” -- Denver recreational shooter

Regarding the word “lazy” in messages:

“I think if you say ‘lazy,’ people will shut their minds off, because it’s an insult.” -- Phoenix recreational shooter

“I think ‘responsible’ is a better word to reach people.” -- Phoenix recreational shooter

“It’s a respect issue. They have that message out there: ‘You pack it in, you pack it out.’ There are problems all over this city, and [littering] is not good, but it’s not that big of a problem.” -- Phoenix recreational shooter

“Everybody shoots down advertising because they don’t see the results of the people who are actually affected by it.” -- Denver recreational shooter

“Part of the problem is that we as a group have this NRA attitude, by which I mean we’re all afraid that giving a little will cost us a lot. And in giving up that little bit, we’re always afraid we’re going to lose it all. When something goes wrong, the first thing the government wants to do is shut everything down.” -- Denver recreational shooter

OPINIONS ON MESSAGES TO CURB UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR ON FEDERAL LANDS

This section of the focus group analysis examines shooters' reactions to the messages tested in the telephone survey. The analysis below is followed by shooter reactions to the individual messages (messages appear in bold throughout).

- In general, most focus group participants reacted positively to the shorter messages, whereas most of the longer messages received less enthusiastic responses (though there were some exceptions). Several participants said that longer messages left open the possibility of misinterpretation, or simply ran the risk of being too lengthy to effectively resonate with shooters and other recreationists.
- The focus groups indicate that shooters value positive messages over messages emphasizing negative outcomes or consequences. However, it should also be noted that a majority of participants supported language on signs and in public service announcements referencing fines and other punitive steps. The consensus for effective messaging seemed to be a concise, positive message in bold print/large font, accompanied (underneath or elsewhere) by descriptions of fines and enforcement actions that would be taken against those littering, causing property damage, behaving irresponsibly, etc.
- Though anti-gun and anti-shooting interests were addressed as threats to sport shooting and the availability of shooting ranges and areas, shooters in the groups appeared reluctant to endorse some of the messages that pitted the two sides against one another (i.e., recreational shooters versus anti-shooters). This relates back to most of the shooters' preference for positive messages over negative ones.

- The following bullets address responses to each individual message:
- “Keep it clean. Keep it open”: This message was favorably received; it was seen as short, to the point, and clear. There was the suggestion that this message be accompanied with a visual, such as the outline of a firearm or cartridge cases.
 - “You can be fined for not cleaning up your shooting debris and litter”: This message was favorably received, though several participants suggested changing the word “can” to “will” (i.e., “You *will* be fined...”).
 - “Leaving behind shooting debris and other litter gives shooters a bad reputation”: This message was not very well received, with some shooters in the groups describing it as needlessly complicated and straying from the intended point. Also, several participants noted that those littering and behaving irresponsibly were unlikely to care much about the reputation of shooters.
 - “Don’t trash it. Don’t help anti-hunters and anti-shooters close down shooting on public lands”: This message was generally viewed as being too long, and there was some doubt about whether or not the message would have any impact.
 - “Why help anti-hunters and anti-shooters win? Clean up your shooting area or range”: Most participants agreed with the message, although several emphasized the importance of choosing a proper medium for it. For example, one participant said such a message would probably work better in a shooting magazine rather than a sign or other public announcement.
 - “Irresponsible behavior provides ammunition to anti-hunting and anti-shooting groups”: This message was somewhat well received, though it was suggested that the statement be changed to, “Irresponsible behavior by hunters and shooters causes anti-hunting and anti-shooting attitudes.” Also, one participant in the Denver group suggested, “Responsible shooters clean up their litter and shoot safely.”
 - “Anti-hunters and anti-shooters want you to practice unethical and unsafe shooting and not pick up your shells. It gives them ammunition to close down

public shooting areas”: This message received the highest number of negative remarks, with participants criticizing its length as well as its veracity.

- “Irresponsible behavior causes shooting areas and ranges on federal lands to be shut down”: This message was better received in the Phoenix group than in the Denver group, with some participants in the latter commenting about the abstract nature of irresponsible behavior.
- “Irresponsible behavior robs you and your children of a place to shoot”: This message was fairly poorly received, primarily due to the perception that it places blame on the shooters.
- “Protect your freedom to shoot on federal lands. Shoot responsibly”: This message was relatively well received, although some participants still questioned the ability of messages to appeal to non-sportsmen and occasional recreationists.
- “Protect public sport shooting. Respect the land. Respect the sport”: This message was very well received in both groups, with several participants commenting that it emphasized everything it needed to.
- “Irresponsible behavior is a threat to the future of shooting sports”: This message received mixed reactions, with some commenting on its perceived negative tone.
- “Keep it safe. Keep it open”: This message was very well received.

“Keep it clean. Keep it open.”

“Gets right to the point.” -- Phoenix recreational shooter

“Simple, good point.” -- Phoenix recreational shooter

“I don’t think there’s very many people who will understand it unless there’s more to it.”
-- Phoenix recreational shooter

“I like the statement, except it doesn’t say anything about a penalty for not keeping it clean.”
-- Denver recreational shooter

"It's cut-and-dried, simple. No need for a threat." -- Denver recreational shooter

"If you're talking bumper stickers, 'Keep it clean, keep it open' is an excellent slogan. ...But when you're at the point of shooting, it would be worth putting really descriptive [language] in it so it's apparent to everyone [what the message refers to]." -- Denver recreational shooter

"A short message is important. We all know what [Keep it clean, keep it open] means." -- Denver recreational shooter

"You can be fined for not cleaning up your shooting debris and litter."

"I don't think 'could' is a good word. 'You WILL be fined' is better. Change the wording on that one." -- Phoenix recreational shooter

"Absolutely, it's a good message." -- Phoenix recreational shooter

"Yeah, 'You WILL be fined' is better." -- Denver recreational shooter

"On highway signs, it says 'Violators will be fined,' period. And that's it." -- Denver recreational shooter

"Leaving behind shooting debris and other litter gives shooters a bad reputation."

"[People who litter] don't care about shooting's reputation. We care, but they don't." -- Phoenix recreational shooter

"The people who don't matter, don't care." -- Phoenix recreational shooter

"The guy who throws the TV set out there could care less about your reputation. He's out there doing it and it doesn't affect him. He'll leave his crap anywhere." -- Denver recreational shooter

"The short one communicates the same thing but more powerfully." -- Denver recreational shooter

"Don't trash it. Don't help anti-hunters and anti-shooters close down shooting on public lands."

"You've got to shorten that one. It's too long." -- Phoenix recreational shooter

"If it was on a commercial and they had enough time to say it, it might work." -- Phoenix recreational shooter

"It's powerful, I think." -- Denver recreational shooter

"It sounds like something you'd see in an NRA magazine. I also wouldn't give them the impression that they CAN close us down." -- Denver recreational shooter

"These messages are all effective, it just depends on where you put them. Public service announcements on television is the best place for it [to reach everyone, as opposed to only readers of hunting/shooting magazines]." -- Denver recreational shooter

Considering the difference between threats to shooting on federal lands-- anti-hunters/anti-shooters versus irresponsible shooters trashing public ranges:

"[Anti-hunters/anti-shooters and irresponsible shooters] work together. The anti-hunters/anti-shooters use the behavior of irresponsible shooters to make their arguments." -- Phoenix recreational shooter

"I think [anti-hunters/anti-shooters] are a bigger issue. No matter what our behavior or conduct was out there, they would be pushing [for closures] regardless." -- Denver recreational shooter

"Why help the anti-hunters and anti-shooters win? Clean up your shooting area/range."

"That one sounds good to me. It's the same point [as the other message addressing anti-hunters/anti-shooters], but it's worded well." -- Phoenix recreational shooter

"I like it. One thing I think would help is pointing out to people a simple message: 'By the way, littering is a felony in the state.' Make it happen." -- Denver recreational shooter

"It's all about the medium – what medium are you going to use? That slogan would be appropriate for a shooting magazine. It's a little long-winded." -- Denver recreational shooter

"Irresponsible behavior provides ammunition for anti-hunting and anti-shooting groups."

"Instead of 'provides' it should say 'causes.'" -- Phoenix recreational shooter

"But people who are irresponsible won't care anyway." -- Phoenix recreational shooter

"True, I agree with it." -- Denver recreational shooter

"Most of the people who are against [shooting] are against us already; their minds aren't changed by irresponsible shooting, because they have preconceived notions based on what they see on television." -- Denver recreational shooter

"I think it's saying too much – you can condense all that. Get to the point." -- Denver recreational shooter

"Anti-hunters and anti-shooters want you to practice unethical and unsafe shooting and not pick up your shells – it gives them ammunition to close down public shooting areas."

"That's too much. You're also implying that [anti-hunters/anti-shooters] have some power we don't have. I feel like they already have the upper hand on us before we can even present our side." -- Phoenix recreational shooter

"Even worse – it's much too long. You get bored before you even finish the sentence." -- Denver recreational shooter

"Irresponsible behavior causes shooting areas and ranges on federal lands to shut down."

"That's better. But then again, irresponsible driving on the roads doesn't cause roads to be shut down." -- Phoenix recreational shooter

"If it gets that bad in a particular area, you just need to go out and arrest certain people." -- Phoenix recreational shooter

"If Game and Fish or the sheriff's department would spend a little bit of time policing these areas like they do other places, they would eventually catch some of these people." -- Phoenix recreational shooter

"No, I think everybody knows this. It's just a waste of time to say all that." -- Denver recreational shooter

"I'm hearing a lot of 'negative' in these messages. If it was rephrased in a positive manner, like 'Irresponsible people cause people to lose their right to shoot.' Instead of, 'If you keep it like this, it's giving the people the right to close these ranges.'" -- Denver recreational shooter

"The abstraction of irresponsible behavior – what the hell is that?" -- Denver recreational shooter

"You could say, 'Responsible shooters clean up their mess.' That's positive. Or, 'Responsible shooters shoot safely.' Instead of writing a short story, just hit it right there on the head."

-- Denver recreational shooter

"Irresponsible behavior robs you and your children of a place to shoot."

"The perpetrators aren't typically the guys bringing their kids out." -- Phoenix recreational shooter

"It just doesn't make sense. I didn't like that one." -- Phoenix recreational shooter

"Ninety-eight percent of the problem is the general public, not outdoorsmen. I think the advertising should focus on what's going to happen to you if you [break a law]." -- Phoenix recreational shooter

"I like it. It covers the unsafe shooting part as well as littering." -- Denver recreational shooter

"Still negative reinforcement, though. Some people don't respond to that." -- Denver recreational shooter

"How about, 'Responsible shooters guarantee the future for their children.'" -- Denver recreational shooter

"Protect your freedom to shoot on federal lands. Shoot responsibly."

"That makes sense. I like that one." -- Phoenix recreational shooter

"It's a good one. Maybe you could take ten seconds at the end to say something about focusing on backstops." -- Phoenix recreational shooter

"That's a good one – positive approach." -- Denver recreational shooter

"I don't think most shooters think about the fact that they're shooting on public lands. We keep talking about the guy who throws a TV set out – he might not even be a shooter. He might be a guy just throwing a TV set out." -- Denver recreational shooter

“Protect public sport shooting. Respect the land. Respect the sport.”

“Nice, I like that one.” -- Phoenix recreational shooter

“I like to hear [shooting] referred to as a sport instead of as a ‘behavior.’” -- Phoenix recreational shooter

“Yeah, that one’s good.” -- Denver recreational shooter

“The three S’s: safety, shooting, sport.” -- Denver recreational shooter

“A negative message conjures up the federal government saying they’re going to take it all away from us. The last thing anybody here wants to have is the federal government – or even the state government for that matter – telling you what you can do. And anytime you get the camel’s nose under the tent, people start getting upset. And a positive message puts the power with you, instead of saying what you can’t do.” -- Denver recreational shooter

“Irresponsible behavior is a threat to the future of the shooting sports.”

“I think it’s true. I don’t think it’s the best message we’ve heard. When you start with the negative, the mind is already turned away from it. They take offense.” -- Phoenix recreational shooter

“It all depends on who the target audience is. If you’re in a hunting magazine, or you’re at the point of shooting and you’re talking about signs, then I don’t think hunters and shooters really object to saying it like it is. But they’re a little leery of putting messages out to the general public that make them think, ‘Hey, we could shut these lands down if we want!’” -- Denver recreational shooter

“Keep it safe. Keep it open.”

“I like the ‘Keep it safe, keep it open,’ and then in fine print, say what will happen if you do break the law.” -- Phoenix recreational shooter

“Yes, absolutely. That’s pretty brief and it hits the point. Bumper sticker-ready.” -- Denver recreational shooter

“Safe is general but it’s not as abstract as ‘responsible’ and ‘irresponsible.’ People know what that means.” -- Denver recreational shooter

CONCLUSIONS AND COMMUNICATIONS IMPLICATIONS

UNSAFE SHOOTING PRACTICES AND IRRESPONSIBLE BEHAVIOR ON FEDERAL LANDS

Shooter Exposure and Experiences

- Though a majority of recreational shooters have not had direct experience with a range or shooting area they use being shut down, it is clear that litter and irresponsible behavior are persistent and fairly widespread problems at ranges and shooting areas in California, Arizona, Virginia, Oregon, and Colorado. A majority of recreational shooters from each state in the survey and numerous participants in the focus groups indicated that unsafe shooting behavior, irresponsible behavior, environmental damage, property damage, shooting debris, and litter are currently affecting the quality of their shooting experiences. Among those who have experienced a shooting area or range they have used on federal land being closed, litter and trash and property damage were among the top perceived reasons for such closures.

- At the same time, participation in shooting activities on federal public lands is high, and recreational shooters in the five states overwhelmingly consider shooting areas and ranges on federal lands to be very important to their shooting participation (74-86% of shooters from the survey gave this answer, a finding reflected in the comments of numerous focus group participants). As such, it appears that many recreational shooters are aware of and concerned about the deteriorating situation in many shooting areas and ranges on federal lands across the country. Convincing recreational shooters of the need for action should therefore be a matter of simply reinforcing what many are already observing for themselves at ranges and shooting areas.

Shooter Awareness and Self-Policing

- The overwhelming majority of recreational shooters (87-94% of all shooters from the survey) say that self-policing should be the role hunters and shooters have in keeping recreational shooting areas and ranges clean on federal lands. This sentiment was echoed in the focus groups, as numerous participants spoke about the need for sportsmen to reinforce responsible behavior and act as stewards of the land. It should also be noted that substantial percentages of recreational shooters would be likely to say something to people they observe participating in unsafe or irresponsible behavior or littering; recreational shooters are also very likely to take it upon themselves to report unsafe or irresponsible behavior or littering at shooting areas and ranges (the latter finding confirmed by the focus groups). These findings should be taken into account when developing messages and communications campaigns aimed at shooters, particularly as the concept of the “true sportsmen” and/or “steward of the land” appeared to resonate strongly with focus group participants (note the recurrence of the words “responsible” and “responsibility” in the various focus group comments throughout).

Clean-up Days and Events

- Substantial percentages of recreational shooters from the survey said they would be likely to participate in an organized volunteer clean-up day, and such events would be valuable in furthering the image of the “true sportsmen” as discussed above. Coordinated, well-organized events would also be useful in raising awareness of anti-littering and “responsible behavior” messages, particularly since adult recreational shooters may be likely to bring their children with them. In the larger sense, such events may help to further a valuable sense of contribution in shooters who feel empowered to maintain the well-being of their preferred shooting areas and ranges.

MESSAGE TESTING

General Themes

- The survey found – and the focus groups confirmed – that recreational shooters value simple, positive messages that resonate clearly. Many of the longer messages were noted for being open to misinterpretation, and most of the shooters in the focus groups lacked enthusiasm for messages they perceived as focusing solely on negative outcomes. Among the messages that tested best in the survey and received high marks in the focus groups were, “Keep it safe, keep it open,” “Keep it clean, keep it open,” “You can be fined for not cleaning up your shooting debris and litter,” (with the suggestion that “can” be replaced with “will” in the latter message) and “Protect public sport shooting. Respect the land. Respect the sport.” This last message was popular for its inclusion of the word “respect” and its appeal to responsibility, ethical behavior, and values. Numerous participants in the focus groups spoke of the importance of responsibility and the need for sportsmen to educate the less experienced on proper decorum while using public lands. Successful messages will incorporate this theme into the larger goal of curbing irresponsible and unsafe behavior on federal public lands. It should be noted that some messages will invariably prove more effective in certain states than in others, and this report provides baseline information on the similarities and differences in preferences for messages in the five states that made up the study.

- The following list outlines some of the major reasons why some communications and outreach campaigns are unsuccessful:
 - Appropriate and adequate financial and personnel resources are not allocated to efforts – many programs and efforts are woefully underfunded from the start.
 - Specific outreach goals and program objectives are not specified or committed to writing.
 - Target audiences are not identified; programs attempt to “educate” the “general public.” Programs attempt to be all things to all people.

- Target audience knowledge levels, opinions, and attitudes toward the specific outreach topic are not adequately researched; programs begin with little scientific understanding of the target audience.
- Messages are not carefully identified and crafted. Messages are not field-tested on the audience.
- There are too many messages and these messages tend to be too complex.
- Appropriate media are not selected with the specific target audience in mind.
- There is too much emphasis on program outputs as opposed to program outcomes.
- Efforts and initiatives are not implemented long enough. Efforts need time to work and sometimes personnel get bored of the implementation phase of repeating the same messages over and over. There is too much emphasis on product and program development and not enough on implementation.
- Efforts are not evaluated quantitatively in terms of outcomes and specified goals and objectives.

Enforcement and Fines

- Despite the fact that survey respondents ranked “more law enforcement” fairly low on lists of preferred additions or changes to shooting areas and ranges, numerous focus group participants stressed the importance of emphasizing fines and other punitive steps on signage and in messaging. Focus group participants also stressed the fact that although an enforcement presence might be viewed as unnecessary supervision by some, deterrence of unsafe and irresponsible behavior would unlikely be successful without an adequate enforcement presence at problematic sites and areas. In general, one of the major overarching suggestions from the focus groups was for a combination of increased enforcement accompanied by positive messages that would include in fine print a mention of fines and/or punitive action.

Education and Communication

- Numerous comments from the survey responses and focus group discussions reflected the need for recreational shooters to have proper training and education. A widespread view among many recreational shooters is that people misbehave and act irresponsibly on public lands because they lack proper education and training, specifically firearms training. As such, agencies may wish to consider advertising firearms training and education in conjunction with messaging campaigns designed to curb littering and irresponsible behavior, as many recreational shooters believe these areas to be interrelated.

Communication from the Local Level

- In conjunction with the above, those involved in the development of messaging campaigns may wish to consider the importance of targeting audiences from the local level (i.e., from within recreational shooting communities in each state). Though federal agencies are necessary in implementing and refining the direction of communications campaigns, communication from the local level would reinforce key messages with trust and familiarity, both of which are invaluable to the effectiveness of communications. In addition, local input may be especially useful in a positive feedback loop providing evidence of improvements or progress or the restoration of opportunities. In this way, regulatory agencies would likely experience substantial support for anti-littering campaigns and management steps designed to eliminate problematic and irresponsible behavior on federal public lands.

APPENDIX: FOCUS GROUP DISCUSSION GUIDE

SHOOTING ON PUBLIC LANDS Denver, CO and Phoenix, AZ Focus Groups

I. Introduction and Welcome

- A. The purpose of this focus group is to talk about shooting behavior on public lands. This focus group follows a telephone survey completed with sport shooters in Colorado, Arizona, Oregon, Virginia, and California.**
- B. Review focus group procedures.**
- C. Participants introduce themselves and describe their level of shooting participation on public lands.**

II. Specific Issues

- All of you here have been sport shooting on federal public lands. Several federal land agencies have shut down shooting ranges and have begun to prohibit shooting in some areas recently.**
 - A. Does anyone here have experience with public lands or ranges being closed to shooting?**
 - B. About a quarter of shooters surveyed had shooting areas and ranges they had used close down. Are shooters concerned about this trend (of shooting areas being closed down)?**
 - C. Does anyone know why agencies would be closing ranges or prohibiting shooting in some areas?**
 - D. Have any of you encountered problems on public lands while shooting? (Prompt on: unsafe shooting behavior, irresponsible behavior, environmental damage, property damage, shooting debris, and litter)**
 - E. In the survey, more shooters preferred to shoot in an area not designated or typically used for recreational shooting rather than official shooting areas or at designated shooting ranges. Why do most shooters prefer non-designated shooting areas?**
 - F. Better access was the most important amenity surveyed shooters would like to see at the recreational shooting sites on federal lands. What do shooters mean by better access?**
 - G. Most shooters surveyed do not want supervision at sites. Why don't shooters want supervision, either by formal law enforcement officers or others?**

III. Specific Issues (Moderator: only keep this section if it can be covered quickly)

- A. Trash and litter.** Some land management agencies have noted that trash and litter (spent cartridge cases) at shooting areas, both designated ranges and informal shooting areas is a problem.
 - 1. Have you noted that?
 - 2. Is it a problem?
- B. Dumping of large items.** Some land management agencies have noted that at some informal shooting areas there has been dumping of larger items such as appliances (which are used as targets and then left).
 - 1. Have you noted that?
 - 2. Is it a problem?
- C. Unsafe behavior.** Some land management agencies have noted unsafe shooting behavior at these sites.
 - 1. Have you noted that?
 - 2. Is it a problem?
- D. Bathroom facilities/trash containers.** Some land management agencies have not been able to maintain bathroom facilities or do routine trash collection at some formal sites.
 - 1. Have you noted that?
 - 2. Is it a problem?
- E. Environmental Damage.** Some land management agencies have had environmental damage such as shooting at trees and vegetation.
 - 1. Have you noted that?
 - 2. Is it a problem?
- F. What types of people are causing the problems?**
- G. Is it everyone causing a few problems or a few people causing a lot of problems?**

IV. Management

- A. What do you think are the top problems with shooting on public lands and how should they be resolved?**
 - 1. Should agencies continue to close shooting ranges and shooting areas? Why or why not?
 - 2. Should agencies increase enforcement or supervision? Why or why not?
 - 3. Would supervision help curb problems and keep areas open? Why or why not?
 - 4. Shooters surveyed said they would be willing to report unsafe behavior, irresponsible behavior, littering and other problems to authorities if they knew it would help prevent some recreational shooting areas and ranges on federal lands from being closed. How could/should this work?
 - a. Would shooters really be willing to report others?

5. Should there be scheduled 'clean up' days at both formal and informal shooting areas? Why or why not?
 - a. Shooters indicate they are willing to come if the agency hosts clean up days. However when clean up days are scheduled and areas cleaned up in a few weeks the area is trashed again, and shooters feel their efforts are pointless. What can be done to prevent this?
6. Shooters surveyed said that fines would encourage them to pick up their shooting debris. What type of fine is appropriate?
 - a. How would such a penalty be imposed?

V. Messages

- A. What messages would work to encourage shooters to assist the land agencies in the management of shooting ranges and shooting areas?
- B. What can be said or done to curtail illegal dumping?
- C. What can be said or done to curtail litter such as shells, clay pigeon fragments, or food wrappers?
- D. What can be said or done to curtail property damage such as shooting at signs, trash cans, or structures?
- E. What can be said or done to curtail unsafe shooting practices such as target shooting with no backstop or using inappropriate targets?
- F. Are there any messages that we could develop around the word "lazy"? Of shooters surveyed it was the number one reason cited why people leave shooting debris.

VI. Specific Messages

- A. I am going to read a few messages designed to discourage people from leaving shooting debris or other litter behind at recreational shooting areas and ranges on federal lands. Please tell me if you agree or disagree that each message would discourage people from littering.
 1. What do you think of the statement, "Keep it clean. Keep it open."? Do you agree or disagree that it discourages littering? Why or why not?
 2. What do you think of the statement, "You can be fined for not cleaning up your shooting debris and litter." Do you agree or disagree that it discourages littering? Why or why not?
 3. What do you think of the statement, "Leaving behind shooting debris and other litter gives shooters a bad reputation." Do you agree or disagree that it discourages littering? Why or why not?
 4. What do you think of the statement, "Don't trash it. Don't help anti-hunters and anti-shooters close down shooting on public lands." Do you agree or disagree it discourages littering? Why or why not?

5. Who is the bigger threat to shooting on federal lands: anti-hunters/anti-shooters or irresponsible shooters trashing public ranges?
 6. What do you think of the statement, "Why help the anti-hunters and anti-shooters win? Clean up your shooting area/range." Do you agree or disagree it discourages littering?
- B. The following messages are designed to discourage people from participating in or causing unsafe shooting practices, property and environmental damage, and other irresponsible behavior at recreational shooting areas and ranges on federal lands**
1. What do you think of the statement, "Irresponsible behavior provides ammunition for anti-hunting and anti-shooting groups." Do you agree or disagree it discourages irresponsible behavior? Why or why not?
 2. What do you think of the statement, "Anti-hunters and anti-shooters want you to practice unethical and unsafe shooting and not pick up your shells - it gives them ammunition to close down public shooting areas." Do you agree or disagree it discourages irresponsible behavior? Why or why not?
 3. What do you think of the statement, "Irresponsible behavior causes shooting areas and ranges on federal lands to shut down." Do you agree or disagree it discourages irresponsible behavior? Why or why not?
 4. What do you think of the statement, "Irresponsible behavior robs you and your children of a place to shoot." Do you agree or disagree it discourages irresponsible behavior? Why or why not?
 5. What do you think of the statement, "Protect your freedom to shoot on federal lands. Shoot responsibly." Do you agree or disagree it discourages irresponsible behavior? Why or why not?
 6. What do you think of the statement, "Protect public sport shooting. Respect the land. Respect the sport." Do you agree or disagree it discourages irresponsible behavior? Why or why not?
 7. What do you think of the statement, "Irresponsible behavior is a threat to the future of the shooting sports." Do you agree or disagree it discourages irresponsible behavior? Why or why not?
 8. What do you think of the statement, "Keep it safe. Keep it open." Do you agree or disagree it discourages irresponsible behavior? Why or why not?

ABOUT RESPONSIVE MANAGEMENT

Responsive Management is a nationally recognized public opinion and attitude survey research firm specializing in natural resource and outdoor recreation issues. Its mission is to help natural resource and outdoor recreation agencies and organizations better understand and work with their constituents, customers, and the public.

Utilizing its in-house, full-service, computer-assisted telephone and mail survey center with 45 professional interviewers, Responsive Management has conducted more than 1,000 telephone surveys, mail surveys, personal interviews, and focus groups, as well as numerous marketing and communications plans, need assessments, and program evaluations on natural resource and outdoor recreation issues.

Clients include most of the federal and state natural resource, outdoor recreation, and environmental agencies, and most of the top conservation organizations. Responsive Management also collects attitude and opinion data for many of the nation's top universities, including the University of Southern California, Virginia Tech, Colorado State University, Auburn, Texas Tech, the University of California – Davis, Michigan State University, the University of Florida, North Carolina State University, Penn State, West Virginia University, and others.

Among the wide range of work Responsive Management has completed during the past 20 years are studies on how the general population values natural resources and outdoor recreation, and their opinions on and attitudes toward an array of natural resource-related issues. Responsive Management has conducted dozens of studies of selected groups of outdoor recreationists, including anglers, boaters, hunters, wildlife watchers, birdwatchers, park visitors, historic site visitors, hikers, and campers, as well as selected groups within the general population, such as landowners, farmers, urban and rural residents, women, senior citizens, children, Hispanics, Asians, and African-Americans. Responsive Management has conducted studies on environmental

education, endangered species, waterfowl, wetlands, water quality, and the reintroduction of numerous species such as wolves, grizzly bears, the California condor, and the Florida panther.

Responsive Management has conducted research on numerous natural resource ballot initiatives and referenda and helped agencies and organizations find alternative funding and increase their memberships and donations. Responsive Management has conducted major agency and organizational program needs assessments and helped develop more effective programs based upon a solid foundation of fact. Responsive Management has developed Web sites for natural resource organizations, conducted training workshops on the human dimensions of natural resources, and presented numerous studies each year in presentations and as keynote speakers at major natural resource, outdoor recreation, conservation, and environmental conferences and meetings.

Responsive Management has conducted research on public attitudes toward natural resources and outdoor recreation in almost every state in the United States, as well as in Canada, Australia, the United Kingdom, France, Germany, and Japan. Responsive Management routinely conducts surveys in Spanish and has also conducted surveys and focus groups in Chinese, Korean, Japanese, and Vietnamese.

Responsive Management's research has been featured in most of the nation's major media, including CNN, ESPN, *The Washington Times*, *The New York Times*, *Newsweek*, *The Wall Street Journal*, and on the front pages of *The Washington Post* and *USA Today*.

Visit the Responsive Management Website at:

www.responsivemanagement.com