SESSION 2
VOCABULARY OF THE DAY

**Acute Exposure**: contact with a chemical for short periods of time (e.g. minutes or once a week)

**Asbestos**: a mineral fiber; because of the strength of this fiber and its resistance to heat, it has been used in a variety of building construction materials for insulation and as a fire retardant

**Chronic Exposure**: continuous or repeated contact with a chemical over a long period of time (e.g. months or years)

**Electric Shock**: The flow of electricity through the body caused by direct contact with a source of voltage; can be fatal.

**Hazard**: a person, thing or an environment that can harm you.

**Lead**: A toxic heavy metal, previously used in paint to speed up drying, resist moisture damage, and remain fresh-looking for a long period of time. The use of lead in paint used in homes was banned in 1978.

**OSHA (Occupational Safety and Health Administration)**: A federal agency created in 1971 that creates standards or rules, workplace inspections and protects workers’ rights.

**Risk**: the probability of getting harmed by a hazard

**Silica**: a tiny mineral that is commonly found in sand, rock, and building materials such as concrete and brick.
SESSION 2
CASE STUDY - STORIES FROM POST-DISASTER WORKERS

The following stories are a compilation of quotes from Spanish-speaking immigrant laborers who worked in Hurricane Sandy post-disaster cleanup efforts.

Materials: For this activity you will use blank pieces of paper and colored markers.

Instructions:
- Using the information above and your experiences, write or draw on each piece of paper a hazard/danger that is present in this post-disaster worksite.
- Once time is up, tape your answers to a wall of the instructor’s choice. Remember, this activity is meant to be done as a group.

Story #1
The problem with Sandy was the flooding. Usually, when a house floods, it is just that one house that fills with water owing to an accident or technical issue, and [someone] is immediately called to fix it. But that was not the case with Sandy. Everything was blocked off, [access to the houses] was closed. Then they allowed people to enter [the area] to build, to renovate. Unfortunately, the cleanup began too late. When they started to work, [there was] stagnant water. We went to New Jersey, to a house [that] had a floor that was very narrow, about three feet. It had glass fiber [that was] wet. We got under the floor, [to] take out the wet fiber. When that fiber gets wet … it's like a sponge … and absorbs all the water. It becomes heavy. Apart from that, you are in a place where you do not have much space to move. You're lying down to work. And you're [working in] water, water that has raw sewage mixed into it. You have to clean, take [debris] out.
Story #2
[When] you demolish Sheetrock that [is] a lime, it becomes a powder [that] has many chemicals. If you do not have a mask on the powder goes into the lungs. Then you start getting a cough, not instantly but the next day.

Sometimes, yes, they give you protection. When I worked three days in [a] basement taking a boiler out, they only gave me gloves, nothing more. [But] a mask was necessary for the insulation. It once happened to me that I was going to change my mask after lunch and [my boss] got angry, he said that I had to pay for it.

Story #3
I was working here by Weston, and there were machines with gas (boilers) in the basement. [There were also] houses without basements that had very small and low ceilings, it's not for very tall people. If short people have to lie down and crouch down to be able to work, imagine a taller person. Impossible.

We first had to work in a building in Brooklyn that flooded [up to] the third floor. There was a garage [where] there were two hundred and fifty ambulances. It took three days to remove the water. And then we had to clean them ... and completely demolish the walls because everything got wet.

In the subsoil, it was broken with an electric machine. You're working with a gasoline hammer. You're locked up [and the gasoline] is fuming and you're absorbing that smoke and it starts to itch your skin.

Yo estaba trabajando acá por Weston, y había maquinaria (boilers) como de gas, que estaban en el basement.

Los espacios son pequeños y son de las casas que no tiene subsuelo, es muy bajito, no es para personas muy altas. Si las personas bajitas tienen que acostar y agacharse para que tenga chance para trabajar, imaginese una persona más alta. Imposible.
Nos tocó primero un edificio en Brooklyn. Eso se inundó desde el tercer piso. Y había garaje [donde] cabían doscientos cincuenta ambulancias. Tres días sacando agua. Y después a limpiarlos... todo, y después a demoler todo totalmente las paredes. Todo se mojó.

En los subsuelos, [se] rompía con una máquina eléctrica. Tú estás trabajando con un martillo de gasolina. Estás encerrado [y eso] está tirando humo y tú estás absorbiendo ese humo y te empieza a picar la piel -la gasolina -y tú estás encerrado y eso está absorbiendo
Anécdota #4
“¿en que me subo? no hay la escalera”? “invente!” Me dicen, “parece arriba de alguien” “No ay una escoba” “entonces invente!” Esa es la palabra preferida de ellos, “invente!” ¿Yo que hago? si es que es un daño de agua, y no traje botas de agua, si es que venía de lejos. Dice “no se haga problema e invente. Se pone unas bolsas, busque las bolsas del supermercado, y [las] queden dentro de la casa, en algún lado, y póngaselas y amárrelas las dos. Lo que pasa: que los daños de agua que vienen del excusado son aguas negras.

Anécdota #5
Un grupo de cinco, seis, o siete. Cada quien está haciendo lo que tiene que hacer. Muchas veces no, no se pone uno de acuerdo, ¿me entiendes? Estoy en el primero piso y el otro en el segundo. Tú estás haciendo lo tuyo, y arriba está haciendo lo de él, pero a lo mejor lo que está haciendo abajo le perjudican arriba y todo... y como no hay comunicación, como mucha gente se conoce ese mismo día, entonces no saben cómo se trabaja.

Anécdota #6
Fuimos a Coney Island. Era en el basement. Y en ese basement se había llenado de agua. Parece que [los dueños de casa] tenían bodegas. Y había muchas baterías de artefactos eléctricos. [Eso se llenó de agua] y tuvimos que sacar agua, y después de eso el trabajar con el piso de arriba. El piso de arriba era de madera. Ese piso era de sacarlo... Y cambiarlo. Porque se pudrió completo.
SESSION 3
PICTOGRAMS

Pictograms are placed on labels to alert users of the chemical hazards.

Instructions:
- Take a few minutes to observe the pictograms below.
- What pictogram have you seen at your workplace?

Globally Harmonized System Pictograms

- Health Hazard
  - Carcinogen
  - Mutagenicity
  - Reproductive Toxicity
  - Respiratory Sensitizer
  - Target Organ Toxicity
  - Aspiration Toxicity

- Exclamation Mark
  - Irritant (skin and eye)
  - Skin Sensitizer
  - Acute Toxicity
  - Narcotic Effects
  - Respiratory Tract Irritant
  - Hazardous to Ozone Layer (non-mandatory)

- Flame
  - Flammables
  - Pyrophorics
  - Self-Heating
  - Emits Flammable Gas
  - Self-Reactives
  - Organic Peroxides

- Exploding Bomb
  - Explosives
  - Self-Reactives
  - Organic Peroxides

- Corrosion
  - Skin Corrosion/Burns
  - Eye Damage
  - Corrosive to Metals

- Environment
  - Aquatic Toxicity

- Gas Cylinder
  - Gases Under Pressure

- Flame Over Circle
  - Oxidizers

- Skull and Crossbones
  - Acute Toxicity (fatal or toxic)
A chemical is any substance, or mixture of substances, that has been purified or prepared, and is mostly artificial. There are three physical forms in which chemicals exist: solid, liquid and gas.

**ACTIVITY:** In the table below, make a list of chemicals that you have been in contact with while working. Make sure to place them according to its physical form.

<table>
<thead>
<tr>
<th>Solids</th>
<th>Liquids</th>
<th>Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How toxic is a chemical?

**TOXICITY** is the ability of a chemical to cause serious debilitation or death to a person. The level of toxicity depends on the following:

1. **Dose:** means quantity

2. **Length of Exposure:** For how are you exposed to a chemical? Once a week or every day?

3. **Route of Entry:** How is a chemical coming in contact with your body? Is it though mouth (ingestion)? Nose (inhalation)? Skin (absorption)?

4. **Potency:** How strong is the chemical?
Are there legal protections for workplace safety and health?

After decades of injuries and deaths at work, hundreds of work-related catastrophes, and the organizing efforts by workers and other organizations, the Occupational Safety and Health Act (OSH Act) became a law in 1970.

Additionally, the OSH Act created a federal agency called the Occupational Safety and Health Administration (OSHA), the job of the administration is to:

1. Develop rules about workplace safety
2. Enforce those rules through inspecting workplaces
3. Track workplace accidents
4. Train workers and employers in workplace health and safety

What rights do we have as workers? Let’s focus on 5 fundamental rights safeguarded by the OSH Act:

1. A healthy and safe workplace
2. Access to information about hazards in the workplace, records about injuries and illnesses
3. Train workers to recognize, abate, and prevent safety and health hazards
4. To request that an unsafe workplace situation be changed (and to file a complaint with OSHA)
5. Protection from retaliation for reporting unsafe working conditions

One of the most fundamental clauses of the OSH Act, called the General Duty Clause 5(a)(1):

(a) Each employer -
(1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his workers.

The OSH Act covers many industries and millions of workers, regardless of their immigration status.
SESSION 5
PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment, commonly referred to as "PPE", is a set of equipment placed on the body of the worker as a barrier against the hazard.

Instructions:
- On the drawn body, with your group draw the types of PPE that you need at the workplace.
- Then, as a group, answer the question at the bottom of the page.

QUESTION: Is personal protective equipment the safest way to protect you from workplace hazards? Explain your answer.
SESSION 5
THINGS TO KNOW BEFORE USING PPE

Unfortunately, PPE is the last form of protection because the probability of being hurt or getting sick is still there. Additionally:

- PPE creates a false sense of safety.
- The hazard is still present and not eliminated

Most importantly, in order for PPE to protect you, Employers are responsible and must do the following:

- Perform a "hazard assessment" of the workplace to identify and control hazards.
- Identifying and providing appropriate PPE for workers.
- Training workers in the use and care of the PPE.
- Provide maintenance of PPE, including the replacement of worn or damaged PPE.

Finally, if the employer fails to perform any or all the requirements that were just mentioned, workers are in danger of getting hurt by the hazard or the PPE itself!

Example:

- Gloves that are not resistant to chemicals can easily wear away or allow the chemical to get inside of the gloves and come into contact with the skin.
- If you are working in wet, damp environments, a Tyvek suit cannot prevent you from the water absorbing through your skin. Imagine the water that is contaminated with mold, chemicals or other substances.