

Hazardous Medication Self-Learning Module March 2020



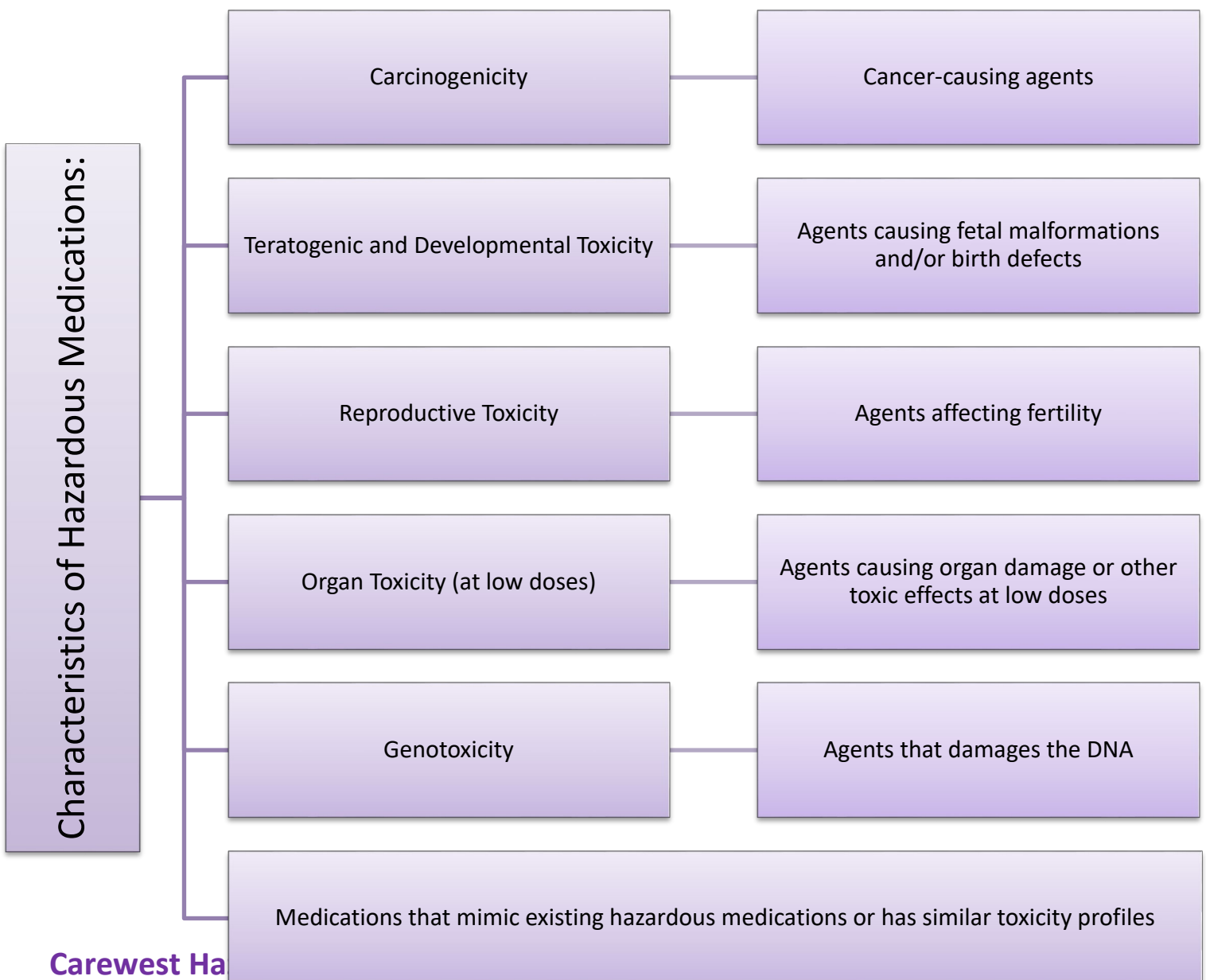
Hazardous Medications

HAZARDOUS MEDICATIONS IS AN **ANNUALLY REQUIRED LEARNING TOPIC FOR HEALTH CARE PROVIDERS.**

Hazardous Medications


Hazardous medications are those known or suspected to cause adverse health effects from exposure in the workplace. *The exposure may pose potential health risks to workers handling hazardous medications or handling contaminated body waste or materials.*

The National Institute for Occupational Safety and Health (NIOSH) defines hazardous medications as those medications which exhibit one or more of the following six characteristics in humans or animals:



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Hazardous medications are classified into three groups: KNOWN, POTENTIAL, and REPRODUCTIVE:

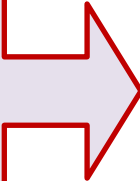
<p>KNOWN Hazardous Medication</p> <p>Cytotoxic Medication</p> 	<p>This group mainly contains antineoplastic medications used for chemotherapy treatment of cancer. However, lower doses may be used for the treatment of non-cancer conditions (e.g., Rheumatoid Arthritis, Multiple Sclerosis, Psoriasis, Systemic Lupus Erythematosus, Crohn’s Disease). Some medications in this group are also Cytotoxic, which will be labelled accordingly.</p> <p>Example:</p> <ul style="list-style-type: none"> • Immunosuppressant medications (such as methotrexate) may be used to prevent the rejection of a transplanted organ. • Methotrexate can also be used to treat Rheumatoid Arthritis and Psoriasis.
<p>POTENTIAL Hazardous Medication</p>	<p>This group mainly contains the non-antineoplastic medications but meets one or more criteria of the NIOSH classification. These medications have the potential to develop adverse health effects in the future.</p> <p>Example:</p> <ul style="list-style-type: none"> • Antiviral medication (such as valganciclovir) that may be used to treat serious viral infections like HIV.
<p>REPRODUCTIVE Hazardous Medication</p>	<p>This group mainly contains non-antineoplastic medications. May pose risk only for certain individuals who are trying to conceive, pregnant and breastfeeding women.</p> <p>Example:</p> <ul style="list-style-type: none"> • Hormonal medications (such as estrogen) or medications with hormone-like effects (such as misoprostol) may be used as a treatment of certain cancers and non-cancer conditions like menopause symptom control.

A current list of hazardous medications is maintained by Pharmacy and is distributed to all Medication Rooms. The list will be updated as needed and reviewed annually.

Hazardous medications will be transported and stored in secure leak-proof containers and will be labeled accordingly by Pharmacy before transporting to the care units. Please see a labeling template below.

It is important to store unit dose packages within the labelled baggies.

Individual pill packages may not have warning labels applied.



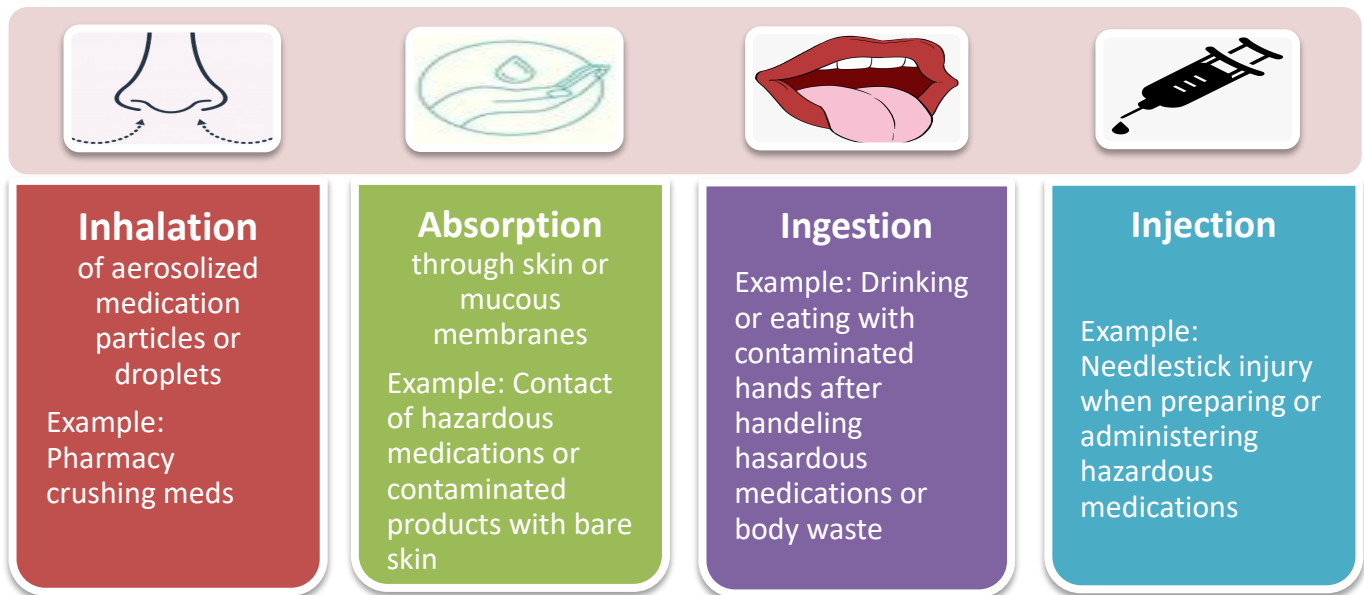

Adverse Effects on Reproductive Health

Hazardous medications that pose risks to reproductive health can affect both female and male workers who are trying to conceive or females who are pregnant or breastfeeding. Current research suggestions for occupational health hazards are based on findings from individuals taking hazardous medications for health-related issues. For example, hazardous medications are known to be found in breastmilk of individuals receiving these medications as cancer treatments. It is suggested that breastfeeding staff may have the same risk when exposed to hazardous medications at the workplace, which consequently places the infant at risk. In males, hormonal changes have been reported from individuals receiving hazardous medications as treatments. As a result, infertility becomes a risk factor for couples who are trying to conceive. Developing fetuses and newborns are more susceptible to chemical toxicity. Exposure at this time may cause birth defects, fetal malformations, and/or developmental concerns.

Please note the policy statement regarding staff who are trying to conceive a child, are pregnant or breastfeeding. These staff may request the option of temporarily refraining from handling hazardous medications and/or their contaminants. Employee Health and Safety will perform a risk analysis and provide recommendations regarding workplace accommodation.

Routes of Exposure

Exposure to hazardous medications can occur through various routes. It can happen when staff are handling hazardous medications or body wastes/other contaminated materials of clients who receive hazardous medications.



Can you think of examples of potential exposure to hazardous medications in your work area?

Reducing Workplace Exposure

Reducing workplace exposure to hazardous medications and contaminants is a team effort. Every staff has a role to ensure risks are minimized regardless of your occupation. The risk of exposure varies for different occupations within health care. It depends on variables such as degree of exposure and the duration of exposure (daily, weekly, monthly, or over years). Exact knowledge of how much exposure is too much is not known. We do know, however, that prolonged unprotected exposure to hazardous medications increases the risk of adverse health effects. Pharmacists who prepare chemotherapy agents (for injection) and nurses who administer them are two groups of workers deemed to be most at risk.

Assessment and Communication

The Hazardous Medication Handling Risk Assessment (HMHRA) is an evaluation of the risk factors related to potential exposure to a hazardous medication or the blood and body fluids of clients receiving hazardous medications to reduce occupational exposure. By completing this assessment, staff can take the appropriate precautions to reduce their risk of exposure. Part of this assessment is to review Appendix 1 & 2 of Policy CS-06-06-27 and communicate this information to the team.

Regulated Nurses must indicate on the care plan any KNOWN, POTENTIAL, and REPRODUCTIVE risk medications and special handling precautions.

Special handling precautions must be reinforced during each shift report. Precautions are required for continent products, catheter tubing, catheter bags, dialysis bags, ostomy supplies, and/or wound dressings of clients receiving hazardous medications. Please note that this is not an exhaustive list of products that require special handling precautions. You should be assessing any potential risk of exposure and determine if the product has been contaminated with the client's blood or body fluids.

The **'Touchless Technique'** should be used when handling hazardous medications to limit exposure. Hazardous medications should be dispensed directly into the medication cup without touching the medication with bare or gloved hands.

Personal Protective Equipment (PPE)

The required PPE needed to protect yourself when handling hazardous medications and contaminated materials are outlined in CS 06-06-27 Appendix 1 & 2. Please review the chart and familiarize yourself with the PPE requirements for KNOWN, POTENTIAL, and REPRODUCTIVE hazardous medications of the required task.



Do you know where each of the PPE items are located and stored on your unit?

Handling Body Waste

Special handling of contaminated items and body waste must be done for the specified number of hours following the last dose of hazardous medication. This must be indicated in the care plan and communicated to the team at each shift report. Special handling precautions for body waste should continue for *a minimum* of 48 hours after the last dose of hazardous medication administration. The exact number of hours or days varies between medications.

Cyclophosphamide and Methotrexate require special handling precautions for urinary, stool, and bile products of a minimum of five (5) days after the last dose of medication administration.

Body waste can be flushed down the toilet:



For KNOWN hazardous medication, put the lid down or cover the toilet with a plastic-backed absorbent pad before flushing the toilet. Flush twice.



Discard the absorbent pad as contaminated waste in a biohazard container.

Hazardous body waste and contaminated materials must be placed in a plastic bag and discarded in a biohazard container.

Clients receiving hazardous medications should have a dedicated commode during the period where special handling is required. This limits the risks of contamination to other clients.

Awareness for Housekeeping staff:

A special label will be placed on the door frame to alert about the hazardous medication. These labels are on order.

Laundry and Utensils

1. Eating utensils, such as forks and knives, can be placed in regular dishwashing bins for cleaning with no special precautions needed.
2. Appropriate PPE is required for handling contaminated linens (refer to Appendix 1 & 2).

Facility Laundry:

- If the soiled linen is not grossly contaminated, it can be placed in regular soiled linen bags.
- If the soiled linen is grossly contaminated with body fluids then dispose of it in a plastic garbage bag, tie the bag, and place it in a biohazard container. Grossly contaminated means the item is dripping or releases liquid when compressed.

Laundry done at home:

- Place the contaminated items in a plastic bag. Provide instructions to wash the items twice without touching the soiled items with bare hands.

Carewest Policy and Procedure (CS-06-06-27) Hazardous Medications: Administration, Handling and Disposal

Policy/procedure CS-06-06-27 “Hazardous Medications: Administration, Handling and Disposal” is in the Care and Services manual. You may also access the policy via Careweb.

You must read this policy as part of your learning.

Where can I
find the
policy?

Regulated Nurses – review the entire policy and procedure to understand how to administer hazardous medications, the spill response, and proper handling of body waste and contaminated items.

Other staff – review the policy and procedure sections regarding the spill response and handling of contaminated body waste and items.



Please proceed to the Survey Monkey link on your Online Orientation checklist to complete your quiz for this topic.

References

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