Reading and Understanding a pesticide label is one of the most important sections to study. In order to use a pesticide legally and effectively, you must read the entire label and follow the instructions. Because of this, there will be a label on your pesticide exam for you to answer questions about. In this section, we will discuss the key sections of a pesticide label, and look at some example label language.

The Pesticide "Label" is the information attached to the pesticide container.
"Labeling" is distinct from the "Label" – Labeling is all of the information received from the manufacturer about a pesticide product.

What is the Pesticide Label?

- The information printed on or attached to the pesticide container
- The LABEL contains all information a USER needs to use pesticide safely and effectively
- Pesticide users required by law to comply with instructions on the pesticide label
- "Labeling" is a related term that indicates both the label and any additional manufacturer information about product, - brochures, leaflets, etc.

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Key Sections of a Pesticide Label

1. Front Panel
2. First Aid
3. Precautionary Statements
4. Directions for Use
5. Storage and Disposal

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These are the key sections of a Pesticide Label. Let's look at each of these individually.

These are two excerpts from a pesticide front panel, or first page of the pesticide label.
A lot of information appears on the front panel of the pesticide label.

If a pesticide has a restricted use designation, the restricted use statement will appear in bold at the top of the label's front panel. If it is a general use pesticide, there will be no statement across the top. At registration, the US EPA decides whether a pesticide will be general use or restricted use.

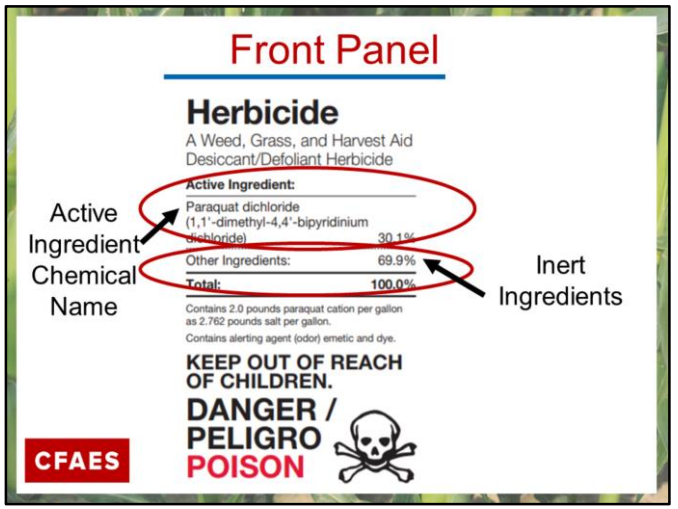
Here are two excerpts from pesticides labels showing two restricted use statements. The EPA may designate pesticides as restricted use for different reasons. In these examples, Gramoxone indicates it is RUP because of acute toxicity. It is highly poisonous, consuming even a very small amount can be lethal. The Atrazine label indicates it is a RUP because of ground and surface water concerns.

The Brand name is used to market the material and sometimes appears with the type of formulation.

In the case of Gramoxone SL, the SL means soluble concentrate.

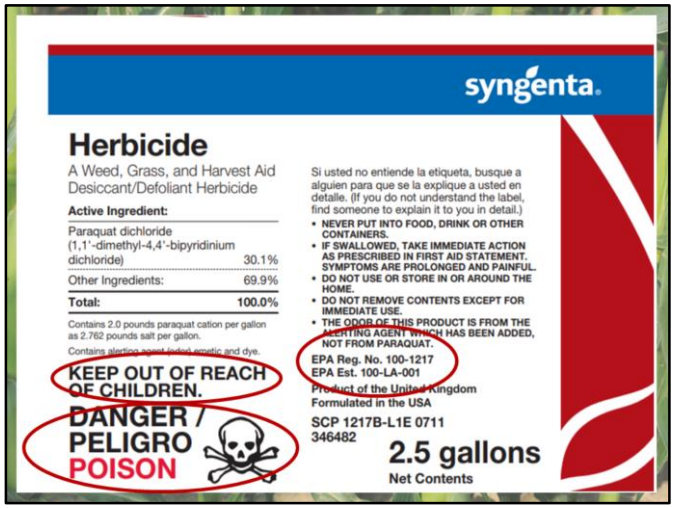
(not to be confused with SC – Suspension Concentrate).

Active ingredients are one or more components in the pesticide that actually control the pest.



Active ingredients are one or more components in the pesticide that actually control the pest. The active ingredient statement will identify the toxicants by their common chemical name and give the percent by weight in the product. In the case of Paraquat (brand name), the common chemical name is Paraquat dichloride – only common names that are accepted by the US EPA may be used in the ingredient statement. A more complex chemical name that identifies the components will often follow the common name of the active ingredient on the pesticide label.

The inert, or inactive ingredients do not need to be listed individually on the label, only the % by weight of the formulation that they make up.



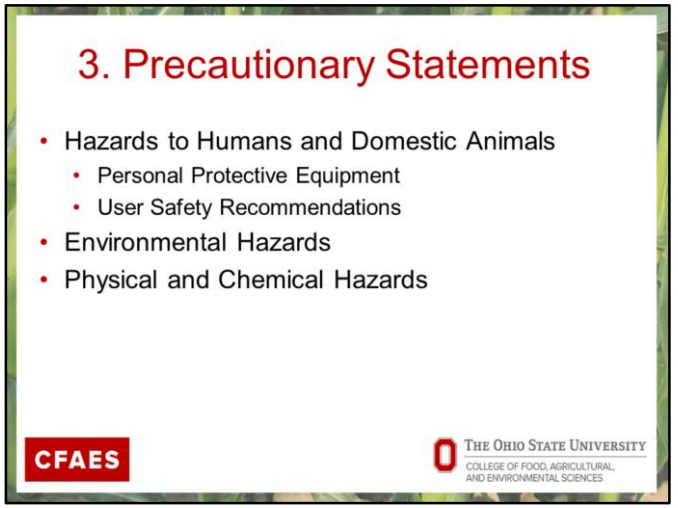
The keep out of reach of children statement appears on every pesticide registered in the US.

Danger with skull and crossbones is the signal word on this label – which appears on the front panel. The combination of Danger with skull and crossbones means that the material is highly toxic via ingestion, inhalation, or dermal exposure.

The EPA registration number uniquely identifies the product and the manufacturer, and indicates that the pesticide labels has been approved by the EPA. These numbers are needed for your pesticide record and are very important in case of poisoning, claims of misuse or liability.

The first aid statement, on older labels called “statement of practical treatment” will assist medical professionals to give the most effective treatment in case of poisoning. The First Aid Statement is often on the Front Panel, but sometimes may appear in other parts of the label.

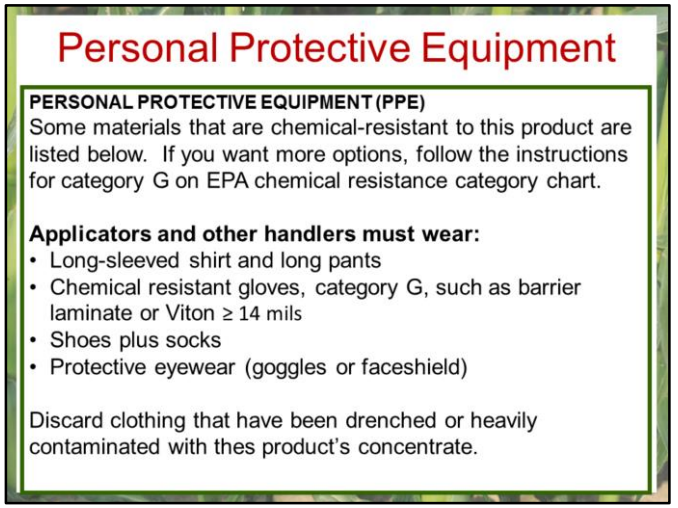
In case of poisoning, it is essential to take the pesticide label to the doctor.



The Precautionary Statement Section on the pesticide label will describe hazards to people an domestic animals. This is where the user safety precautions (e.g., wash hands before eating, drinking, and chewing gum, using tobacco or using the toilet.) and required Personal Protective Equipment will be found. Remember that PPE may vary according to task.

The potential for Environmental Hazards will be described. For example, this may include ground or surface water issues, pollinator or wildlife hazards.

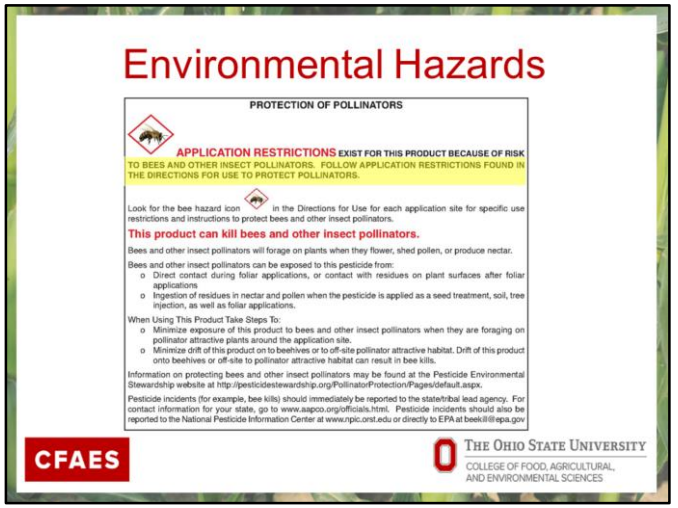
The physical and chemical hazards section will cover these hazards – for example, flammable or explosive materials.



An example of a product PPE statement. Note that this product specifies that gloves that must meet specific criteria for chemical resistance.

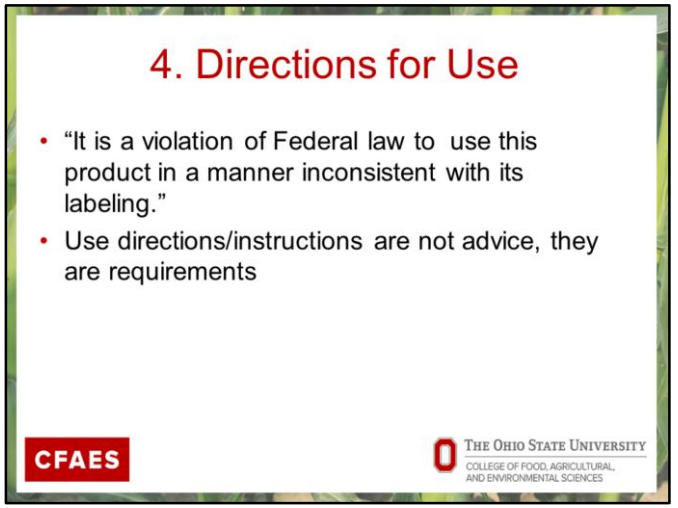
PPE is not a recommendation, It is a legal requirement.

User Safety Recommendations are common sense directions to prevent self-contamination.



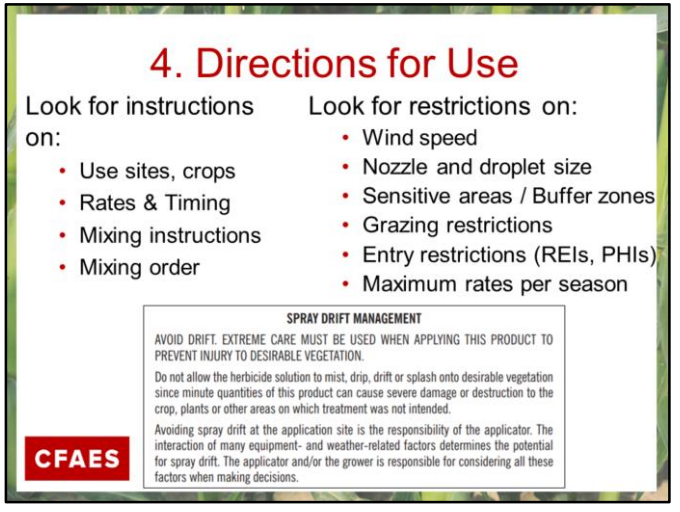
The most common environmental hazard concerns water – rivers, streams, ground water, pubic water systems. There are many precautions on labels about water.

This example is another type of environmental hazard statement. This example has a pollinator hazard warning, and refers you to the directions for use for specific use restrictions and requirements.

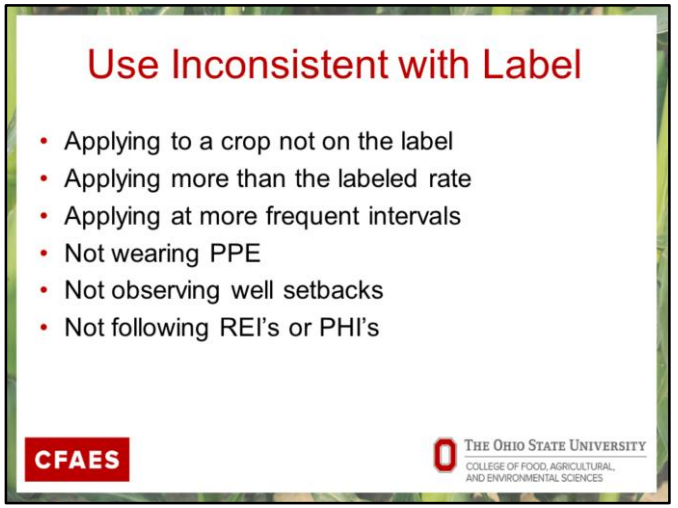


The Directions for Use section tell you how you are allowed to use the product – crops, non-crop situations, rates, timing etc. This is where you can find the sites where this product is allowed to be applied.

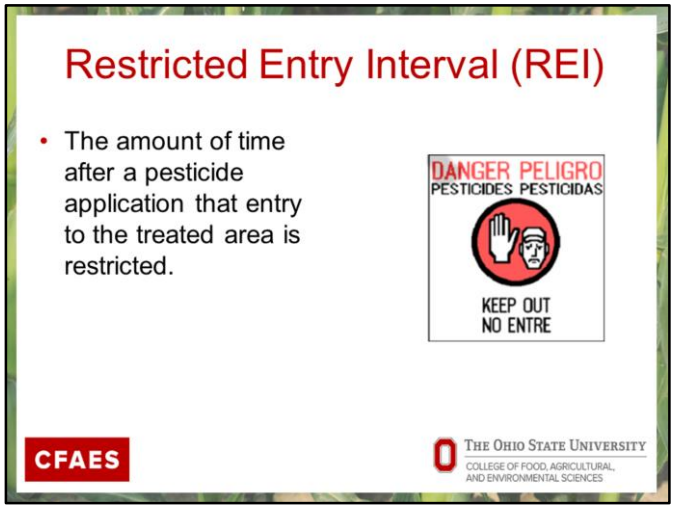
Every Pesticide registered in the US has this statement.



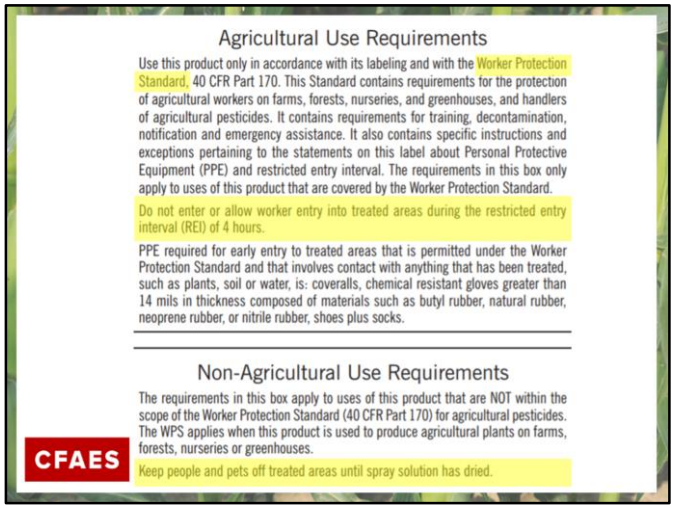
The Directions for Use Section will tell you what crops or non-crop situations you may use the product and how to mix, load and apply the material. It will also tell you what restrictions you have on your application, for example, wind speed, buffer zones, non-authorized entry restrictions.



In Ohio, pesticide use is site specific. You may make an application to a pest not on the label, as long as the site is listed on the label. You can also apply at lower rates.

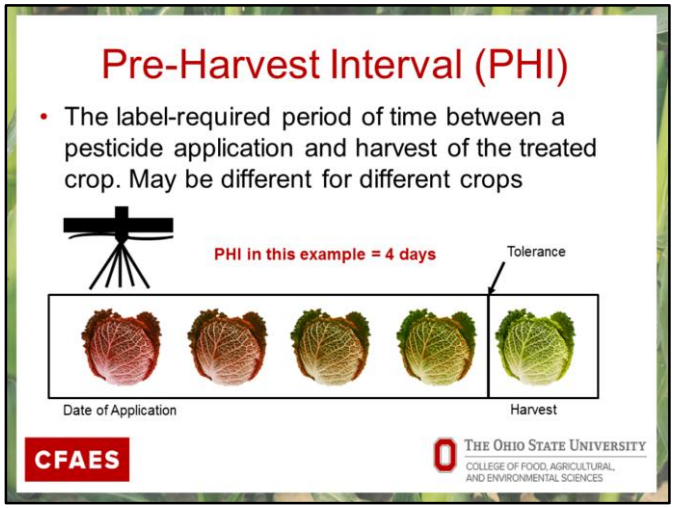


This is of big concern at nursery farms or orchards where workers are working closely with the crop on a daily basis.

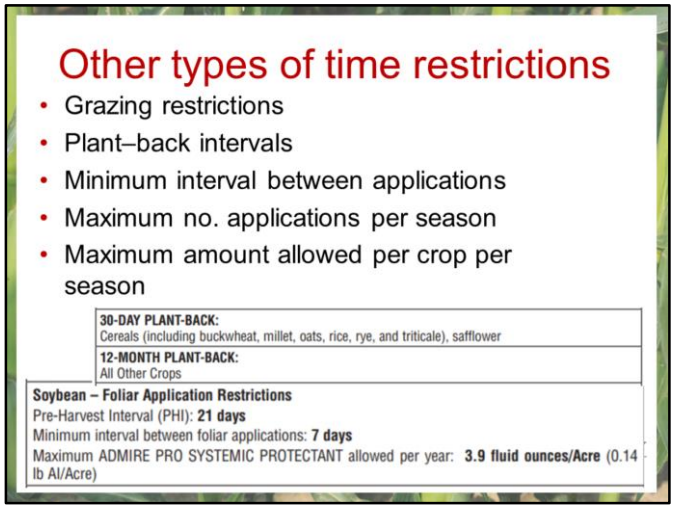


Many pesticides will have both an Agricultural Use Requirements box and a non-ag use box. If you are producing an agricultural commodity you must follow the Ag Use box. This box invokes the Worker Protection Standard, and it tells you that whenever you use this product on an agricultural commodity (as opposed to non crop areas, landscape, turf, etc.) you must follow WPS requirements.

Note: restricted entry intervals for Ag Uses and Non-Ag uses are often different. You don't get to choose…… for ag uses you must in this case keep people out for 4 hours after application.

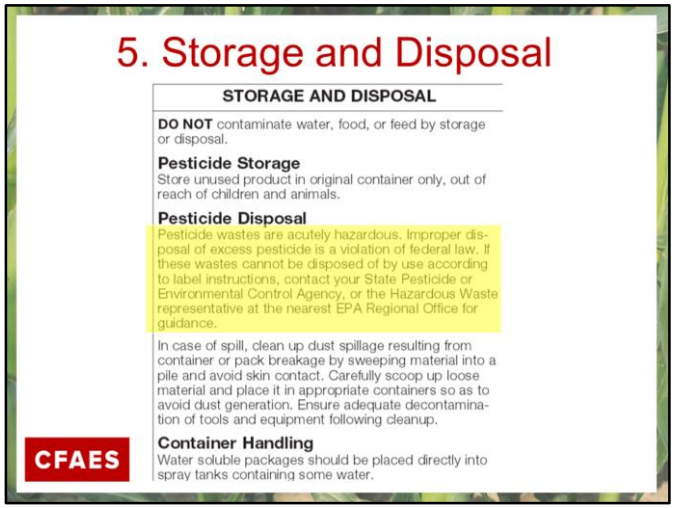


This term is important for crop protection pesticides. It describes how long you must wait after an application before the crop may be harvested. It is different from the Restricted entry interval, which is how long you must keep people out. The PHI reduces the amount of pesticide residues in the harvested crop, because all pesticides break down over time. The EPA establishes tolerances for all pesticides used on food crops, - the maximum allowable pesticide residue in a crop. The PHI is set to prevent the crop residues from exceeding the Tolerance. Not observing the PHI could result in illegal residues in the crop and it would have to be destroyed.

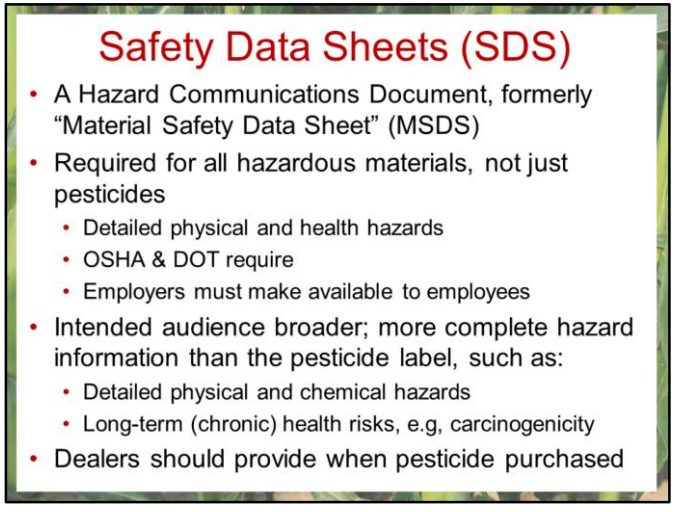


Grazing restrictions specify how long you must wait after an application before animals may graze.
Plant-back restrictions appear on the pesticide label because soil residues may affect rotational crops, you must wait the period to replant.

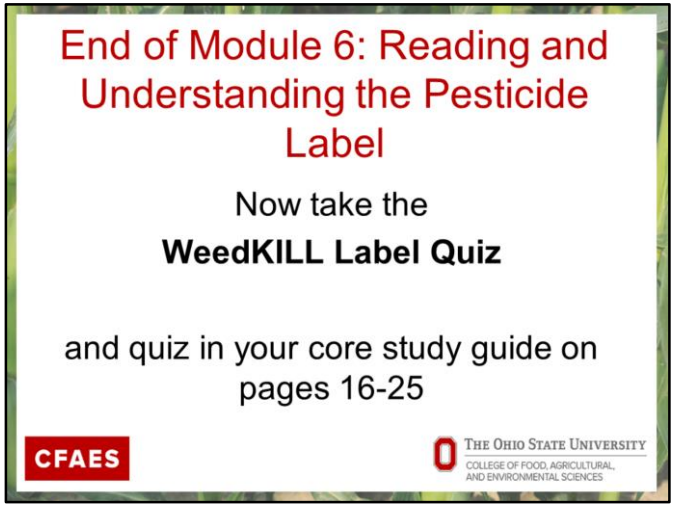
In terms of how much or how often a pesticide may be used on a crop, this also will be clearly spelled out on the label.



The Storage and Disposal Section covers pesticide and container disposal.



The Safety Data Sheet is another document, separate from the pesticide label. It is designed to communicate the hazards associated with any hazardous substance, pesticides being only one small subset. Communication of hazards is governed in the US by OSHA by way of the SDS Sheet.



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