

## The Warning Sign Booklet

Prepared by: Western University Health, Safety & Well-being Revision 11 - June 2024

# Western University Health, Safety & Well-being Contact Information

Support Services Building - Room 4159

hsw@uwo.ca Fax: 519-661-3420

#### **Emergency after-hours**

Contact Western Special Constable Services (WSCS) at 911.

#### **Staff Members**

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#### Introduction to the Warning Sign Booklet

The use and storage of hazardous materials at Western is a normal part of the ongoing teaching and research activities associated with the University. While most members of the University community will have no reason to encounter these substances, some of our staff, faculty and students must have regular access to areas containing hazardous materials. In order to protect the health and safety of all members of the University, a series of standard warning signs was developed.

The purpose of these signs is threefold. First, identifying some rooms as hazard areas will warn unauthorized persons not to enter. Secondly, they will notify those people who may be required to enter the area on an irregular or infrequent basis of the particular hazards in the room. Finally, they will serve to remind those who work in hazard areas of the need to take special precautions, and to use special protective equipment where warranted.

Throughout this booklet, warning signs are classified according to two groups. These are **Caution** and **Danger** signs.

**Caution** signs indicate the presence of a hazard, but do not restrict entry beyond limiting it to authorized personnel. Included, as authorized personnel are the workers in the area, caretaking staff, trades, and Western Special Constable Service (WSCS) staff.

**Danger** signs indicate an immediate and unusually serious hazard and restrict entry to the area to the staff working on the project only. All other personnel must have permission of the research supervisor to enter the area.

This booklet will be amended from time to time as the situation on campus changes. Please refer any questions about any of this material to Health, Safety & Well-being (HSW).

Title: Caution- Authorized Personnel ONLY Type: Caution Date: June 2024

#### Description of Hazard:

Hazardous Chemicals - various WHMIS Hazard Classes

#### Instructions:

Caretaking: No restrictions on sweeping, bulb changing, dusting, garbage

removal, testing safety showers or checking fire equipment.

Do not empty garbage cans containing chemical wastes or

chemical bottles.

WSCS: No restrictions on entry.

Trades: No restrictions on entry.

Do not move or rearrange any lab equipment or containers- must

be done by lab staff.

Routine maintenance must be scheduled in advance with Lab

Supervisor.

This sign is distributed by Western University Health, Safety & Well-being. For further information, please contact <a href="https://example.com/hsw@uwo.ca">hsw@uwo.ca</a> - listed on page 2.



## **Authorized Personnel** ONLY

#### This Room Contains the Following WHMIS Hazard Classes:

$\Diamond$	Compressed Gases		<b>®</b>	Biohazard Materials	Ш
	Fire Hazards & Combustible Materials			Corrosive Materials	
<b>(2)</b>	Oxidizing Materials			Dangerously Reactive or Explosive Materials	
	Materials with Immediate & Serious Toxic Effects		<b>&amp;</b>	Health Hazards	
<b>(</b>	Materials with Other Toxic Effects or that Damage the Ozone Layer				
Super	visor:		Supervise	or Office Location:	
Supervisor Office Phone:		Supervisor Emergency Number:			

All workers and visitors **MUST** wear **Safety Glasses** and any Personal Protective Equipment as required by the Supervisor

In Case of Emergency Call: 911

Title: Material for Disposal Type: Information Date: June 2024

#### Description of Hazard:

Chemical Waste: - Stickers used to identify packages containing chemical waste for disposal.

#### Instructions:

Caretaking: Do not touch these packages. Contact individual on label or HSW.

WSCS: Do not touch these packages. If found on campus in unusual or

inappropriate areas, contact the Researcher identified on the label,

or Health, Safety & Well-being.

Trades: Do not touch these packages. Contact individual on label or HSW.

\* If package is leaking, isolate the area and call Western Special

Constable Services at 911.

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HAZARD	OUS MATERI	AL FOR DISPOSAL
NAME OF CON	STITUENT(S)	% TOTAL CONTENT
PRINCIPAL HAZ	ARD(s):	
In the event of ar	emergency, please call:	
Research Direct		
Diame Marchae		
Phone Number	:	
Phone Number Location of Lab	:	
	:	

Product Identifier	name, generic na	nd name, chemical name, common ame, trade name, etc. of the uct found on the SDS	
<u>Hazard Informatio</u>	<u>n</u>	Include the signal word and hazard statement from SDS	
Safe Handling Prec	autions	PPE requirements, hygiene, emergency measures	
See Safety Data Sheet (SDS) before using			

WHMIS - Workplace Label

**Title**: Caution – Radiation Area **Type**: Caution **Date**: June 2024

#### Description of Hazard:

Radiation Area - Radioactive Laboratory and/or radioactive material storage area

- Active benches, equipment, containers and storage area are labelled with radiation tape and/or sign(s)

#### Instructions:

Caretaking: No restrictions on regular garbage removal, sweeping, dusting, bulb

changing, drench shower testing or checking fire equipment.

Do not enter if equipment or experiment in progress, verify with the

researcher.

After-hours: Contact the Laboratory Supervisor and\or WSCS at

911.

WSCS: Do not enter unless escorted.

Trades: Do not enter if material in use. Maintenance must be scheduled in

advance with the lab supervisor.

Do not move or rearrange any lab equipment.

After-hours: Contact the Laboratory Supervisor and\or WSCS at

911.

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#### **RAYONNEMENT — DANGER — RADIATION**



#### **RESTRICTED AREA**

RADIATION PERMIT HOLDER	ł
Name	Phone No
IN CASE OF EMERGENCY CO	NTACT:
UWO RADIATION SAFETY OFFI (519) 661-2111 Ext. 84746 - 8	
WSCS - 911 using campus tele	phone

## DESIGNATED NUCLEAR SUBSTANCE ROOM

#### **NOTICE TO ALL PERSONNEL**

Security regulations demand that this room

#### **MUST BE KEPT LOCKED**

in the absence
of an authorized person or
persons during normal working hours
and at all other times
including evenings, nights,
weekends and holidays

**Title**: Caution – Radioactive Material Storage **Type**: Caution **Date**: June 2024

#### **Description of Hazard:**

- Open Source radioactive materials\*, being stored in frozen or prepared solutions
- Radioactive materials are labelled and in marked containers

This sign is used on refrigerators, freezers, incubators, cupboards, and other storage cabinets.

#### Instructions:

Caretaking: Do not enter or open these storage areas.

Any scientific equipment with this sign affixed, must not be

disposed to regular garbage or landfill.

After-hours: Contact WSCS at 911.

WSCS: Do not touch or move this equipment.

Trades: Do not touch or move this equipment unless it has been checked

for contamination and confirmed as cleaned.

Storage area must be empty and tested for contamination before

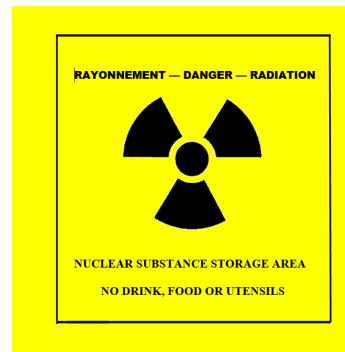
repair or maintenance work can proceed.

After-hours: Contact WSCS at 911.

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<sup>\*</sup> open source = solid, liquid

<sup>\*</sup> You may ask for contamination results prior to doing any work



Title: Caution – Radioactive Material Type: Caution Date: June 2024

#### **Description of Hazard:**

- Radioactive materials waste label

- This sticker identifies radioactive waste materials, packaged for disposal, often usually in a 20L plastic pail, approved for radioactive waste or bags.

#### Instructions:

Caretaking: Do not touch or remove any of these packages.

Any packages with this sign affixed, must **not** be disposed in

regular garbage or landfill.

Contact the permit holder and\or WSCS at 911.

WSCS: Do not touch these packages. If found in an unusual or

inappropriate location, contact the permit holder, identified on the

label.

Trades: Do not touch these packages.

After-hours: Call permit holder or contact the Lab Supervisor and\or

WSCS at 911.

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Nuclear Activity	Western Un ONNEMENT — DAN Substance: (μ¢i or MBq): Activity:	GE —	-
Permit I	Holder:		
Permit I	Number:		
(Check /)	AQUEOUS (Water Soluble) COMBUSTIBLE	0	LIQUID SCINTILLATION VIALS
	GLASS		OTHER:
٥	HAZARDOUS CHEMICALS		
List and	Quantity (%) of Hazardous	Che	micals (if applicable):

Title: Warning - This device contains RADIOACTIVE MATERIAL

Type: Caution Date: June 2024

#### **Description of Hazard:**

Sealed Source Radioactive materials are present inside the labelled equipment.

#### Instructions:

Caretaking: Do not move any equipment bearing this label.

This equipment must not be disposed of without prior approval of

HSW.

After-hours: Contact the Lab Supervisor and/or WSCS at 911.

WSCS: Do not touch or move any equipment bearing this label, contact

HSW.

Trades: Do not touch or move any equipment bearing this label unless

authorized by the Lab Supervisor.

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#### **RAYONNEMENT — DANGER — RADIATION**



This radiation device contains sealed source

Nuclear Substance

Quantity (MBq or mCi)

Initial Date\_\_\_\_\_

Permit Holder

Permit Number

Telephone

Contact the UWO Radiation Safety Coordinator before disposing or relocating of this radiation device.

In case of emergency contact: UWO Radiation Safety Officer (519) 661 – 2111 Ext. 84746 – 8:30 am to 4:30 pm

Or

Western Special Constable Services (WSCS) - 911 using campus telephone

**Title**: Caution - X-RAY Room **Type**: Caution **Date**: June 2024

#### **Description of Hazard:**

- X-Ray generating equipment, x-ray diffraction machines, x-ray fluorescent equipment.

- Machine is turned on when red warning light located at entrance is on.
- No hazard if the machine is turned off.

#### **Instructions**:

Caretaking: Do not enter if equipment in use, otherwise, no restrictions on entry

into the room or laboratory.

WSCS: Do not enter if equipment in use, otherwise, no restrictions on entry

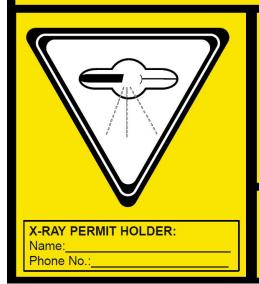
into the room or laboratory.

Trades: Do not enter if equipment in use, otherwise, no restrictions on entry

into the room or laboratory.

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### CAUTION: X-RAYS ATTENTION: RAYONS-X



Do not enter when light is illuminated.

**<u>Dosimetry required</u>** while in service area.

If you are pregnant, or think you may be pregnant, please contact RSO.

Only individuals that are listed as authorized users on the specific X-ray machine may have the ability to operate the X-ray unit(s).

IN CASE OF EMERGENCY CONTACT:

WESTERN RADIATION SAFETY OFFICER (RSO)

(519) 661 – 2111 Ext. 84746 (8:30 am – 4:30 pm)

WESTERN SPECIAL CONSTABLE SERVICE (WSCS)

911 using campus telephone

Health, Safety & Well-being

**Title**: Restricted Entry – Laser Beam Type: Caution Date: June 2024

#### **Description of Hazard:**

- Laser beam may cause exposure to skin or eyes.

- Machine is turned on when red warning light located at the entrance is on.

No hazard if the machine is turned off.

#### Instructions:

Caretaking: Do not enter if equipment is in use, or laser beam is turned on,

otherwise, no restrictions on entry into the room or laboratory.

WSCS: Do not enter if equipment is in use, or laser beam is turned on,

otherwise, no restrictions on entry into the room or laboratory.

Trades: Do not enter if equipment is in use, or laser beam is turned on,

otherwise, no restrictions on entry into the room or laboratory.

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Class \_\_\_\_ Laser In Use Avoid eye or skin exposure to direct or scattered radiation. Laser eye protection required.

IN CASE OF EMERGENCY CONTACT: **WESTERN RADIATION SAFETY OFFICER** (519) 661 – 2111 Ext. 84746 (8:30 am – 4:30 pm) WESTERN SPECIAL CONSTABLE SERVICE (WSCS)

Health, Safety & Well-being

911 using campus telephone

**Title**: Restricted Entry – Laser Beam Type: Danger Date: June 2024

#### **Description of Hazard:**

- Laser beam may cause exposure to skin or eyes.

- Machine is turned on when red warning light located at the entrance is on.

- No hazard if the machine is turned off.

#### Instructions:

Caretaking: Do not enter if equipment is in use, or laser beam is turned on,

otherwise, no restrictions on entry into the room or laboratory.

WSCS: Do not enter if equipment is in use, or laser beam is turned on,

otherwise, no restrictions on entry into the room or laboratory.

Trades: Do not enter if equipment is in use, or laser beam is turned on,

otherwise, no restrictions on entry into the room or laboratory.

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Title: Biohazard Type: Caution Date: June 2024

#### **Description of Hazard:**

BIOHAZARD LEVEL 1 or 2 - Viruses, bacteria, or other agents including human source material at Level 1 or 2 containment, stored or used in this equipment.

#### Instructions:

Caretaking: Do not move, open, or disturb equipment without permission of lab

Supervisor.

WSCS: Deal with emergencies (fire, flood, etc.) as required. Contact the

Lab Supervisor immediately.

Trades: Do not move, open or disturb equipment without permission of the

Lab Staff.

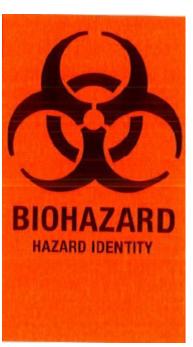
Equipment must be emptied, cleaned and disinfected before

maintenance or repair work is done.

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<sup>\*</sup> If equipment or waste containers leaking, isolate and call WSCS at 911.







Title: Caution – Biohazard Containment Level 1

Type: Caution Date: June 2024

#### **Description of Hazard:**

BIOHAZARD CONTAINMENT LEVEL 1 - Viruses, bacteria, or other biological agents at LEVEL 1 containment.

#### Instructions:

Caretaking: No restrictions on sweeping, bulb changing, drench shower testing,

or checking fire equipment.

Make prior arrangements for floor buffing.

Garbage removal from regular garbage containers only- do not

handle biohazard-labelled containers.

WSCS: No restrictions on entry.

Emergencies (fire, flood, etc.) May be dealt with as required, the

Lab Supervisor must be contacted immediately.

Trades: No restrictions on entry.

Do not move or re-arrange any lab equipment or containers - must be done by Lab Staff. Equipment must be clean and empty before

maintenance or repair work is done.

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# CAUTION



**BIOHAZARD** 

Containment Level

1

LIST BIOHAZARDS:

## **AUTHORIZED PERSONNEL ONLY**

RESPONSIBLE INVESTIGATOR:

IN CASE OF EMERGENCY CONTACT:

PHONE:

Western University Occupational Health & Safety

Title: Caution - Biohazard Containment Level 2

Type: Caution Date: June 2024

#### **Description of Hazard:**

BIOHAZARD CONTAINMENT LEVEL 2 - Viruses, bacteria or other biological agents at LEVEL 2 containment.

#### Instructions:

Caretaking: Do not remove labelled biohazard waste.

Each lab has individual restrictions on sweeping, garbage removal, bulb changing, drench shower testing, and checking fire equipment.

Make prior arrangements for any of the above.

Consult with each Laboratory Research Director for instructions.

WSCS: Do not enter unless an emergency. Deal with emergencies (fire,

flood, etc.) as required. Contact the Lab Supervisor immediately.

Trades: Do not enter unless prior arrangements are made with Lab Staff.

Do not move or re-arrange any lab equipment or containers - this

must be done by Lab Staff.

Equipment must be empty, clean, and decontaminated by an approved method before maintenance or repair work is done.

After hours contact lab supervisor and/or WSCS at 911.

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# CAUTION



**BIOHAZARD** 

Containment Level

2

LIST BIOHAZARDS:

### **AUTHORIZED PERSONNEL ONLY**

RESPONSIBLE INVESTIGATOR:

IN CASE OF EMERGENCY CONTACT:

PHONE:

Western University Occupational Health & Safety

**Title**: Biohazard Containment Level 3 **Type**: Danger **Date**: June 2024

#### **Description of Hazard:**

BIOHAZARD CONTAINMENT LEVEL 3 - Viruses, bacteria or other biological agents at LEVEL 3 containment.

Campus Location: Dental Science Building - 6th floor Suite

#### Instructions:

Caretaking: Do not enter unless Facility is closed down for research and is

decontaminated. Must be accompanied by Facility Staff or

Biosafety Officer

Enter only with authorization of Biosafety Officer or Facility

Supervisor.

WSCS: Do not enter without contacting the Facility Director of Operations

or Biosafety Officer.

In case of Emergencies (fire, flood, etc.) secure the area and

deploy HazMat Team.

Contact: Personnel designated on the Call-In list.

Trades: Enter only with authorization and accompaniment of Biosafety

Officer, Facility Director of Operations, or designated Facility Staff.

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## **AUTHORIZED PERSONNEL ONLY**

THIS CONTAINMENT ZONE CONTAINS INFECTIOUS MATERIALS OR TOXINS



# **BIOHAZARD**

C	O۱	ITAI	NME	NT LE	VEL:	3
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**EMERGENCY CONTACT:** 

CONTACT INFO:

ALTERNATE EMERGENCY CONTACT:

CONTACT INFO:

#### REQUIRED PPE

Scrubs

Facility Dedicated Footwear



PAPR

Gloves (Double Layer)



Shoe Covers (Double Layer)











#### Additional PPE:

Additional special provisions for entry (optional):

Unique Hazards (optional):

Entry Requirements (optional):

**Title**: Danger – Strong magnetic Field **Type**: Danger **Date**: June 2024

#### Description of Hazard:

Strong Magnetic Field

- pacemaker and metal prosthetic users are at risk of serious injury or death

- ATM, credit cards and watches may be damaged

#### Instructions:

Caretaking: Do not enter without prior approval of lab supervisor

No routine garbage removal, sweeping, dusting or bulb changing.

No work in this area without lab staff in attendance

Enter with lab staff to test drench shower or check fire

extinguishers.

WSCS: Do not enter without contacting the lab supervisor or department

chair.

Trades: Do not enter without supervisor or lab staff in attendance.

Routine maintenance must be scheduled in advance with the lab

supervisor.

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# **ADANGER**



#### STRONG MAGNETIC AND RADIO-FREQUENCY FIELDS ARE PRESENT

#### Pacemaker and Metallic Implant Hazard

Strong magnetic and radiofrequency fields are present that could cause serious injury or death to persons with implanted or attached medical devices, such as pacemakers and prosthetic parts.

Such persons must not go closer to the magnet than the 5-GAUSS WARNING signs until safety at a closer distance is identified by a physician or medical device manufacturer.

## Magnetic Media and ATM/Credit Cards

Strong magnetic fields are present that could erase magnetic media such as floppies and tapes, disable ATM and credit cards, and damage some watches.

Do not take such objects closer to the magnet than the 5-GAUSS WARNING signs.

#### **Tools and Equipment**

Strong magnetic fields are present that could make some magnetic items suddenly fly towards the magnet body, which could cause personal injury or serious damage.

Do not take tools, equipment, or personal items containing steel, iron, or other magnetic materials closer to the magnet than the 10-GAUSS WARNING signs.