

WHMIS and HHPS Review Questions

1. How can you quickly tell apart the WHMIS symbols and the HHPS symbols? What would you look for?

Look at the border. WHMIS borders are a diamond shape. HHPS symbols are an upside-down triangle or an octagon (stop sign).

2. What do WHMIS and HHPS stand for? How are the systems similar? How are they different? (Hint: What is the point of the symbols? Where are they used? How do the symbols compare?)

WHMIS: Workplace Hazardous Materials Information System

HHPS: Hazardous Household Products Symbols

They are similar because they both indicate potentially dangerous chemicals or containers.

They are different because HHPS is used on household products and is a simpler system; WHMIS is used in the workplace and school and is a more complex system which needs to deal with a greater variety of risks. They also are different because WHMIS has more symbols (9 or 10 if you include the environment one) while HHPS only has 4 (or 6 if you include the borders). Because WHMIS has more symbols, it is more detailed and breaks down the specific risks...e.g. there are two WHMIS symbols relating to fire hazards.

3. Name these symbols. Then, explain the similarities and differences between them.



Left to right: HHPS flammable, WHMIS flame, WHMIS flame over circle

Similarities: all relate to fire hazards

Differences: Flammable is an HHPS symbol; Flame and Flame Over Circle are WHMIS symbols. Flammable and Flame are similar because they both warn that the material or chemical itself will catch on fire easily and should be kept away from heat sources and oxygen sources. Flame Over Circle is different because it indicates that the chemical produces oxygen and should be kept away from flammable objects as well as heat/sparks.

4. Name these symbols. Then, explain the similarities and differences between them and their meanings.



Left to right: WHMIS compressed gas, WHMIS exploding bomb

Similarities: both indicate that the objects should be handled in a special way; if mishandled, both could result in rapid and explosive events

Differences:

Compressed Gas only indicates that the contents are a gas under pressure. It does not say anything about how reactive it is. Compressed gases should be stored upright and kept away from heat and sharp objects that could puncture them.

Exploding Bomb indicates that the contents themselves are highly reactive and/or explosive and that you should be very cautious about letting them close to sources of heat or other chemicals that could react with them. If dealing with a chemical labelled with this symbol, you should be very careful to look up additional information on it so you know what chemicals it could react with, and ensure that you keep them away from each other.

5. Which HHPS symbol is the WHMIS skull and crossbones symbol most similar to? Explain your choice.

It is most similar to HHPS Poisonous.

Both symbols indicate a chemical that can cause death or severe illness very soon after it is consumed. Extreme care should be taken with both types of chemicals. The symbols themselves are also very similar to each other, both indicating a skull and crossbones.

6. There are HHPS and WHMIS symbols indicating that the chemical is corrosive. What does corrosive mean, generally? How do the interpretations of the HHPS “Corrosive” and WHMIS “Corrosion” symbols differ?

Corrosive means that the chemical eats away at various materials.

The interpretations are different because under the HHPS system, the chemicals are only corrosive to skin, eyes, throat, stomach. They should not corrode metals. Under WHMIS, the chemicals corrode skin and eyes (and probably also throat and stomach), in addition to metals. This difference is shown visually in the symbols themselves: the HHPS symbol only shows a human hand being damaged. The WHMIS symbol shows a human hand as well as metal are being corroded.

7. List the three WHMIS symbols that indicate health risks. Compare and contrast them.

The symbols are: Health Hazard, Exclamation Mark, and Skull and Crossbones.

They differ in the severity of the health hazard and the time frame over which the health hazard could occur.

Exclamation Mark is for minor health hazards like skin irritation and irritation to the respiratory tract. It should be avoided through proper use of PPE (personal protective equipment).

Health Hazard and Skull and Crossbones both indicate very severe health concerns. Health Hazard indicates concerns like cancer, organ failure, and birth defects, while Skull and Crossbones indicates severe illness and death. The biggest difference is the time frame. Skull and Crossbones is an acute health hazard that requires very little time to take effect. Health Hazard is a slower-acting health hazard that generally will result in negative outcomes given prolonged exposure without appropriate precautions (i.e. over many years).