

## Clinical Process Instruction Manual

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### Hazardous Materials Training, Handling and Storage Process Instruction

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#### Policy:

Trillium Gift of Life Network (TGLN) provides and promotes a safe work environment. TGLN ensures its staff receive appropriate training for handling and storage of hazardous materials on its premises in accordance with the Workplace Hazardous Materials Information System (WHMIS). Hazardous materials may be biological or chemical in nature. All biological material must be treated as a potential source of bacterial, fungal or viral infectious agent as indicated in universal precautions. Chemical materials must be handled as instructed by its label or accompanying Safety Data Sheet (SDS).

The expectation is that staff will at all times:

- practice and promote safe work habits,
- use personal protective equipment (PPE) as required,
- bring the attention of their supervisor concerns about hazardous products,
- report any unsafe acts or conditions to his/her supervisor, and
- work in compliance with TGLN's safety clinical process instructions and any/all legislative health and safety standards.

This process instruction applies to Tissue Recovery Coordinators (TRC), Multi-Tissue Recovery Coordinators (MTRC), Surgical Recovery Coordinators (SRC), Inventory Assistants, Administrative Assistants – PRC Organ, PRC Tissue, Hospital Programs, Clinical Specialist – Organ, Clinical Specialists – Tissue, , Manager – Tissue Recovery, Manager – Ocular Recovery, Manager, Surgical Recovery Manager – Organ and Manager – PRC Organ.

#### Process:

1. Human Resources ensures staff receive general Workplace Hazardous Materials Information System (WHMIS) training. This training will occur on an annual basis.
2. Human Resources documents the annual WHMIS training on *WHMIS Training Record* and files it in the employees training record. See Exhibit 1.
3. Human Resources will review potential risks/hazards and bring forward relevant issues to the Joint Occupational Health and Safety Committee (JOHSC) and action thereof. Upon request of the JOHSC, Human Resources shall make available a list of products and SDS.
4. Human Resources will make available a list of products and SDS.

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5. Provincial Resource Center (PRC) Manager – Organ, Manager, Surgical Recovery Manager – Organ or designate, Manager – Tissue Recovery and Manager – Ocular Recovery or designate ensure staff receive job specific WHMIS training regarding biological and/or chemical hazards they may encounter during their work and the PPE required when handling these items. This training will occur on an annual basis.
6. Provincial Resource Center (PRC) Manager – Organ, Manager, Surgical Recovery Manager – Organ or designate, and Manager – Tissue Recovery and Manager – Ocular Recovery or designate ensure a current hazardous materials inventory is maintained, that SDS are readily accessible and up-to-date, that all staff know of the location of SDS for hazardous products in the staff's workplace and investigate any known or suspected incidents with hazardous products, unsafe conditions, or unsafe procedures. They shall report findings to Human resources
7. Education documents the annual job specific WHMIS training and files it in the employees training record.
8. Inventory Assistant – Provincial Tissue Program or Administrative Assistant - PRC ensures all SDSs are obtained when ordering supplies, if required. A list of possible hazardous materials is specified in Appendix 1.
9. SDS binders are located in the Clinical Supply/Receiving area at 483 Bay Street and at the Forensic Services and Coroner's Complex. The Inventory Assistant – Provincial Tissue Program ensures these are up to date.
10. Staff will use PPE as specified by the hazardous material's SDS, as applicable. WHMIS Controlled hazardous materials may be identified by a hazardous symbol printed on the label of the product. See Appendix 2.
11. Staff are responsible for the following:
  - inspecting all PPE prior to its use,
  - wearing PPE upon the direction of their immediate supervisor and as documented in the process instruction,
  - participating in mandatory training,
  - notifying their supervisor when they have concerns regarding hazardous products (e.g. damaged or removed labels, outdated SDS, concerns with product use),
  - notifying their supervisor when new PPE is necessary,

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- notifying their supervisor of any changes which might impact the type of PPE they utilize (e.g. facial hair, pregnancy, etc.) reporting to their supervisor if labels are unreadable or altered,
- speaking to their supervisor immediately if they have difficulty understanding the information on the labels or the SDS. See Appendix 3 for how to read a WHMIS label. See Appendix 4 for how to read an SDS,
- ensuring that a workplace label is affixed to new containers if hazardous materials are transferred from supplier containers into workplace containers,
- be aware of the location and contents of the SDS binder and notify their supervisor or their designate if an SDS is missing.

Adhere to WHMIS policies and programs at off-site locations (e.g. hospitals, morgues, coroner's office, funeral homes) and contact appropriate personnel if assistance is required.

12. Supplies are located in the Clinical Supply/Receiving Area at 483 Bay St and at the Forensic Services and Coroner's Complex. Staff will follow handling and storage requirements as specified by hazardous material's SDS or by the applicable process instruction.
13. When disposing of hazardous materials, staff shall follow the processes identified in Hazardous Waste Disposal Process Instruction, CPI-9-1506.
14. Should there is a biohazardous or chemical spill, staff shall follow the processes identified in the Biohazard and Chemical Spill Clean Up Process Instruction, CPI-9-1501.

Incidents involving biohazardous materials shall be reported to the Manager, Manager-On-Call (MOC)/Tissue-On-Call (TOC) or designate.

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#### Records:

Record Name	Form No. (if applicable)	Record Holder	Record Location	Record Retention Time (as a minimum)
WHMIS Training Record	_____	Human Resources	Human Resources	16 years

#### References:

- *Biohazard and Chemical Spill Clean Up Process Instruction, CPI-9-1501*
- *Hazardous Waste Disposal Process Instruction, CPI-9-1506*
- Standards for Tissue Banking, American Association of Tissue Banks, United States, 14th edition, 2017. J2.400, J3.100, J3.200 (4), J3.300.
- Canadian Centre for Occupational Health and Safety. "WHMIS 2015 - Safety Data Sheet (SDS)" [https://www.ccohs.ca/oshanswers/chemicals/whmis\\_ghs/sds.html](https://www.ccohs.ca/oshanswers/chemicals/whmis_ghs/sds.html)

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#### Appendix 1: List of Hazardous Materials Used at TGLN, by Program

##### Tissue Program

- 10% Povidone Iodine
- Antiseptic Isopropyl Alcohol Pad
- Avaguard
- Betadine
- Cavi Wipes
- Cavicide
- Chlorhexidine Gluconate Solution
- Dura Prep Surgical Solution
- Endure 400 Scrub-Stat 4 Surgical Scrub
- E-Z Scrub Brush 4% CHG
- Optisol-GS
- Povidone Iodine Solution
- Povidone Iodine Swab Stick
- Sterile 70% Isopropanol

##### Organ Program

- 10% Calcium Chloride Injection
- Antiseptic Isopropyl Alcohol Pad
- Celsior Cold Storage Solution
- Dust Destroyer
- Prostin VR Sterile Solution

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#### Appendix 2: WHMIS Hazard Symbols

The following WHMIS Hazard Symbols may be present on materials used for recoveries or may be required to be labelled on recovered tissues.



The **flame** pictogram is used for the following classes and categories:

- Flammable gases (Category 1)
- Flammable aerosols (Category 1 and 2)
- Flammable liquids (Category 1, 2 and 3)
- Flammable solids (Category 1 and 2)
- Pyrophoric liquids (Category 1)
- Pyrophoric solids (Category 1)
- Pyrophoric gases (Category 1)
- Self-heating substances and mixtures (Category 1 and 2)
- Substances and mixtures which, in contact with water, emit flammable gases (Category 1, 2 and 3)
- Self-reactive substances and mixtures (Types B\*, C, D, E and F)
- Organic peroxides (Types B\*, C, D, E and F)



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The **flame over circle** pictogram is used for the following classes and categories:

- Oxidizing gases (Category 1)
- Oxidizing liquids (Category 1, 2 and 3)
- Oxidizing solids (Category 1, 2 and 3)



The **gas cylinder** pictogram is used for the following classes and categories:

- Gases under pressure (Compressed gas, Liquefied gas, Refrigerated liquefied gas, and Dissolved gas)



The **corrosion** pictogram is used for the following classes and categories:

- Corrosive to metals (Category 1)
- Skin corrosion/irritation - Skin corrosion (Category 1, 1A, 1B and 1C)
- Serious eye damage/eye irritation - Serious eye damage (Category 1)

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The **exploding bomb** pictogram is used for the following classes and categories:

- Self-reactive substances and mixtures (Types A and B\*)
- Organic peroxides (Types A and B\*)



The **skull and crossbones** pictogram is used for the following classes and categories:

- Acute toxicity -
  - Oral (Category 1, 2 and 3)
  - Dermal (Category 1, 2 and 3)
  - Inhalation (Category 1, 2 and 3)



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The **health hazard** pictogram is used for the following classes and categories:

- Respiratory or skin sensitization - Respiratory sensitizer (Category 1, 1A and 1B)
- Germ cell mutagenicity (Category 1, 1A, 1B and 2)
- Carcinogenicity (Category 1, 1A, 1B, and 2)
- Reproductive toxicity (Category 1, 1A, 1B and 2)
- Specific Target Organ Toxicity - Single exposure (Category 1 and 2)
- Specific Target Organ Toxicity - Repeated exposure (Category 1 and 2)
- Aspiration hazard (Category 1)



The **exclamation mark** pictogram is used for the following classes and categories:

- Acute toxicity – Oral, Dermal, Inhalation (Category 4)
- Skin corrosion/irritation – Skin irritation (Category 2)
- Serious eye damage/eye irritation – Eye irritation (Category 2 and 2A)
- Respiratory or skin sensitization – Skin sensitizer (Category 1, 1A and 1B)
- Specific target organ toxicity – Single exposure (Category 3)

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The **biohazardous infectious materials** pictogram is used for the following classes and categories:

- Biohazardous Infectious Materials (Category 1)

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#### Appendix 3: How to Read a WHMIS Label



**WHMIS 2015**  
Workplace Hazardous Materials Information System  
fact sheets



These Fact Sheets summarize key requirements of WHMIS 2015 which incorporates the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) for Canadian Workplaces. See [WHMIS.org](http://WHMIS.org) for more information.

## Supplier Labels

The product label is the worker's first source of information about the hazards of a product and how to use it safely. In WHMIS 2015, supplier labels for hazardous workplace products must display the information elements shown below.

**1 Product K1 / Produit K1**

**2** 

**3** **Danger**

Fatal if swallowed.  
Causes skin irritation.

**Precautions:**  
Wear protective gloves.  
Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.

**5** Store locked up.  
Dispose of contents/containers in accordance with local regulations.

**IF ON SKIN:** Wash with plenty of water. If skin irritation occurs. Get medical advice or attention.  
Take off contaminated clothing and wash it before reuse.  
**IF SWALLOWED:** Immediately call a POISON CENTRE or doctor. Allow mouth.

**6** ABC Chemical Co., 123 rue Anywhere St., Mytown, ON N0N 0N0 (123) 456-7890

**4** 

**Danger**

Mortel en cas d'ingestion.  
Provoque une irritation cutanée.

**Conseils :**  
Porter des gants de protection.  
Se laver les mains soigneusement après manipulation.  
Ne pas manger, boire ou fumer en manipulant ce produit.

**5** Garder sous clé.  
Éliminer le contenu/conteneur conformément aux règlements locaux en vigueur.

**EN CAS DE CONTACT AVEC LA PEAU :** Laver abondamment à l'eau.  
**En cas d'irritation cutanée :** Demander un avis médical/consultez un médecin.  
Enlever les vêtements contaminés et les laver avant réutilisation.  
**EN CAS D'INGESTION :** Appeler immédiatement un CENTRE ANTIPISON ou un médecin.  
Rincer la bouche.

**Note: General labelling requirements**  
Supplier labels must be bilingual (English/French), easy to read, and durable. If the label is lost, damaged, or no longer readable, the product must be relabelled.  
The pictogram(s), signal word and hazard statement(s) must be grouped together on a label.

- 1. Product Identifier**  
The product name exactly as it appears on the container and on the Safety Data Sheet (SDS).
- 2. Hazard Pictograms**  
Hazard pictograms, determined by the hazard classification of the product. In some cases, no pictogram is required.
- 3. Signal Words (NEW)**  
"Danger" or "Warning" are used to emphasize hazards and indicate the severity of the hazard.
- 4. Hazard Statements**  
Brief standardized statements of all hazards based on the hazard classification of the product.
- 5. Precautionary Statements**  
These statements describe recommended measures to minimize or prevent adverse effects from exposure to the product, including protective equipment and emergency measures. First aid is included in precautionary information.
- 6. Supplier Identifier**  
The company which made, packaged, sold or imported the product, and is responsible for the label and SDS. Contact the supplier for additional product information.

**Note: Hazardous ingredients**  
Disclosure of hazardous ingredients on a label is not required under WHMIS 2015. However, the supplier may choose to include them on the label. For a hazardous product that is a substance, the chemical name of the substance must be listed on the SDS. For a hazardous product that is a mixture, the chemical names of the hazardous ingredients that present health hazards must be listed on the SDS.


WHMIS 2015 is based on the 5th revised edition of the GHS. See [WHMIS.org](http://WHMIS.org) for more information.

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#### Appendix 4: How to Read a Safety Data Sheet



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Workplace Hazardous Materials Information System  
fact sheets



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## Safety Data Sheets

**Safety Data Sheets (SDSs)** are an essential component of WHMIS 2015. Employers and workers use the information on an SDS to protect themselves from hazards and for safe handling and use.

SDS Section	Information Requirements (partial list)
1 Identification	Product identifier, recommended use and restrictions on use, supplier contact information, emergency phone number.
2 Hazard identification	Classification (hazard class and category), label elements (including hazard pictogram, signal word, hazard statement and precautionary statements) and other hazards (e.g. thermal hazards).
3 Composition/information on ingredients	For a hazardous product that is a substance: the chemical name, synonyms, CAS No. and the chemical name of impurities, stabilizing solvents and stabilizing additives where classified and that contribute to the classification of the product. For a hazardous product that is a mixture: for ingredients that present a health hazard, the chemical name, synonyms, CAS No. and concentration. Note: Confidential Business Information Rules may apply.
4 First-aid measures	First-aid measures by route of exposure as well as most important symptoms/effects.
5 Fire-fighting measures	Suitable (and unsuitable) extinguishing media, specific hazards, special equipment and precautions for fire fighters.
6 Accidental release measures	Protective equipment, emergency procedures, methods and materials for containment and clean up.
7 Handling and storage	Precautions for safe handling, conditions for storage, including any incompatibilities.
8 Exposure controls/ personal protection	Exposure limits, engineering controls, personal protective equipment.
9 Physical and chemical properties	Appearance, odour, odour threshold, pH, melting/freezing point, boiling point and range, flash point, upper and lower flammable or explosive limits.
10 Stability and reactivity	Reactivity, chemical stability, possible hazardous reactions, conditions to avoid, incompatible materials, hazardous decomposition products.
11 Toxicological information	Description of various toxic effects by route of entry, including effects of acute or chronic exposure, carcinogenicity, reproductive effects, respiratory sensitization.
12 Ecological information*	Aquatic and terrestrial toxicity (if available), persistence and degradability, bioaccumulative potential, mobility in soil.
13 Disposal considerations*	Safe handling and methods of disposal, including contaminated packaging.
14 Transport information*	UN number and proper shipping name, hazard classes, packing group.
15 Regulatory information*	Safety, health and environmental regulations specific to the product.
16 Other information	Other information, including date of the latest revision of the SDS.

The SDSs must be accurate at the time of sale or import, for each sale or import. SDSs must be updated when significant new data become available. Suppliers must provide this new information at the time of sale.

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\* Sections 12 to 15 require the headings to be present. The supplier has the option to not provide information in these sections.

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#### Exhibit 1: Sample WHMIS Training Record

