

>> well, good afternoon on the east coast, good morning on the west coast.

We would like to welcome you to our interactive workshop, Bloodborne Pathogens, breaking the chain of infection.

My name is Rick Gividen.

I work at the National Indian Programs Training Center in New Mexico.

We're especially excited about today's workshop because it represents a collaboration among several DOI bureaus, the bureau of Indian affairs, bureau of land management, U.S. fish and wildlife service, national park service, folks from the national safety offices have collaborated in order to bring this workshop to you so we've got folks participating from each of those different bureaus today.

We welcome you and look forward to your participation, we have looked forward to participating with you as students in each of those bureaus.

I'm going to get started by having the other instructors introduce themselves.

Over to my left is Ed Perez, from the bureau of land management.

>> Ed Perez: Thanks, I'm the occupational health manager for the bureau of land management in Washington D.C. looking forward to sharing some information and hopefully hear you guys give us some information.

I always learn something when I teach these classes.

You know how things work, what doesn't work.

You bring a lot of experience to this workshop.

We want to hear.

I'm looking forward to this.

>> R. Gividen: We have also with us today, Mike May from the national parks service risk management division.

Mike, would you take a moment to introduce yourself?

>> M. May: My name is Mike May, occupational safety and health program manager for the National Park Service..

I work in Washington D.C., I've been with the park service for about four months now, so far I'm very excited with what I have seen.

This is my first experience with this class, I'm looking forward to the experience this afternoon.

>> R. Gividen: Thanks very much.

How do you interact?

We have Ed and Mike, how do you interact with the instructors?

We know the protocol for a bricks and MORTAR class.

There is a way to interact, we encourage you at any time.

You have at your site a push-to-talk microphone.

It may look like this, you may have a little more streamlined version.

Each has a lever.

Any time during the course you have a question or a comment, feel free.

You push the push-to-talk lever.

We would like you to say "excuse me" -- this is, tell us your first name and the bureau or location.

I have a comment.

After you have done that, release the button.

Let go of the button, wait for the instructor to acknowledge you and then ask your question or add your comment.

Ed mentioned the experience we have out there and learning from the participants.

Our parents taught us that it's rude to interrupt -- we want you to interrupt.

It will be a better course as we hear your questions and comments.

There may be times when you have several students trying to ask a question or make a comment at the same time.

When that happens you may see the instructor do a time out sign.

Go ahead and immediately release your push-to-talk lever and the instructor will sort out who was it that asked the question

first and we'll take it one by one and make sure we get to each of your questions or comments.

That's how we interact and we encourage you to do that.

There's going to be times during the course where there are student exercises.

We will ask you to share or help us out.

Be prepared to that as we do each of the exercises it's not uncommon in a regular classroom for everybody to introduce

themselves.

We're not going to do that with all the participants but we would ask you to share these things.

A couple of you tell us your name, your position, what you do, how long you have been with the agency.

Then the 4th bullet, think about that and then we'll ask you to help us.

What's a task or activity performed at your site that might result in an employee's exposure to blood.

While ask a couple of you to introduce yourselves.

with that, let me ask TRAVIS at the BLM site.
Would you mind taking a moment to introduce yourself to your
classmates here and addressing those bullets?

We think they checked in.

Would you take a moment, introduce yourself?

They may have a little technical problem.

We'll check with another site.

And we have northern cascades participating.

Let me ask if we've got Jesse there or another employee at
northern cascades.

Would you take a moment and introduce yourself to the other
participants?

>>> and we may -- two out of three, that's not very good odds.
Let's try a third.

I know I heard Theodore Roosevelt.

>> This is Lisa.

I'm the administrative officer.

>> R. Gividen: Would you mind sharing with us how long you have
been with the park service?

What are some of the activities that employees do there that
might result in them being exposed to bloodborne pathogens?

>> Participant: I've been at the park a year and a half.

Exposure I would say probably to EMS calls over maintenance
working with trash and things like that.

>> R. Gividen: All right.

EMT personnel are some of the ones that a lot of us think of
first when we think of exposure to bloodborne pathogens.

Picking up trash.

Those activities.

Lisa, thanks for taking a moment to introduce yourself.

Just as Lisa did, that's how we want you to interact.

We will do that throughout the course.

If you will take a look at your screen now, you should have in
front of you a participant guide.

On the power points, you'll see at the bottom of the right-hand
corner, you'll see a little page number icon.

So with that, that tells you what page we're on in your
participant guide.

As we go through the course material, take a look as you see the
page numbers that pop up on the power point slides.

That will help you to reference and pace yourself with us in the participant guide.

For example, let's take a look at page 3 in your participant guide.

You should see the objectives for the course today.

I'm not going to go through the whole list but some of the objectives, we're going to look at defining bloodborne pathogens, look at describing what you can do to determine who at our site needs to be covered by an exposure control plan.

We call that employee exposure determination.

Some of the universal precautions, protective personal equipment that you can wear and different controls.

Those are part of the objectives as well as what training needs to be acquired.

Take a moment to review those objectives on page 3.

We would like you to refer back to those objectives throughout the course.

Go back and make sure that those objectives are clear to you and if there's any questions about a particular objective and it seems like we didn't quite cover what you needed, feel free to use the push-to-talk microphone to interrupt.

Lastly, you want to look at the objectives because there is going to be a post test following the course.

You'll receive an E-mail with a link that tells you how to do the post test.

That's going to be based on the objectives.

I hope that gives you an idea how to interact with the instructors, and gives objectives.

One final note before we jump in with the first module.

Are we going to talk about a lot of things that are mandated? Absolutely.

OSHA regulations, references, absolutely.

Are sites legally required to do the things we are talking about?

Absolutely.

You know what, that's probably about the least common denominator when it comes to occupational and health safety training, doing something that's mandated.

We hope that by participating today, each participant will have a better idea how to implement an exposure control site so we reduce the risk any employees will contract a bloodborne pathogens disease from something they do at work.

I don't think any of us wants to be the one to go to an employee and tell them or tell their spouse they have contracted a disease that will be with them the rest of their life and

potentially negatively impact the life that they're going to live.

More important than being mandated, it's the right thing to do. If we can, from the things that we share together today and learn together today, if there are actions taken that reduce the risk of that happening, then it will have been worth while. With that, I'm going to ask Ed, would you take a moment and share with us what are bloodborne pathogens, what are the dangers involved?

>> Ed Perez: Sure.

You're batting .300.

Ain't too bad.

We spoke a little bit about the activities or tasks that you or your employees may be involved in that may expose you to blood. As an industrial hygienist, my responsibility is to recognize and control hazards in the workplace.

The next question is, what is this with blood that we need to be involved with?

One of the hazards that I think everybody is familiar with is HIV and AIDS.

That was a popular disease discovered several years ago, it's been on the front news but that's not the only pathogen involved in the particular standard.

Before we move on, let's identify or define some terms.

One is, what is a bloodborne pathogen?

A bloodborne pathogen is a micro organism borne by the blood, disease causing, it must be present in blood.

When we talk about blood, we talk about human blood.

All the things we talk about today pertain to human blood, except in one case.

If you work in a research laboratory, it's dealing with any one of these pathogens, you're injecting a laboratory animal with this pathogen, that's where the exception kicks in.

For the most part, it's human blood.

In addition, there are different modes of transmission, how the disease is spread with blood.

We'll get into that a little later, but one of the things we want to talk about is some of the more common bloodborne pathogens.

One is hepatitis B, hepatitis C and HIV.

We'll give you some statistics with each one.

Let's start with hepatitis B first.

That is a virus, Clayton, you got some slides to bring up?

It is a virus that attacks the liver, can lead to liver cancer

and eventually death.

An estimated 73,000 people are infected with HBV.

One of the things you might want to know or do know, this particular disease has a vaccination.

Those of you who are parents know that its -- a child vaccination.

Hopefully somewhere down the line, this disease will be eliminated like polio and things of that nature.

And let's go to hepatitis C, or HCV.

It is a chronic infection.

It leads to chronic illness.

About 1.6% of the United States adult population has some evidence of this infection.

I know two individuals that were personally infected with this.

One was a health care worker.

She could not identify the particular incident that caused her to contract this disease.

She underwent treatment and the disease was eradicated in her case, although she still has to keep check on it.

The second person was an individual going to get a hip replacement.

Nowadays they ask you to donate your own blood.

We test our blood or the blood banks of the United States test the blood for hepatitis C, HIV.

The indicator found out he was a carrier of hepatitis C.

He thought he may have contracted that from a tattoo he got earlier in the service, like some of us had done.

He underwent a holistic approach and was able to bring that viral mode.

Two different methods, they both works and they are both living a fairly good life at this point.

Finally, the most popular, the one we know and understand because we have heard so much about it, HIV, human immuno deficiency virus.

This disease isn't as bad as it used to be.

You remember in the early '80's, it almost always led to death.

Now it is a controllable or manageable disease.

This disease attacks the immune system, particularly the T-cells.

Really puts a load on your body.

Your body can no longer, the immune system is compromised and an infection comes in and you succumb to that.

Another definition we have to identify is OPIM.

Any other types of body fluids, saliva, semen, synovial fluid, these fluids may contain a trace of blood or visible blood and

carry the disease with them.

Some of these fluids you see more in a hospital setting.

We are going through it to give background.

Amniotic fluid is another one.

There may be instances where law enforcement individuals are doing autopsies or conducting investigations in death, they may be exposed to some of those fluids.

Number 2, any unfixed tissues that are being collected.

Usually in a research laboratory environment or in an autopsy setting where you're taking slides to do some type of analysis.

Fresh tissue like that we need to be aware of that may carry one of these bloodborne pathogens and finally, HIV containing tissue and cell cultures.

That's basically in research laboratories.

We got a good idea of what a bloodborne pathogen is, fluids we need to worry about.

Let's talk a little bit regulated waste.

It varies from state to state, any liquid or semi liquid blood or OPIM.

There may be some items that are heavily caked with dried blood and contaminated sharps, all considered regulated waste.

Anything that the possibility of blood or OPIM oozing from or coming out.

We'll talk a little more about that later.

Let's talk about the modes of transmission.

What are different ways bloodborne pathogens can be transmitted from one person to another or blood or OPIM to an individual.

One is contact with your eyes.

Your open mouth.

Mucous membranes, non--intact skin or parenteral contact.

So any time the blood comes in contact with any of these areas there's a possibility of us contracting a disease if a disease is present.

Let's bring up the slide of the skin.

One think we talked about was non--intact skin.

The skin normally is a fairly good barrier to any types of blood splashes or any type of OPIM.

However, we see the anatomy of the skin.

Although the skin is normally a good barrier, if we look at our hands, I'm pretty sure almost on a daily basis we're going to find a cut or abrasion on there.

We need to be aware of that.

Any cuts or abrasions, the potential for something getting in there could be detrimental.

In addition to that, what are some transmission risks?

Talk about things like needles, cuts from other contaminated sharps.

If you're working with collecting blood and putting them in test tubes and that glass breaks, the possibility of that glass having blood on it, or getting cut by it.

We talked about the mucous membranes, broken skin and contaminated blood.

Great, we have gone through what the bloodborne pathogen is, defined that, we talked about some of the common bloodborne pathogens.

I want you to brain storm.

On page 5 of the participant's guide, we have some steps.

What steps would you take before allowing an employee to perform a task that poses a potential for hazardous exposure to bloodborne pathogens or OPIMs.

I'll see you in about two to three minutes.

>> Ed Perez: You've been working on this exercise for approximately two and a half minutes.

Bottom of page 5 of your participant guide we asked you to look at the bottom, there's a little exercise.

What steps might you take to protect your employees from potentially being exposed to blood or OPIM in the workplace.

Finish up and maybe we can get a little discussion going.

Welcome back.

I have asked you to go to the participants guide and do a short exercise.

We would like you to go through those types of scenarios that you think where an employee might be exposed to blood or OPIM.

Jeremy, at glacier national park, what did you come up with, steps that you would take before you allowed an employee to perform a task where that potential hazardous exposure might be?

>> Participant: we came up with hepatitis B shots, offering those, getting the best PPE available.

And training.

The best training we could get for different situations.

>> Ed Perez: Great.

Absolutely, you recognize the hazard and implement and put some mitigating circumstances.

Perfect.

Wonderful.

How about art from the Indian programs training center in Albuquerque.

Art, what did you come up with?
What steps would you take to prevent potential exposure to your employees when they went out to work?

>> Participant: You know, you also need to consider some administrative controls, those kind of things.
The person before was right on a couple of things, too.

>> Ed Perez: Those are wonderful answers.
Training, administrative controls, PPE.
Those are right on.
Anyone in our class like to volunteer an answer?
Maybe something different or it could be the same?

>> Participant: Excuse me, Ed, this is Jesse Kennedy from north cascades with a question, comment.

>> Ed Perez: Glad to have you in today's class.
What's your question or comment?

>> Participant: well, Ed, it's very good seeing you back and meeting Mike.
But I go back basically to the beginning.
The E-mail with the material.
So if I could get that.
And we have had significant problems getting on.
I'm glad we're on now.

>> Ed Perez: we understand you had some problems.
Glad to have you back.
Were you able to down load the participants guide?

>> Participant: we received an E-mail with it, if you could get it to me now, I would be glad to join in.

>> Ed Perez: we'll get to you on the break, that's okay.
We've got a break coming up in like a couple of minutes.
All right?

>> Participant: Thank you very much, Ed.

>> Ed Perez: Thank you, Jesse.
Do we have any other volunteers?
All right, great.
Let's move on.

What I would like to do now is turn it over to Mike. He is going to talk to us about the program elements that we need for our exposure control.

>> M. May: Thanks, Ed.

Ed has talk to us about the dangers of bloodborne pathogens. We want to look at the program building phase of this course. Rick mentioned we are driven by some publications, there is some type of instruction that tells us we have to build a program. Of course this is no different with bloodborne pathogens.

Our principle guiding document is 29CFR1910, 1030.

This standard became effective in 1992.

It is difficult to create and update OSHA standards.

In the foreseeable future it's going to remain as is.

This standard identifies the minimum requirements to develop a bloodborne pathogen program.

If we develop our programs to this standard we are meeting the minimum requirements.

We're meeting with the intent of the law.

In addition, we have 29CFR1904.8.

This is another OSHA publication.

It's going to tell us if our employees are subject to sharp sticks, needle sticks, we have to maintain a sharps injury log.

This is something we will talk about later on this morning or afternoon.

Both standards are available at OSHA's website at www.OSHA.GOV.

The centers for disease control put out a publication, a 33-page publication in June of 2001, the updated U.S. public health service guidelines for management of occupational exposures to HBV, HCV and HIV and recommendations for post-exposure prophylaxis.

This publication is intended for health care workers that has been exposed to a bloodborne pathogen or other potentially infectious material.

This publication is full of very good information in addition to what the OSHA standard says.

I recommend that you review it.

In addition, the centers for disease control puts out a weekly news letter titled morbidity and mortality weekly report.

This is a publication that you can go on to the CDC website and register for it.

They had an article in one of their November issues and one of their October issues specifically for bloodborne pathogens.

Also, we have to follow -- I'm sorry, let me back up for a

minute.

CDC isn't a document that we have to follow but CDC is the preeminent entity in the United States for infectious disease. It makes sense that we keep an eye on what they publish because OSHA can't update their publications that often.

However, the CDC does on a weekly basis.

It's a good place to go.

Then of course we have to follow our own agency guidelines, bureau of land management, fish and wildlife service, national park services.

This document may specify more stringent requirements than OSHA does.

When we talk about developing bloodborne pathogen program, we are talking about 13 elements.

I'm going to touch on a -- on a couple of these 13.

Number one, employee exposure determination, this is probably the most important.

We are going to look at our workers in our workplaces and look at the tasks they do and determine if they are in occupations that could potentially expose them to bloodborne pathogens.

Rick is going to talk about this more in depth.

Another thing that we have already talked about this morning or this afternoon is our engineering controls.

Ways we can take the hazard away from our employees or isolate our employees from the hazard.

And then Ed mentioned hepatitis B vaccination available.

We will talk more about that, as well.

Employee training.

Rick will talk about the initial training that we're required and annual refresher type training that we are required.

I want to take a look at a diagram that you have on page 53, breaking the chain of infection.

There are places within this process that you can break this chain of infection by doing -- by taking certain steps.

If we look at the very first one, disease causing agent, look at the very first link, we know based on statistics that Ed gave and every day life, our population, there are quite a few people in our population that are carriers of HIV, hepatitis B and C.

At the top of the chain, you'll see the chain breakers.

Actions that we can do that can break the chain.

We have public health control of disease in populations.

Vaccinations.

It's not good to share needles.

We need to practice safe sex.

So those are ways.

And then Ed mentioned the hepatitis B series is being given to children.

Hopefully our school-age kids, this disease will be eradicated as we move on.

This is where we can break the chain.

If you look at the middle, transmission exposure incidents, this is where our employees have been, they have been exposed to a blood spatter or something in their job.

If it's hepatitis B, we can give the vaccination even if they chose not to take it the first time.

Ed will talk more about that process.

We want to break the chain as close to the left as possible.

It gets worse and harder to break as you go to the right.

So keep that in mind as you develop your bloodborne pathogen program that there are ways that we can interject and hopefully break the chain and prevent it becoming more serious.

I would like to ask, are there any questions about the publications or program elements we're going to talk about?

Or if you thought about something that Ed mentioned earlier as far as the dangers of bloodborne pathogen and potentially infectious material.

If there are any questions, we will definitely take them.

Okay.

Great.

We're going to move on.

Is it break time?

No.

Okay.

We're going to move on, Ed is going to talk to you about recognizing occupational exposure and exposure incidents.

>> Ed Perez: I want to ask Jesse if you could turn down or get off the audio bridge.

Jesse at north cascades.

Your bridge is kind of interrupting the transmission.

We've got that echo in the back as you can hear.

Jesse, can you acknowledge that you have dropped off that bridge or are going to drop off the bridge?

>> Participant: Ed, I just turned everything down, so hopefully it will work.

>> Ed Perez: completely disconnect from the bridge.

I hate to kick you out of the class -- just the audio portion.

>> Participant: Sure.
I'll get off the bridge.
Thank you.

>> Ed Perez: Thanks a lot, Jesse.
Appreciate that.

I don't think I'll be able to go out to north cascades.
We have talked about the disease a little bit, progression of it
there are some definitions we need to define.

A key definition is what an occupational exposure is.

What is an occupational exposure?

You need to understand this when you do your assessments.

It is a reasonably anticipated event.

Is there a potential that blood or OPIM can come in contact with
skin, eye mucous membrane or contact with a sharp.

It results in the performance of the employee's duties.

An EMT, is there a reasonably anticipated event that may occur
or is there a potential during the course of their work
activities or their work day they may come in contact with blood
or OPIM?

I think all of us would agree that potential exists.

The next is an exposure incident.

It is a specific event that occurs to an individual that'
performing they're duties to come in contact with blood or OPIM.
During the course of their duties they come in contact with the
blood or the OPIM, breaks the skin, gets into the eye or mucous
membrane.

Occupational exposure is potential, reasonably anticipated.

The incident is where it has occurred, we've got some kind of
injection hazard that's occurred, that is the event.

In order to maybe define this or get a better understanding of
this, right, we would like you to go to the bottom of -- I
believe it's page 7 of your participant guide.

There are five scenarios.

What I would like you to do is read those scenarios amongst
yourselves or read them by yourself if you're by yourself and
identify which of these scenarios is an occupational exposure
is.

Reasonably anticipated event.

I'll give you about two minutes to go through that.

You can brain storm with one another, we'll come back in two
minutes, ask some of our participants to share their answer with
us.

Maybe we can get a little bit of a discussion going.

I'll give you two minutes.

>> Ed Perez: We've been working on the exercises, the five scenarios on page 7 of your participant guide. We'll ask a couple of people to share their answers with us. We'll give you another 30-seconds to wrap it up and we'll go through the scenarios. You've been working on the participant guide, on page 7. We have asked you to look at the scenarios and identify, determine whether an occupational exposure exists. Let's go through the first one, custodians at your site have the daily duty of picking up and disposing of feminine hygiene products. Do these fall into the category of regulated waste and does that task involve an occupational exposure? Perhaps a participant from BLM could share. One of our BLM students? Perhaps you can share that, what you came up with for the first scenario? I guess we have some shy people from BLM. How about Billy at whiskey town? Can you share your answer with our class and tell us your thoughts? Is that an occupational exposure or not?

>> Participant: Hello, can you hear me?

>> Ed Perez: I hear you loud and clear, Billy. The first scenario what do you believe it is?

>> Participant: Can you hear me?

>> Ed Perez: I hear you fine. Yes, I can. The first scenario what do you believe it is?

>> Participant: We don't have the guide. We would, I would say that yes, that is occupational exposure.

>> Ed Perez: Does anybody have anything different? Any one of our students have anything different? Well, actually, I threw you a little bit of a curve ball. That is not considered an occupational exposure believe it or not. OSHA has been pretty adamant as CDC. They do not believe feminine hygiene products -- they are

intended to absorb blood.
There are several letters of interpretation.
I wanted to give you a little bit more of a hint.
I'm glad we went through this.
Billy, do you understand that answer?

>> Participant: Yes, I do.
But I have had to clean rest rooms before and that's kind of a natural thing there.

>> Ed Perez: Yeah, it is a natural thing and not the most pleasant thing, I agree, but we're trying to identify whether an occupational exposure exists.

This is important because when we do risk assessments we stop to look at these things and make that determination to put that individual in our program.

If the maintenance activity is picking up trash in the rest room, and the feminine hygiene products are in the rest room, that is not considered an occupational exposure.

Again, kind of an exception to the rule.

The second scenario, your plumbers perform repairs on the pipes or drains in laboratories.

Are they involved in an occupational exposure?

How about some fish and wildlife students?

would one of our fish and wildlife students like to share their answer with us on scenario number two?

These scenarios are meant to be a little bit challenging.

They are meant to get discussion going.

How about again a volunteer from fish and wildlife, bureau of land management, national park service?

Any one of your students like to answer that question?

Share their answer with us.

Oh, boy.

Okay.

Hey, you know, let me go through it for you.

Let's go through it step by step.

All right in again, we have asked you to look at these and just kind of make a determination whether it's an occupational exposure or not.

We are talking about a plumber who is repairing pipe or drain.

Give you a little bit of a hint.

We didn't mention anything about blood or OPIM.

would one of our students like to comment on their answer?

How about Art?

Say again, I didn't hear you.

Can you repeat your name?

>> Participant: Virginia.

>> Ed Perez: Great.

What did you come up with?

>> Participant: Yes, it is an occupational hazard.

>> Ed Perez: That believe it or not does not fall under the category of occupational exposure.

Reasonably anticipated event that would expose an individual to blood or OPIM.

This person works in a laboratory.

We didn't indicate there was blood or OPIM involved in it.

This would not be an occupational exposure.

Raw sewage, OSHA came out with an clarification, if you're a sewage treatment worker, working in a treatment facility, exposed to raw sewage, that would not be an occupational exposure.

This scenario, number 2, is not an occupational exposure.

The reason we're going to that is when we go to do the assessments you need to keep in mind what an occupational exposure is, to put the person in the program or not put them in the program.

Thanks for that answer, Virginia.

Appreciate it.

Let's move on to the third scenario.

Your site has employees trained in first aid and designated responsible for rendering medical assistance as part of their job duties.

As part of several tasks at the site, you can reasonably expect a myriad of other accidents that could result in exposure to blood or saliva during first aid or CPR emergency assistance. Is there anyone who would like to share their answer with us?

>> Participant: This is Frank in Elko.

>> Participant: This is Rita from GLACIER.
Yes.

>> Participant: This is Frank in Elko, Nevada.

>> Ed Perez: Thanks, Frank.

What was your answer to the scenario?

>> Participant: Elko, Nevada says yes.

>> Ed Perez: I would put that person in the program.
What if none of the individual designated as a first responder?
What if we gave people training but did not designate them?
Do you think they would be in the program, Frank?
Would that be an occupational exposure?

>> Participant: Everybody who is trained in first aid should
render first aid and will be exposed, yes.

>> Ed Perez: That's kind of where we draw a fine line, believe
it or not.

OSHA says just because we provide first aid training does not
necessarily mean that person has an occupational exposure.
If we designate that person to respond -- that's where the key
is.

If you're giving first aid to a person, it's a collateral duty,
not a primary function, I'm expecting you to respond, that's
occupational exposure.

If I had a branch of 10 people and gave CPR -- those people --
it's the designation, are you asking them to respond or giving
CPR first aid just to be a good person, that you want them to
have it.

Normally we would think if we do this we would like or expect
that person to respond.

If we haven't made that designation, that's not considered an
occupational exposure.

I hope I have clarified that, Frank.

>> I know it's hard to imagine that we would have a government
agency that wasn't intuitive but what I think it points out
whereas intuitively we might think, well, like feminine hygiene
products, they contain blood, that's an exposure where it sounds
like the OSHA determination letters are important because some
of the things that we would intuitively or quote make sense,
that's why it helps -- we appreciate those who are volunteering
and evaluating the scenarios, I know that was some of the same
reaction I had when I started looking at the scenarios is that
what seem to be OSHA's come out with determination letters and
so it helps because it doesn't seem to be intuitive and kind of
underscores the need to look at some of those OSHA determination
letters.

>> Ed Perez: That's true, Rick.
These scenarios were not intended to be cut and dry.
We gave you gray areas because you need to understand the
definition of occupational exposure.
That's going to determine whether you need the program or need
to place people into the program.
So, you know, we give out first aid, CPR classes all the time.
It can be an expensive we anticipated everyone in the program to
be in our program.
That designation for CPR and first aid, have you put them on
some type of response team even though it's collateral duty.
We have gone through three or four of these scenarios.
Let's take about a 10 minute break --

>> Participant: Excuse me, Ed.

>> Ed Perez: Yes.

>> Participant: This is Art from Albuquerque.
Let's say that you have first aid training and you -- you are
not designated and you respond to an incident.
And got exposed to blood.
What do we do?

>> Ed Perez: That's a good question, I'm glad you brought that
up.
That would be considered falling under the Good Samaritan act.
We would hope in your exposure control plan that you have taken
that into consideration.
Although you do give the training to an individual or the
training had the -- or the individual had the training before,
under the Good Samaritan act we are not required to provide
anything to them.
Within our exposure control plans, we can write in to it that if
we have a Good Samaritan that acts during work hours we would
provide them with a post exposure evaluation that we'll talk
about a little later and maybe the vaccination if they haven't
had it.
Does that answer your question, Art?

>> Participant: Yes.

>> Ed Perez: Thanks.
Okay, we have been going at this for about an hour or so.
Let's take a 10 minute break and then we'll come back, go over

what an exposure incident is.
See you back in 10 minutes.

>> Ed Perez: Welcome back.
Hope everybody got a chance to wake yourselves up, get a cup of coffee.
For those of you who don't have the participant guide, we had the streaming website.
I want to thank Rita and Art for participating.
That's what makes this class drive.
I'm going to ask more to participate, make general comments, get a discussion going.
That's what makes this class a positive thing.
I'm going to ask the BLM participants to respond.
No pressure on anyone but I would like to encourage people to participate as much as possible.
Let's move on to the next series of exercises.
We believe that the concept of occupational exposure and exposure incident is important to understand.
We are going to use that when we do the occupational risk assessment.
Let's define exposure incident.
It's a specific incident where OPIM or blood comes in direct contact with the skin, eye, mucous membrane or non-intact skin.
Result from the employee's duties.
At the bottom of page 8, we have four scenarios.
Go through the scenarios.
Identify or indicate whether an exposure incident has occurred.
We've gone through occupational exposure.
Indicate whether an exposure incident has occurred.
I'll give you about three minutes to complete that exercise.

>> Ed Perez: I've asked you to look at the bottom of page 8 of your participant's guide.
Read the scenarios.
Read through them and determine whether an exposure incident has occurred.
You've been doing that for about two and a half minutes.
We'll give you another 10, 15 seconds to wrap it up and we'll ask some of our students to share answers with our class.
You've been working on the scenario on the bottom of the guide page 8 for the last three minutes or so.
I have asked you to read through them and make a determination whether an exposure incident has occur.
I would like to ask a couple of our students to share answers

with us.

Let's go through number one, a law enforcement officer breaks up a fight between two men and gets blood on his hands.

He finds the blood has made contact with an abrasion he received from a recreational accident on his personal motorcycle the day before.

Cathy, do you think that's an exposure incident?

Lincoln home?

Anyone in the class from Lincoln, perhaps you can share your answer for scenario one.

Is that considered an exposure incident?

All right, perhaps we can get a volunteer in our class today.

Do we have any volunteers that would like to share their answer or thoughts about exposure, scenario number one, whether it's an exposure incident?

Someone from BLM or fish and wildlife?

>> Participant: Frank in Elko says it is.

Our law enforcement has HEP-B shots.

>> Ed Perez: Right, although he got the abrasion off site, the fact of the matter is he has the abrasion while working.

OPIM or blood has gotten into it.

You hit the nail right on the head.

Thank you for sharing your answer.

Let's move to number 2, and if we read that, a maintenance supervisor removes a used syringe from a garden area at your site and places it in a sharps container for disposal.

Is this an example of an exposure incident?

How about Gabe from petroglyph?

Can you share your answer or thoughts or have any comments about this particular scenario?

>> Participant: If you pick it up properly, it would be a no.

>> Ed Perez: Absolutely.

If you pick it up properly, it would definitely be a no.

We'll talk about some of the ways you can pick up the syringe.

You hit that one, nail on the head on that one.

We appreciate that, thank you so much for participating and sharing your thoughts and comments and answer with us.

Let's go to scenario number three.

This was lengthy but -- a volunteer AED responder deploys an AED to a fellow employee who has had a heart attack.

Upon arrival, the AED responder finds vomit with visible blood

in the employee's mouth.
The responder applies abdominal thrusts to the employee to clear the airway.
The vomit hits the responder in the eyes.
The responder has been designated.
Do we have any volunteers that would like to share the answer or comment?
Is this an incident exposure?
Someone from fish and wildlife service, perhaps?

>> Participant: This is Jeremy in glacier.
Yeah, I think that is an exposure.

>> Ed Perez: Absolutely right.
Visible blood in the vomitus, that is an exposure incident.
Let's go through the fourth, a maintenance worker comes across a visitor sleeping for the night in a public area of your site.
He wakes up the visitor who swears and spits in his face.
Would that be an example of an exposure incident?
Read it carefully.
Do we have any volunteers who would like to share their answer with us?

>> Participant: This is Ray from badlands.
Yes.

>> Ed Perez: well, at first when you look at it, you would say definitely.
If you read it carefully, we didn't say he got spit in the eye or in a mucous membrane, we just said that he spit on him.
That in itself would be an occupational exposure but not an exposure incident per se.
How about if I said that the spit had visible blood in it and it went into the employee's eye?
Would that be an example of an exposure incident?
How about that, Ray?
What do you think?

>> Participant: Yes.

>> Ed Perez: Definitely.
We have visible blood, it's in one of the parts that we talked about, visibly gotten into his eye.
Definitely an exposure incident.
Hopefully from this you have gotten the definition of

occupational incident versus exposure incident.

Those are definitions you are going to use to do the risk assessment in your park.

Whether you need to have a program.

After this class, you may determine that you don't have anybody that falls into the types of programs and you don't need a written program.

We have gone over exposure incident, occupational exposure, HIV and bloodborne pathogens.

Does anybody have questions or comments about anything we have covered?

>> Participant: Frank in Elko, is there any bureau guidelines who our district puts on that A list, the people who are responders?

>> Ed Perez: We're going to go through this x exercise right now, how to conduct an employee exposure determination.

It's up to the employer.

There are some categories we can automatically think of without thinking too much ahead that these people are in the program.

One is a law enforcement individual because of the scenarios he or she can be involved in every day.

That fight was a good example.

Another EMT.

It's the responsibility of whoever is in charge of that program to make the determinations based on the assessment.

So does that help you out, Frank?

Does that answer your question?

>> Participant: Thank you.

>> Ed Perez: Sure.

Let's move on.

We're going to talk about the exposure determination.

Rick is going to go through that with us.

Rick, can you take it from there?

>> R. Gividen: You bet.

I think Frank, your question underscores a question that a lot of us have.

That is, okay, who is it that we're required to cover under an occupational exposure control plan?

Our initial reaction is, we'll make sure we cover everybody.

There comes with that determination that someone falls and

the -- they have occupational exposure, remembering that definition that Ed covered with us.

There are then responsibilities that the agency has as an employer.

There are good reasons we don't want to put everyone under it. Because then we are legally responsible to do certain things. Again, the key here is probably this question.

That is: Do the tasks and procedures of the group, if the group is -- think in terms of job classifications.

Do the tasks and procedures of law enforcement officers -- fill in the blank.

Do they involve an occupational exposure?

This question is what employee determination.

With employees can we reasonably anticipate in perform man of their job duties will have exposure to bloodborne pathogens, OPIMS.

It's a three-step process.

There are some 12 step programs out there -- this is a three-step process in terms of determining what it is that we do.

We are going to roll up our sleeves now and have you walk through conducting the employee exposure determination for your site.

List the job classifications in which all employees have occupational exposure.

EMTs, if you have folks that is their job classification. If they're in that job classification, then the answer is, they need to be covered by your occupational exposure control program.

So first step, at your site, at your location, you're asking, okay, what job classifications do we have where all the employees -- because they're in that job classification -- they have exposure and from there it's, boom.

Automatically they are going to be, we're required to cover them under the exposure control plan.

Second thing, we're going to say that's the first group.

Second group is, what are the job classifications in which some employees have occupational exposure?

Now, an example of that would be custodians.

We have mentioned and a couple folks have brought up the fact that custodians responsible, one of the procedures they do is cleaning common areas where it's known they will encounter, it's reasonably anticipated they will encounter, for example, used syringes.

Unfortunately, some of the locations, whether a BLM office,

boarding school, or whether you're at fish and wildlife refuge, there are some public use areas where IV users like to go. It's frequent that the custodian in cleaning those areas will encounter used syringes. That task or procedure for the custodian of cleaning that common area, that then it's reasonably anticipated they will be exposed.

They have occupational exposure when performing that task. However, there may be other folks in that same job classification but let's say their task and procedures are limited to cleaning, removing trash and office waste receptacles, whereas federal employees it's not reasonably anticipated anything should be there other than paper in the recycle bin.

Maybe as a custodian they're responsible for sweeping hallways within a building.

If those are all the tasks and procedures that they do and they don't do these other tasks and procedures even though they're in the same job classification, then they would not be covered by the standard.

Which then takes us to the third step.

First step, those job classifications where all employees are covered.

Things like LE or EMT.

Second step, the classifications where some of the employees in that classification do have occupational exposure but then we have to identify in that third step the specific task and procedures that are performed by that second group that result in occupational exposure.

Here's what we're going to have you do in just a moment.

We're going to have you go to the participant guide, appendix D, on page 41, we'll have you some fill out some work sheets.

Before we do, let's review.

This gets to the crux of what Frank was asking.

Who is covered?

The employer has that responsibility.

Who knows better than at your local site.

Who knows better than the supervisors, the managers there, the employees there in terms of what tasks or procedures result in occupational exposure.

We're going to have you identify some of the job classifications.

Before we do, any questions or comments about how we go about doing the employee exposure determination or the three areas that we have identified there.

>> Participant: This is Eddie from badlands.
Should we consider the employees who are exposed to blood from wildlife?

>> R. Gividen: That's a good question, especially for those from fish and wildlife, they might be drawing blood from animals, folks that might perform -- that's a very good question. The standard we're talking about today in terms of bloodborne pathogens applies to human blood. That's not to say you can't get some zoo -- Ed can help me with the pronunciation -- that's not to say you can't get bad stuff in animal blood. The standard we are talking about today, especially as we get to employee determination, we're talking about human blood. There are other things that you need to do in terms of wildlife blood, but that would be training for another day. Does that help, Eddie?
That's a great question.

>> Participant: Yes.

>> R. Gividen: Okay.
Appreciate you asking that because I know there are other folks who have employees exposed to that, as well.
Other questions or comments before you jump in?
Everybody comfortable?
As Mike mentioned, you do this today in the next few minutes and you've got the ball rolling in terms of your written exposure plan.
Turn to page 41 in your participant guide.
This is a work shop.
We're going to ask you to do some work here.
We're going to give you four or five minutes.
We want you to go through and do the employee determination for your site.
We want you to go through and for your site take a stab at doing this.
I will hasten to add, if you were to ask me what the job series are, you know what, don't worry right now about what the job series is.
If you know what it is, great.
For right now, let's focus on the titles, whether custodian, maintenance worker or etc., principal, whatever.
Go ahead and take four or five minutes and take a stab at that.

Then we'll ask you to help us out when we come back and share a little bit about which employees at your site have exposure.

>> R. Gividen: You've been at this for a couple of minutes. If you haven't already done so, go ahead and stop your work on part A and go ahead and move to the second group. You have looked at who falls into table A. Move on if you haven't done so, to table B. Complete that portion.

>> R. Gividen: Okay, if you haven't done so, you've done a little bit in table A, table B. Move on here in the last minute what we would like you to do is move on to what are the tasks and procedures that those folks who are in table B, what is it that they do that then results in exposure?

>> R. Gividen: Okay, so you had a few minutes to determine your employee exposure on your site. You've been working on page 41 in your participant guide and filling in those tables. Let's see how big a list we have. So as we ask different folks to help us out with the tables, compare to what you've got. If you have a job classification at your site, that you don't mention, chime in after their done. Let's see with the students in our class, let's see what the list looks like. Table A, those classifications in which the employees in that classification they have occupational exposure. I'm going to ask, Virginia you're at a national wildlife refuge. As you went through the exercise and looked at table A on page 1, would you mind helping us out, share? We were wondering, tell us where your refuge is at. Tell us a little bit about the job classifications there where all the employees -- for the other students, listen to what she shares compared to your list. Let's see if you've got some that can help us make an even longer list. Virginia, what were some of the job classifications that you came up that went into table A?

>> Participant: First of all, we are located in Socorro, New Mexico. 50 miles south of Albuquerque.

We are a relatively small station as far as employees go.
We have one regional LE officer.

>> R. Gividen: We're neighbors, down the road from us.
Law enforcement officer, a small staff.
So let's see, who else had other items?
Can someone add to our list?
We've got law enforcement.
Who can add another job classification to our list, help us to
build our list here?
I've got to believe we have folks who have jobs besides LE in
which all employees in that job classification have exposure.

>> Participant: Bill from whiskey town.
We've got lifeguards.

>> R. Gividen: That's one where we were going through the
content yesterday and anticipating, lifeguards was one of the
things that we came up with.
Absolutely.
Those lifeguards, you know, Ed was telling us about New York
lifeguards which essentially like -- what do you want?
No, especially -- sand in your face.
We're going to add that to our list.
I know that there are other folks besides whiskey town who have
lifeguards?

>> Ed Perez: Do those guys wear wet suits?
That must be cold.

>> Participant: Ray from badlands.
Firefighters.

>> Participant: Rita from glacier, we have criminal
investigators and custodial workers.

>> R. Gividen: Thanks, Rita.
You put down custodial workers.
I'm going to come back to that in just a moment.
Great job, folks, we're filling out the list.

>> Participant: Frank in Elko, recreation people who clean
bathrooms.

>> R. Gividen: Okay.

Again, that is kind of like Rita's custodial.
We'll touch on those in just a sec.
We're building a list.
Anyone else have an item in table A that we didn't mention?
LE, lifeguard, firefighters, criminal investigators, and
custodians.

>> Participant: Mary from Ozark.

>> R. Gividen: Mary.
Where were you from?
How can you add to our list?

>> Participant: I have a visitor use assistant.
I'm from Ozark river ways.

>> R. Gividen: And up in Denali.

>> Participant: This is Nathan.
We have EMTs.

>> R. Gividen: Good catch.
EMTs.

Pretty good list for table A.
Last call for table A.

Anyone help us build -- and it's, we appreciate what you're
doing in terms of helping to build this.
Anyone else?

Let me ask a couple of questions in terms of some of those that
are in it.

Mary, I think -- I apologize if I wrote it down wrong.
Mary did you have visitor use assistants?

>> Participant: Yes.

>> R. Gividen: Let me ask you, I think this will help with a lot
of us because whether it's visitor use assistance, that's a
person -- help me understand a little bit about what they do
there.

>> Participant: They work in the camp ground, they post the
reservations and do face-to-face contact with the visitors.

>> R. Gividen: Okay.
So on -- and do all of your visitor use assistants do that task?

>> Participant: Yes.

In addition to collecting the fees in remote areas.

>> R. Gividen: That's a good example, again especially when you have contact in the public and camp grounds, reasonably anticipated.

Like wise, with the custodial staff.

Rita, that's up in your way?

>> Participant: That's correct.

>> R. Gividen: What is it?

In all of your custodial tasks, what is a task that they all do that it might be reasonably anticipated that they may come into contact with human blood?

>> Participant: They perform the work that involves potential contact with blood and body fluids and assist cleaning up medical equipment after use.

>> R. Gividen: Wow, that's a good one.

We haven't talked about that much.

When it comes to cleaning up the equipment after there's been an emergency.

We know the LE, EMT guys are out there.

Who has to clean that equipment up?

Custodial staff at her location might be required to do that.

Good job, folks, filling out table A.

Any questions about table A?

You all are doing great.

We're working through the employee exposure determination.

Any questions or comments on table A before we move down to

table B?

Okay.

Let's move down to table B.

Let's see if we can build the list again.

And so I'm going to ask -- let me ask Art in Albuquerque, can you get us started?

What were some of the job classifications that you put into your table B?

Would you get us started and then we'll see again how big a list we can build.

>> Participant: I didn't put anything.

Reason being, I work for the central office.
I'm not too familiar with what we have out there in the field.

>> R. Gividen: Fair enough.
At the central office, this is a good example Ed touched on, you might find out that you don't have anyone that falls in, that needs to be part of a program.
That doesn't mean we don't constantly re-evaluate it but Art is in a situation where they are in a central office so he didn't come up with anyone.
The gentleman from petroglyphs, did you have anyone that fell into table B?

>> Participant: Yes.
Our custodians cleaning the areas.

>> R. Gividen: He shared with us table A and B.
That's a good way of doing it.
He has custodial staff, the ones that go out and clean the day use area.
My assumption is that you have some custodial staff that don't have those tasks but are in the same location.
Good assumption?

>> Participant: Yes.
There is a potential, though, if I've got somebody out that does the cleaning that I will send one of the other laborers to cover for that person.

>> Ed Perez: I want you to, let's verify the reason they're in the second category is they clean camps.
That's a general duty.
The real possibility is that they come in contact with blood as a result of -- fill that in.
What is that?
Because they may pick up some trash in a public bathroom where there are used syringes or is it as -- I forgot who the other individual was, someone said their custodians are responsible for cleaning up after emergency response.
Normally, the tasks are to clean up, right?
But when they perform this one specific task in this location, based on this assessment, they are put into the program.
We go back to the point about the custodian.
The task, pick up trash.
I've got one custodian that picks up trash in a building.

Another that picks up trash outside.
It's not the fact of picking up trash, he is picking up trash in an area where identified used syringes are.
What is it in that risk assessment that's a potential or reasonably anticipated exposure going to occur in it's not from picking up the trash, it's from picking up trash that has a syringe in it.
It's from cleaning up or picking up trash from an EMT event.
That's what we're trying to focus in on over here.
That secondary category.
There are only some activities they perform in unique situations where the potential exposure exists.
Category A, there's potential every day they perform that task or those tasks or those tasks they are required to perform there's a reasonable anticipation of exposure.
If you go back and look at the last two in category A, the visitor use, the basic task is to interact with the public, fees and this and that.
That doesn't put them in the category.
What puts them in the category, result of an additional task, for them to go clean up public rest rooms where there are syringes, that would place them in category B.

>> R. Gividen: Or in this example, the visitor use assistant, they're going to interact with the public and in that, potential of breaking up fights or --

>> Ed Perez: Perform first aid.

>> R. Gividen: Right, as part of their duties they are designated to be a first aid responder then they would fit in that category.

>> Ed Perez: Make sure you are specific in your categorization.

>> R. Gividen: That you know as a result of doing that duty in terms of cleaning up the common use area it's reasonably anticipated they may be exposed.
Did you have anyone else in your table B before we start having folks jump in?

>> Participant: Not at our park.

>> R. Gividen: Great.
Are there other folks?

Help us build the list.
Custodial workers.

>> Participant: Ray from badlands.
Plumbers.

>> R. Gividen: Help us with the second part.
What is it that those plumbers do?
What are the tasks and procedures that there are occupational
exposures.

>> Participant: Replacing waste lines, traps in rest rooms.
Being put in a position where they will be exposed to fluids,
liquids, etc.

>> R. Gividen: I'm going to clarify just for a second because
plumbers is one of those groups that it's one of those where
it's like okay, there's some -- with the OSHA determination and
help me out, Ed, if I go astray but this is back to the question
we had about wildlife blood in terms of that, it's not to a
there are not a lot of nasty diseases you can get from raw
sewage.

The question is, for the purposes of this, bloodborne pathogen
exposure, does the fact that a plumber does a procedure in which
they might be working with sewage lines, do they fall under the
standard?

I think OSHA and again it's also kind of back to the fact that
you know it's kind of counter intuitive, like darn you if you do,
darn you if you don't.

Ed, there have been some OSHA determination letters on sewage
lines and sewage, does it have to do with the viability of the
virus?

>> Ed Perez: OSHA came out with clarifications.
Number one, when blood or OPIM or something like that gets into
a raw sewage line is it's diluted.
Viruses we are talking about are fairly fragile organisms with
the exception of hepatitis B which has known to last outside in
dried blood for seven days.
Remember that the dilution factor, it's a very hazardous
environment for the organisms, the PHs are fluxing back and
forth.
OSHA and CDC say just because you're exposed to raw sewage does
not necessarily mean you have occupational exposure.

>> R. Gividen: For those tasks.
There may be other tasks or procedures which you maybe have your plumbers do.
Let's take for example -- I can't think of one within park service.
Let's suppose they were clearing plumbing in a laboratory where you did have live HIV viruses or something like that.
Kind of far-fetched for department of interior.

>> Ed Perez: I think this goes back to the importance of doing the assessment.
You're assessing those activities.
Remember it's the activity that the individual is performing, is there a reasonably anticipated -- it is reasonable to anticipate there will be an exposure based on that specific activity.

>> R. Gividen: Ray, thanks for helping us build the list.
Other to build the list for table B?
I know we had some besides plumbers.

>> Participant: This is Bill from whiskey town.
We included waste water treatment operators because that's their task all the time.

>> R. Gividen: What are the tasks?
I think it's critical concept.
What are the tasks or procedures that those waste water workers do that cause them to be, have occupational exposure?

>> Ed Perez: Remember what I said.
I understand.
They work in lift stations, stuff that's coming into ponds and whatnot so there could be fresh blood being washed in if we had some kind of accident, something happen in the park.

>> R. Gividen: Back to what Ed shared about that determination letter.
It's not to say you can't get nasty stuff raw sewage.
Let me take a stab at why this is important to make the distinction.
For example, if you're going to say we're going to cover these people because they're working on raw sewage, OSHA has determined the viability of the -- you're not required to put those people in the program.
Put let's take this step.

That is, remember, if we're going to do that and put them in the program, means we are going to be required to give the hepatitis B vaccination within 10 days of the assignment, give them training, keep medical records, again we need to look at that and determine back to that task or procedure.

Other folks?

Let's fill out the rest of table B.

Anyone have another one they want to add to that list?

>> Participant: Mary from Ozark river ways.

>> R. Gividen: Hi, Mary.

>> Participant: I think our VIP camp ground hosts should be there.

Occasionally they have to render first aid or do render first aid until help arrives.

>> R. Gividen: Is it designated that part of their duties will be to provide first aid?

>> Participant: No, but we do offer the first aid training.

>> Ed Perez: This goes back to what I said earlier.

Remember the distinction of first aid.

You could provide first aid to 30 people.

If only 10 of those people have been designated to respond in the workplace, they are in the program, the other 20 people are not, the three of us, Mike, Rick and myself, we go to a first aid CPR training course that our employer, the DOI, offers.

Right?

However out of the three of us, I'm the only one designated as a responder or I volunteered for the response team.

I'm the only one that falls into the occupational exposure category.

If Rick or Mike perform first aid, that would be a Good Samaritan.

If an employee performs CPR or first aid under the Good Samaritan act, this is what we're going to do.

We'll offer them a vaccination, offer them counsel.

Because they have taken the class and because it's been introduced by the DOI or employer does not automatically put you into the program.

The distinction is you've got to be designated -- even if it's a collateral duty.

Otherwise we could have every employee that's taken CPR or first aid should be classified into the program.
That's not the case.

>> R. Gividen: So I think -- again we told you at the beginning that your participation would help and make this class better. I think this segment is an example of just that.

So many things are not intuitive.

Your participation has helped us.

If you look in your participant guide on page 26, there's an OSHA determination letter.

OSHA comes out, folks will write to OSHA, saying hey, wait a minute, we want you to determine whether these people are covered by the bloodborne pathogen standard.

OSHA will make an attempt to answer that.

Ed pointed out almost always the letter starts out we apologize for the delay because it takes a while to get one.

You may want to take a look at that.

Here is what we have done.

We're going to take about a five minute break.

Here is what we have done to this point.

This part has been helpful.

And again, thank you for jumping in and helping us.

We have looked at definition of bloodborne pathogens, what is occupational exposure?

And we have gone through now and done an employee exposure determination for your site.

And looked at that, got started and that's a good chunk of your written control exposure plan.

Let's take a five minute break.

When we come back, we'll pick up any questions you have and move on to looking at chain breakers.

What can you do once you determine the employees do have occupational exposure, what can you do to protect them?

What do you have to do and what do you do because it's the right thing?

Let's take a five minute break.

>> Ed Perez: welcome back.

We have gone through a good portion of the course.

We might want to move a little quicker but there are some important concepts to get across.

The concept of universal precautions.

What is that?

Universal precautions where we treat blood or OPIMs as being

infectious.

And then we are going to use different mitigations to protect ourselves from being exposed we are going to go over some of these things.

Let's start off with barrier precautions.

Things like gloves.

Puncture resistant, aprons, a barrier to protect against splashes of OPIM or blood.

Goggles and face shields, to prevent splashes getting into our eyes and mucous membranes.

Let's concentrate on sharps.

What are sharps?

Things like needles, syringes or intravenous sticks to give saline solutions.

There are a couple of things to remember.

Never try to recap it.

From personal experience, it doesn't work, especially as you get older because you can't make that little connection.

Never bend or destroy the needle in any way.

During that process you could inadvertently stick yourself or you could stick somebody else.

Maybe there's a piece laying around.

Never manipulate the needle or syringe any other way than what way it's supposed to be used.

Saliva.

Although it has not been shown to transmit any of these diseases unless there is blood, we use the concept of universal precautions.

How do we do that?

Use one way valves when doing CPR, you have seen those little triangle devices you place over the person's mouth.

You may use squeeze bags where you -- instead of doing mouth to mouth, you squeeze the bag and putting air into the individual's lungs that way when you resuscitate them.

Non-intact skin.

If you have some kind of abrasion or cut, you need to keep that gauzed or covered really well.

Or if possible, if you're allowed to, don't perform that particular activity until the healing is completed in that area.

The last thing you want to get is OPIM or blood splashed on this, now you have the possible exposure incident.

Never keep food, drinks in the same storage refrigerators as we keep OPIMs or blood.

You probably ask yourself, why would somebody do that?

There are some cases where law enforcement personnel are doing

autopsies or taking samples -- I don't know if you worked around a autopsy lab, these guys are kind of loosey-goosy about that. You don't want to eat or drink while doing those things or store things in those locations.

Keep OPIMs contained, whether it be sharps containers, vials. And do remember that if you are pregnant, there is a possibility for you to contract the disease and pass that on to the fetus.

We know?

Certain situations we can give treatment to prevent the fetus to get infected.

Mike is going to talk to you about reducing exposure.

>> M. May: We're going to break down the universal precautions that Ed talked about in terms of what kind of control.

There's three general types of control, engineering, administrative and workplace practices.

Under engineering controls, we're going to isolate the worker from that hazard.

We can do this by sharps containers or other biohazard containers that you see on your slides right now.

These items must be puncture resistant.

For disposal for sharp instruments.

Ed talked about sharps containers.

That's an engineering type control that we will use frequently if you are in an area where he have to clean up hypodermic containers.

These must be red or have the biohazard symbol on them.

Under administrative type policies -- excuse me, administrative type controls, these are policies implemented by the agency to help prevent worker exposure to a bloodborne pathogen.

We have hepatitis B vaccination, which is a good example of administrative control.

Labeling, using the international biohazard symbol as well as containers.

And training, our personnel need to know when they see a red container or -- excuse me, a sharp container, they should never put their hands into it or reach into a red bag.

This goes back to some of the custodial workers that are cleaning up facilities or other places where needles are.

Those are some policies.

That's where the training comes in.

Now, using that maneuver to never put your hand underneath a bag is an example of a workplace control.

On these, Ed mentioned something, never recap.

Other things we wanted to do, teach correct hand washing

activities and correct housekeeping activities.

Hand washing, if we come in contact with any type of bloodborne pathogen or excuse me, blood or potentially infectious material, we want to wash our hands continuously for 20 seconds using warm soap and water.

After that we want to apply a general disinfectant that you can buy.

If we receive a blood spatter, even intact skin, we want to wash with warm, soapy water for about 20 seconds.

If we come in contact with anything in our eyes or mucous membrane, blood or OPIM, we want to flush those areas with water or saline 15 minutes continuously.

Eyes, mouth or non-intact skin.

Rick mentioned contaminated equipment.

It's obvious if we are giving first aid treatment, we are going to have some equipment that's going to be subjected to human blood or OPIM.

We want to look at how we clean the steps that we go to clean and disinfect that equipment.

Trying to get my son to understand, there's a difference between cleaning and disinfecting.

If we get blood or OPIM on a table surface, we want to clean up the bulk of that with using towels.

If we do that, we want to wear our correct PPE.

But when we wipe that up and discard that potentially as a regulated waste, we need to come back and disinfect that surface.

I'll talk to you more about that in just a minute.

Those are the three types of controls we have, engineering, administrative and workplace practices.

We want to take a couple of minutes just for you to go through and look at some of the controls that we haven't talked about and give us an idea of what you may be doing at your workplace.

When you do this, would you identify which category it belongs to, either workplace control, engineering control or administrative control.

Take a couple minutes and do that and we'll ask if you will share what you have come up with.

>> M. May: In about 30-seconds we will wrap this up and see if there are any controls that we haven't talked about already.

Thanks, I hope you had enough time to think of controls, engineering, administrative or work practices.

How about Frank at Elko, did you come up with anything?

>> Participant: We have a trash compactor that we use at the camp grounds, that would be engineering.

>> M. May: Thanks.

What about ray up at badlands?

Okay.

Ray.

>> Participant: Dumping garbage correctly, correct PPE equipment.

>> M. May: Important aspects.

Thank you.

Any other volunteers want to share something unique that you don't think the rest of us are doing?

>> Participant: Gary from whiskey town, after an accident scene or medical, we hand over the hazardous waste to the ambulance crew who can dispose of it at the hospital.

>> M. May: That is excellent, nice segue for me.

Anybody else?

We're going to move on.

>> Participant: Virginia at --

>> M. May: I'm sorry.

>> Participant: We have trash Tongs that we give people to pick up the trash.

>> M. May: That's a good one.

Jeremy had mentioned earlier, when picking up used needles, if you pick it up correctly, the sharps container is a good engineering tool but you have to get the sharp to the container. Using a Tong or something like that is a good way to handle that.

>>> We're going to move to handling regulated waste.

Ed talked to you about what a regulated waste is so I won't bore you going back to that.

I talked to you about disinfecting versus cleaning.

Get the bulk waste off of it, discard of it and disinfect the surface.

The best still is household bleach.

We want to put that on the surface.
One thing I want you to keep in mind, we want to check whatever the item's manufacturer says.
There are some material that we can't apply bleach to.
We should leave that on, once we apply it to about the time where it air dries.
That's the point we know it has probably killed all the anti microbial activity on that surface.
We can use -- some of the items we come across, unless you are an EMT or clinic worker, needles is a common one.
Spoiled scalpels, intubation equipment.
Used bandages, discarded PPE.
Those are some that you may see more frequently.
One thing, too, certain materials that you will come across may contain small amounts of blood or saliva or other secretions.
You may come across used bandaids.
Unless it's a very large amount of blood, caked blood, we don't have to treat that as regulated waste but to check with your state or local regulations to make sure they are not more stringent than what OSHA requires.
If you have clothing that comes in contact with blood, we have to launder that correctly.
Employees cannot take that type of clothing home and launder it themselves, it is the employer's responsibility to have that cleaned.
We don't want to prerinse that at our work site wherever we're getting the blood on it either.
We need to put these clothes in a red bag.
We want a secondary container.
If you can give it to another agency to take it, that's the best control.
If you are handling contaminated laundry, you don't want to reach underneath that bag.
Feminine hygiene products, that's typically not looked at by OSHA as a regulated waste.
In closing for this section, the containers we put, whatever we put a regulated waste in, the container must be closeable, puncture resistant.
If it's a bag, maybe using two bags.
It has to be leak proof.
It has to be either red or have the biohazard label.
It doesn't have to have the biohazard label that we see here but it must be red.
Those two items let us know that it is a regulated waste.
In your emergency vehicles, if you have them, make sure that you

have the bags on hand.

We don't want to get there and have something happen and need to place items in that type of bag and we don't have it.

Any questions on handling regulated waste?

Okay.

I'm going to move on and talk briefly about labeling requirements.

Actually, everything in here I have already talked about.

Any questions about labeling requirements?

We're going to move on to Ed who is going to talk to you about PPE.

>> Ed Perez: Appreciate that, Mike.

We have touched on PPE a little bit in the form of barrier protections.

Any specialized clothing or equipment used to prevent infection, smocks, coveralls, gloves, anything to prevent the infectious agent getting on to us.

PPE must be provided to the employee at no cost to the employee.

You need to have some training about the PPE.

How to maintain it, how to clean it, how to inspect it to make sure it's functioning properly.

The last thing you want to do is take the face shield you have been using and find out that the scrap bag is broken, it falls off and you get a splash in your face.

Where when you have PPE it must be properly cleaned and maintained.

And finally, think about when you use the PPE it must be removed from the site when you're leaving.

You don't want to take any of that stuff with you.

There was an individual from whiskey town that indicated one of the processes they do, they take a red bag and give it to the ambulance one they leave.

Some PPE can be considered regulated waste.

If you have disposable gloves, throw it in the red bag and boom, you dispose of it properly.

Give it to the EMT and he takes it off.

I want to emphasize one thing about regulated waste, it varies from state to state, county to county.

You need to understand those regulations with regard to your situation.

That's PPE in kind of a nutshell.

We have discussed all the different items -- I don't want to reiterate, if you go into your participant's guide on page 15 we list some of those general things.

Does anybody have questions or comments up to this point about regulated waste or PPE?

Let's talk about the hepatitis B vaccination.

Hepatitis B is one of those viruses where we have a vaccination. We can intervene to prevent being exposed before an exposure incident or after, we can apply vaccination and hopefully on a prophylactic basis, prevent the individual from coming down with disease.

Vaccinations must be offered within the first 10 days of being employed at the workplace.

Made available free of charge at a reasonable time at a reasonable place for the employee.

Must be performed under the supervision of a licensed health care provider.

You would not provide the vaccination if the employee has had the vaccination or if antibody testing reveals immunity.

You cannot make antibody testing -- if you had the hepatitis B vaccination, antibodies we are not going to give the vaccination.

The vaccination series occurs as follows, the initial shot.

Boom.

30 days later you take the second shot.

6 months after the second shot, you take the third shot.

This is a point of contention.

At the BLM at the monthly safety management meeting we had a question from one of our safety managers and they wanted us to discuss or talk about and perhaps some of our students can help us, what do we do in a situation with a part-time hire or temporary hire.

If the employee -- you've determined this employee must have the vaccination, there's no way to get around it, you have to give it to him, you have identified during assessment that activity they perform is an occupational exposure.

You give them the first, second and third vaccination.

If they don't complete the vaccination series before they leave or come back next year, what does CDC say?

They missed a vaccination?

Give the vaccination or second series as soon as possible.

If you have two injections, two vaccinations, they come back, they leave and come back nine months later, you can give them the third vaccination.

You don't have to re-start the situation.

It is a problem where you have a temporary employee or temporary hire, we may not be able to give them the full set of vaccination.

How do you get away without doing the vaccination?

There is no way unless you have made the occupational assessment.

Offering the vaccine, the employee has the right to decline the vaccination.

So if you hire me for the summer, I say don't want to take the vaccination, I will sign a form declining the vaccination.

The form, what do we do with it?

Whoever is in charge of the vaccination contract should keep a copy, the employee should keep a copy and maybe a copy should go into the personnel folder.

Golden gate national recreation area unfortunately several years ago went through the process, about 10 years after they started it, they gave out shots, people signed declining forms.

The union felt they had not enacted a strong program, golden gate lost.

They are in the process of determining how much hazardous duty pay these employees should get.

We went back to look at the records, they were poor, lacking.

If you start the process and the whole program, this is a program that takes a little bit of work as you understand those steps and what you need to do to keep records, have a written program to follow and track people.

It's really, really important.

If the employee sometime down the line decides after declining the vaccination initially, says I declined it the first time but I would like to have the vaccination now, we are required by law to provide that vaccination to the employee.

Those are all things about the hepatitis B vaccination.

Does anybody have any questions or comments about how they deal with the situation where you have temporary employees or summer hires, you don't get the full series of vaccinations, how they deal with it?

Perhaps one of our students can share that situation with us?

I go back to the point -- that's why you see it's important to conduct the assessments.

If you have people working in the camp grounds, just for the summer, they are not required to perform first aid or there has not been a determination they're exposed, then why put them in the program?

I mean, we had the program, there's a cost to it.

We have to make some tough decisions.

In my mind it's not really that tough.

As much as we would like to give the vaccination to everyone and have everybody in the program, it's not feasible.

I fall back on the exposure determinations.
You need to understand what your people are being exposed to and make a determination as to whether we need the program or not and whether vaccinations need to be administered.
One thing I wanted to talk about vaccinations, page 45 talks a little more about that.
Say I hire a wildlife biologist, they go to the back country with another individual.
I train them in first aid and CPR.
I expect them to respond.
I can designate that individual as having a collateral duty and not offer the vaccine.
Ed, your job as a wildlife biologist, the chances of you performing first aid on an individual is probably very slight, right?
So I will put you in the program, I'll train you, I'll provide PPE but I won't offer you the vaccination -- which is allowable. OSHA allows you to do that.
The key element is that you must have a good post exposure program.
If somebody now becomes or undergoes an exposure incident, there's a post exposure program we need to have set up.
You need that in place and we'll get more into that a little later, but you need to think about the steps.
Somebody has been exposed, I got to get into a position within 24 hours to get them the vaccine, that needs to be thought out with some regularity.
Let's talk about now -- does anybody have questions about vaccinations at this point?
Let's talk about responding to an exposure incident.
What are the responsibilities of an employee?
Turn to page 17 of your participant's guide.
Some of the responsibilities include initiating the appropriate cleaning or first aid at the exposure site.
If possible, this is really important, if possible you need to identify the source of the exposure.
In other words, was there an individual involved in it, was it a sharps situation?
That needs to be identified.
If you're the individual involved in that, you need to remember that.
That information needs to be taken back to your employer or supervisor.
What you need to do is report the ins department immediately to your supervisor.

In your written exposure control plan there are certain steps you take specifically from the site you're at that you need to be aware of.

Your supervisor should also be aware of that.

It's important to take these steps and do them appropriately accordingly.

What are the employer's responsibilities?

Or site?

We are required by law that after an exposure incident to provide a confidential examination, with a licensed health care physician.

We are required to identify the source if we can and to try to get source testing.

If an individual is involved.

So if I go to an emergency response as an EMT and I stick myself with a needle and the source, that individual goes off to the hospital, right, the employer or that site is responsible for trying to get ahold of that individual, identifying them and then asking them to sign a consent decree to provide a testing. Now that's going to vary from state to state so you really need to understand what the regulations are in your state.

If anybody knows what they do in their particular state, please provide -- if you can provide some information to our class, that would be great.

In addition to that, you need to provide counseling to the individual.

After the first medical examination, it may be a series of counseling that need to go back and do additional counseling with the individual.

An appropriate post exposure prophylaxis may be involved, in the form of hepatitis B vaccine or IGG.

Does anybody have experience with source testing at their sites that they have been involved in?

There are quite a few components to the program.

Again, I can't stress enough that you need to think through these aspects of it.

It's very easy to take a template and put it together.

When we get these types of plans within your plan, they're very specific.

If I'm in Utah I'm not going to go to the same health care provider that someone in Georgia goes to.

I'm going to encourage you when you start to put your plan together, start to think about these steps.

Think through it.

When we were at golden gate recreational area, we put together

an exposure control plan.

One of the things in the original plan was if you get stuck or have an exposure incident, you will go to the local licensed health care professional.

We never identified where that was.

They have 24/7 operations.

The standard says have you to offer the individual the vaccination or medical examination within 24 hours of the exposure.

What happens at 11:00 at night on Saturday night?

At a minimum by the next day I need to have them somewhere to be examined and a report to be determined.

The physician needs to look at this individual, write a report up.

What do you think?

You need to think those things through.

In golden gate, they licensed with a emergency care facility for a 24 hour, 7 day a week contract so if something happened after hours, take the credit card as an employee, tell them as much information as you can, the doctor determines if you need any medications given to you and post follow-up examinations.

Again, think that through.

What are the reporting requirements?

That's the requirements for a needle injection of some sort.

Refer to page 8, to appendix H in your guide, page 47.

I'm going to go through this briefly.

You will need to include the time, date, specifics, what happened, who got splashed on.

What are details about the source?

Was it an individual that was HIV positive?

You don't know?

Employee details.

Site response details, what are the details exactly at that response.

Now, that's a lot of information and you're probably sitting there saying, my goodness, why does all this really matter?

What good is this to me?

You need to think of it in this context.

We want to try to protect our employees the best way that we can.

You can imagine that during an exposure incident there's a lot of anxiety going on in an individual.

Oh my God, I just got exposed, what do I do?

Where do I go?

What are these things?

Keep that in the fore front.
Don't think about all the steps you have to do.
Keep in mind I'm doing this because I need to take care of the individual that has been exposed during their work activities. I need to alleviate some of the anxieties.
Providing all that information to the physician, the dates, times, reports, having your exposure control plan in place, are all things that you really, really need to think about.
Think again from the context of not so much that it's a lot of work but that I want to protect the employee.
Does anybody have any questions or comments with regard to the requirements or post exposure exams and post exposure percutaneous exposures?
A lot of the information -- all of the information I covered is in your participant's guide.
I urge you to look at that when you put your control plan together.
If you have any questions, you know, feel free to contact any of the safety officers or safety officials.
They can definitely help you through that process.
All right, we talked about the post exposure requirements. We talked about different requirements of the employee and employer.
We talked about the hepatitis B examination.
Let's talk about employee training.
Rick is going to talk to us about that.

>> R. Gividen: Thanks, Ed.
Ed mentioned the anxiety that can come about when there is an exposure incident.
Sometimes even occupational exposure when employees find out, really I have to do that as part of my job description?
Part of that, I think one of the ways we can relieve that anxiety is through proper training.
One of the ways we can help our employees understand what their responsibilities are and the commitment you are making as a site to mitigate the risk that they will have that exposure.
That can be done with training.
With training we are going to try to answer four basic questions.
The standard is clear in terms of who requires training.
If you look on page 21 in your participant guide, you'll find the answers.
Who required training?
Everyone who is covered by your occupational exposure program.

When do you have to deliver the training?

You have to deliver it upon their initial assignment to a position that has occupational exposure.

And also, then, you need to provide annual refresher training.

What will the training be about?

What do you need to cover?

That's outlined on page 21 in your participant guide and hits on things in terms of your site specific exposure plan is.

Emergency accidents or emergency actions during an incident, those things that Ed touched upon.

Who will do the training.

You know, the standard here, OSHA standard, is pretty broad. Someone knowledgeable in terms of that activity.

You will want to make sure as part of your plan, that you provide that training to folks who are covered by your occupational exposure control plan.

Now, one of the things that you'll also need to do, again if they're covered by the program, that's why that employee exposure determination is covered, everyone covered needs to receive that training and you need to keep a record of the training taking place, which leads us then to a topic we're going to ask Mike to touch on.

That is, what are the recordkeeping requirements when it comes to a bloodborne pathogens exposure control program.

Mike, can you help us out?

>> M. May: Thanks, Rick.

OSHA says that each employer will maintain an accurate record for each employee that has occupational exposure.

In that record, we must have the names and Social Security number for each individual.

We have to have a copy of their hepatitis B vaccination form or decline form.

We want to keep copies of the results of any exams or follow-up actions that have occurred as well as a copy of the health care professional's written.

The last two are going to occur if a person has an actual exposure incident.

We need to keep those and what OSHA says as far as maintaining medical records that we need to keep those for the employee's duration of employment plus an additional 30 years.

As far as the training records for the training that Rick just talked about, we need to maintain those records for three years from the date the training occurred.

And part of that training we need to have, we need to have

employee's name, job title, the difference topics that are covered, the date that the training occurred as well as the name and qualifications of the person that gave the training.

That's a three year requirement to maintain those.

The sharps log, that log needs to be maintained for five years.

Ed mentioned earlier, in the sharps injury log, we want the type, the brand name for the equipment that actually caused the injury.

And the department where the individual worked.

And detailed explanation of what happened.

Again, that one is five years.

Any questions on the records?

Okay.

Ed is going to wrap all of is up with the last discussion on written exposure control plan.

>> Ed Perez: Thanks a lot, Mike.

One thing I neglected to tell you, during the process where the employee gets the examination from the physician, the physician has 15 days to provide a written copy of this diagnosis and prognosis to the employee.

In addition to that, any other written information that's provided to the employer, which employer can have.

We're not talking about specific medical records but information like did the person take the vaccination, what kind of treatments am I recommending or examinations?

15 days from the time that the individual sees the physician.

Now, all the information we learned today -- there's a lot of stuff we went over -- it's all in your participant's guide.

All of this culminates to one thing.

The written exposure control plan.

You must put together a written exposure control plan that covers all the elements we talked about.

You are kind of on your way now, we did those exercises, we defined things for you.

But let's talk about the importance of the plan.

Two things.

Why do we want to have a written plan?

Number one, it decreases potential exposure or exposure incident.

Number two, it eliminates the vagueness of what needs to be done.

If you have it written down and you don't remember it necessarily, pull the plan out.

This is what I've got to do, boom, boom, boom.

It's got to be specific to where you are.

Keep that in mind.

I'm not saying that every specific location has their own plan. You could have a plan that encompasses a geographical area that has several different locations but it's got to be specific, workable for that location.

It's really important that when you put this plan together, right that you keep that in mind.

Everything we have gone over today leads up to this written exposure control plan which is required under the standard.

Things you want to cover, employee exposure determination, program responsibilities, compliance methods, universal controls, engineering controls, housekeeping controls, hepatitis B, information on training, recordkeeping and program evaluation.

The program should be evaluated annually to make sure things are running along and being conducted accordingly.

That's everything we have learned leads up to the exposure control plan.

Hopefully you've got enough information to start that off.

If you have an exposure control plan, go through it and make sure it's working for you.

I'm going to ask Rick to give us the final wrap-up.

He is going to talk about resources, references and other things.

Rick.

>> R. Gividen: Thanks very much.

A couple things as we head into the last couple minutes.

One, you're not alone.

You've got resources available to you.

Hopefully today we got the ball rolling.

Some of the resources available to you are the publications, printed materials out there.

There's a multitude of websites.

Your bureau may have a specific website related to occupational safety and health.

The last bullet, personnel.

Look on page 48 in your participant guide.

That's why we say you're not alone.

Each bureau participating, there are those prepared to assist you in implementation.

One of the final exercises, this will take just a minute and

following this exercise we're going to come back and do the wrap up so we're out of here on time.

with that, I would like you to turn in the participant guide to page 54.

We're going to give you just a minute here.

Have some music playing.

We want to improve this work shop so we're going to ask you to go in there, complete that evaluation.

Then we'll come back with our final comments.

Go ahead and take one minute, turn to page 54 and complete that evaluation, if you would.

>> R. Gividen: Thanks.

Those evaluations are valuable to help us continuously improve the work shop.

The questions you have asked, your participation, please take a moment and fax that evaluation today.

If you're in the national park service, I think you're familiar with completing the evaluation.

We're going to ask you to complete the evaluation, fax it in today.

Get that faxed in.

Have one person, if you have a written exposure control plan, have that person submit it to the bureau and lastly, within the next week you'll receive an E-mail that directs you to post test.

If you're not familiar with DOI learn, don't worry, we'll help you through that process.

In summary, one, I want to express appreciation and Ed, thanks very much for your participation.

And Mike, also, in terms of I think it's been really a phenomenal effort in terms of the multi bureaus and chip Murphy from the fish and wildlife service, and Paul holly, Art in BIA, we had the collaboration and appreciate those folks.

Art, you there in Albuquerque and Paul for the work ahead of time.

We want to thank you as students, participating.

I always kind of crack up when I call Verizon, not plugging any particular carrier but they have the phrase they use at the end.

Thank you for being the most important part of our Verizon network.

You are the most important part of the occupational safety and health program.

It's your efforts at the local site.

You are the most important part that is going to make the difference.

We hope that in the last three hours that we have provided you

with information that might help you to perform those responsibilities and we hope that the instruction as well as the comments from some of the other students and input have helped you to understand some things that will help you to mitigate the risk, so that we do the right thing when it comes to protecting our employees.

One last opportunity before we say goodbye, any other questions or comments over anything we have discussed today?

Has it been helpful to you in terms of the meeting the course objectives?

Any questions you might have?

Then with that, Ed, you wanted to --

>> Ed Perez: I got one plug, January 29, BLM, an it event out of NTC in Arizona, supervisors for safety training, rules and tools.

Hope to see you all of our BLM employees in our classroom and looking forward to that.

With that, they're playing our song, Rick.

>> R. Gividen: Yankees in 2009 thanks a lot, Mike, we hope you have safe travels and holiday season.

Thanks for participating today.

Thanks very much.

Happy holidays.