Pesticide Exposure Meeting Kit

Pesticides are chemical compounds that are used to kill pests, including insects, rodents, fungi, and unwanted plants (weeds). Over 1000 different pesticides are used around the world.

In the agriculture industry, field workers—including those who work in indoor nurseries—come in contact with pesticides every day. They can get it on the skin, in their eyes, and on their clothes. Workers are also exposed to pesticides through airborne residue and contaminated irrigation water.

ORIGINS OF PESTICIDES

Residue: Dried form of the chemical found on plants, produce, and ground after a spray. Without proper precautions, pesticides can easily get on an employee's clothes and skin if proper precautions are not taken.

Chemigation: Pesticide residue found in irrigation water. Never drink or wash in irrigation water.

Drift: Airborne residue that moves into the work area either by a shift in the wind. It can also happen if someone sprays a pesticide in the wrong direction. Employees can breathe in the residue without the right precautions.

SAFETY MEETING BRIEFING ON PESTICIDE EXPOSURE

It is important to avoid the causes of exposure by complying with the following.

- Wear proper personal protective equipment.
- If you do start to breathe pesticide mist or dust, move away from that area as quickly as possible and get into fresh air.
- Use a closed handling system.

- Maintain and clean personal protective equipment.
- Wash exposed body parts often to reduce dermal exposure.
- Read pesticide labels thoroughly (Refer to module: Reading Pesticide Labels).

Review the Following Points

- Dermal exposure to a pesticide means that it gets on the skin.
- Ocular exposure to a pesticide means that it gets in the eye.
- Oral exposure to a pesticide is swallowing or ingesting it.
- Inhalation exposure is inhaling a pesticide.
- Using improper personal protective equipment can lead to exposure to the pesticide.

HOW DO PESTICIDES ENTER OUR BODIES?

There are generally three ways a chemical or material can enter the body:

Dermal (absorption through skin or eyes): In most work situations, absorption through the skin is the most common route of pesticide exposure. People can be exposed to a splash or mist when mixing, loading or applying the pesticide. Skin contact can also occur when you touch a piece of equipment, protective clothing, or surface that has pesticide residue on it.

Pesticides can also be absorbed through your eyes. In addition, pesticides, can cause injuries to the eye itself.

Inhalation (through the lungs): Inhalation may occur when working near powders, airborne droplets (mists) or vapours. The hazard from low-pressure applications is fairly low because most of the droplets are too large to remain in the air. Applying a pesticide with high pressure, ultra low volume, or fogging equipment can increase the hazard because the droplets are smaller, and they can be carried in the air for considerable distances.

Ingestion (by mouth): While ingestion (by mouth) is a less common

way to be exposed, it can result in the most severe poisonings. There are numerous reports of people accidentally drinking a pesticide that has been put into an unlabelled bottle or beverage cup/container (including soft drink cans or bottles). Workers who handle pesticides may also unintentionally ingest the substance when eating or smoking if they have not washed their hands first.

WARNING SIGNS

Symptoms of pesticide-related illness are similar to the flu. These include headaches, dizziness, upset stomach, eye pain, and skin rash. Workers should seek medical attention if these symptoms occur.

Workers must keep pesticides away from the eyes, skin, nose, and mouth.

EMPLOYEES WHO WORK NEAR PESTICIDES

When working in the field, always wear protective clothing. This includes gloves, long sleeves, and long pants to help minimize potential contact with your skin. Employees should remember to wash their protective gear after use and properly dispose of anything that becomes heavily contaminated with toxic chemicals.

Employees also need to wash their hands when they break for water, lunch, or a snack, and when they leave for the day. Workers should never to eat produce from the field and to never eat lunch or a snack in the field.

TIPS FOR REDUCING PESTICIDE RISKS AT WORK (AND AT HOME):

- Always follow the label. The directions on a pesticide label are there to protect you and others from becoming over-exposed.
- Consider using the least toxic methods of pest control to get the job done.

- Personal Protective Equipment (PPE) can be uncomfortable to wear, but it can protect you from being over-exposed. Read the label to find the appropriate PPE or contact your state lead pesticide agency for help.
- Inspect your PPE to make sure it will do its job effectively. Check for signs of cracking, swelling, stiffness, sponginess, or any change of color in the rubber or plastic of your PPE.
- Frequently washing the pesticide off your chemical resistant clothes, like aprons, boots and gloves, can minimize your exposure and help your equipment last longer. Cleaning this kind of PPE at work may reduce your family's exposure.
- Wear your PPE when you are mixing, loading, or when you are cleaning the equipment. Consider bringing an extra set of clothes to change into at work in case you get pesticides on your clothes.
- Remove your shoes before entering your house, take a shower immediately and clean work clothes properly to reduce your family's exposure.

FINAL WORD

Pesticides have provided great benefits to public health like kill mosquitoes and pests that destroy crops. Pesticides can cause farm if proper precautions are not taken to avoid the harmful effects of exposure to pesticides.