

Master Gardeners 2018

Question set 1

Please answer the questions your area was assigned.

1. What is the main federal pesticide law?

2. According to the Master Gardener policy on pesticides, what two actions need to be taken before recommending the use of a pesticide?

3. True or False To manage a pest problem, first consider the use of a pesticide.

4. In addition to protecting the pesticide applicator, who or what else needs to be protected during the use of a pesticide product? List at least three entities.

5. Write out the Risk Equation.

6. In terms of the risk equation, state how to reduce the risk of harm from using a pesticide.

7. List the three routes of exposure that are of concern in pesticide toxicity.

8. True or False All skin absorbs at the same.

9. In toxicological terms, why is inhalation exposure a concern?

10. Following an oral exposure, where can a pesticide be absorbed into the body?

11. In addition to direct harm to the skin and absorption through the skin, what other harm can develop from exposure to the skin?

12. What are the two measurements for acute toxicity? (Give the name, units, and end point for each).

13. Give one example for which toxicity categories are used to assign something on a pesticide label.

14. List the five signal words in order from least to greatest potential harm.

15. List three other types of non-human toxicity measurements EPA uses when evaluating a pesticide.

Master Gardeners 2018
Question set 1 ANSWERS

Please answer the questions your area was assigned.

1. What is the main federal pesticide law?

Federal Insecticide, Fungicide, and Rodenticide Act

2. According to the Master Gardener policy on pesticides, what two actions need to be taken before recommending the use of a pesticide?

Identify the cause of the problem.

Monitor the problem.

3. True or False To manage a pest problem, first consider the use of a pesticide.

False

4. In addition to protecting the pesticide applicator, who or what else needs to be protected during the use of a pesticide product? List at least three entities.

Children

Pets

Items in the area being treated

Water

Wildlife

5. Write out the Risk Equation.

RISK = EXPOSURE X TOXICITY

6. In terms of the risk equation, state how to reduce the risk of harm from using a pesticide.

Reduce exposure by avoiding contact with the product or treated items.

Reduce toxicity by using a product containing a different active ingredient or one with a lesser signal word.

7. List the routes of exposure that are of concern in pesticide toxicity.

Oral

Dermal

Inhalation

8. True or False All skin absorbs at the same. *False*

9. In toxicological terms, why is inhalation exposure a concern?

Lung tissue can be easily damaged.

Products entering via inhalation can easily enter the blood stream.

10. Following an oral exposure, where can a pesticide be absorbed into the body?

Anywhere along the gut.

11. In addition to direct harm to the skin and absorption through the skin, what other harm can develop from exposure to the skin?

Sensitization leading to allergic reaction.

12. What are the two measurements for acute toxicity? (Give the name, units, and end point for each).

Lethal Dose 50 (LD₅₀), mg/kg body weight, the dose (amount) to kill 50 percent of a test population.

Lethal Concentration 50(LC₅₀), mg/liter or cubic meter, the concentration in air or water for 4 hours to kill 50 percent of the population.

13. Give one example for which toxicity categories are used to assign something on a pesticide label.

Signal Words

First Aid statements

Personal Protective Equipment (PPE)

14. List the five signal words in order from least to greatest potential harm.

Caution (voluntary)

Caution

Warning

Danger

Danger - Poison

15. List three other types of non-human toxicity measurements EPA uses when evaluating a pesticide.

Aquatic vertebrates (warm and cold water fish)

Aquatic invertebrates (water fleas)

Birds (ducks and quail)

Mammals (rodents)

Honeybees

Surface water
Ground water