

Emergency Procedures for Radioactive Materials

1.0 Overview

Emergency Procedures for Radioactive Materials must be followed in case of radioactive isotope loss or spill. All laboratory personnel should read these procedures prior to commencing work.

2.0 Contact Information

Radiation Safety Office Phone: 646-962-4567

2.1 Radiation Safety Program

- **Wendy Kresge, MS, DABR** - Director, Medical Health Physics, Radiation Safety Officer for NewYork-Presbyterian Hospital
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- **Michael Zgaljardic, MS, DABSNM** - Assistant Radiation Safety Officer, Laser Safety Officer for Weill Cornell Medicine
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2.2 Emergency Contact Information

- For radiation emergencies during business hours, contact **MHP: 646-962-4567**.
- For radiation emergencies after hours, contact **Security: 212-746-0911**.

(When contacting Security after hours, request that they contact the On-Call MHP Emergency Responder.)

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4.0 Major Spills - Greater Than 100 MI or 10 Mci

1. **Clear the Area:** Notify all persons not involved to vacate the room at once.
2. **Prevent the Spread:** If a liquid is spilled, right the container (**wear appropriate PPE**). Prevent the further spread of contamination by covering the spill with absorbent paper, but **DO NOT attempt to clean up the spill**. To prevent the spread of contamination, limit the movement of all personnel who may be contaminated.
3. **Shield the Source:** If possible, protect the source. This should be done only without further contamination or a significant increase in radiation exposure
4. **Close the Room:** Leave the room and lock the door(s) to prevent entry.
5. **Call for Help:** Notify MHP / Security immediately.

5.0 Minor Spills - Less Than 100 MI Or 10 Mci

1. **Notify:** Notify all persons in the room.
2. **Prevent the Spread:** Prevent the spread of contamination by covering the spill with absorbent paper.
3. **Clean Up:** Clean up the spill using disposable gloves and absorbent paper and remote handling tongs. Carefully fold the absorbent paper with the clean side out and place in a plastic bag for later disposal as radioactive waste. Also put contaminated gloves and other contaminated, disposable material in the bag.
4. **Survey:** Survey the area with an appropriate low-range radiation detection survey meter or by wipe tests for removable contamination, as appropriate. Check the area around the spill. Also check your hands, clothing, and shoes for contamination.
5. **Report:** Report the incident to MHP or EHS.

6.0 Dry Spills

1. **Prevent the Spread:** Place damp absorbent paper over the spill (**wear rubber or plastic gloves**). Take care not to spread the contamination.
2. **Report:** Notify EHS or MHP
3. **Clean Up:** Decontaminate as necessary.
4. **Survey:** Do not permit work in the area until Radiation Safety has confirmed a survey.

7.0 Personal Decontamination

1. **Remove Contaminated Clothing:** Remove contaminated clothing and store it for further evaluation by MHP.
2. **Spill on Skin:** If contamination is spilled in on the skin, flush thoroughly with lukewarm water and then wash with mild soap. Do not rub hard! If contamination remains, induce perspiration by covering the area with plastic, then wash again.

8.0 Radioactive Dusts, Mists, Fumes, Gases, Etc.

1. **Notify:** Notify other persons to evacuate the room.
2. **Evacuate and Prevent the Spread:** Hold breath, close valves, and turn off air-circulating devices as time permits. Vacate room. Close all doors and post area.
3. **Report:** Contact MHP / Security and report suspected inhalations of radioactive materials.
4. **Decontaminate:** Interview all persons suspected of being contaminated and decontaminate as instructed by MHP. MHP must perform an air survey before work can be resumed.

9.0 Injuries Involving Radiation Hazards

1. **Flush:** Flush minor wounds immediately, under running water, spreading edges of the wound.
2. **Report:** Report all radiation accidents and injuries to EHP or MHP.
3. **Seek Medical Evaluation:** Employees must proceed to Workforce Health and Safety or the NYP Emergency Department. In the case of traumatic injury, call 212-472-2222 for emergency medical assistance.

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10.0 Fires Involving Possible Radiation Hazards

R.A.C.E. is an acronym for the general procedures all occupants should follow in the event of a fire, visible smoke, or fire alarm activation. R.A.C.E. procedures particular to each building are provided in the Building-Specific Fire Safety and Evacuation procedure noted in the [Fire Safety and Emergency Action Plan](#).

R - RESCUE: Remove occupants from the affected area. Assist areas as appropriate. For patient care areas, rescue those in immediate danger from fire or smoke.

A - ALARM: If there is visible fire or smoke, report the fire to the other occupants in the immediate area by shouting **"CODE RED"** or **"FIRE."** Activate the nearest fire alarm pull station to alert building occupants of the fire. **Occupants in NYP buildings must call the NYP fire hotline at 746-FIRE (3473).**

C - CONFINE: Close all doors, including interior doors, to the area to confine the fire and minimize the risk of the fire spreading in the building. Damp towels should be placed at the base of the door to minimize smoke entering an area where occupants or patients are unable to evacuate.

E - EVACUATE /EXTINGUISH: In the event of a fire alarm or a fire alarm activation, building occupants must evacuate the building as specified in the [Building-Specific Fire Safety Procedures](#) or EHS-approved locale fire safety plan. Fire extinguishers should only be used by trained personnel to extinguish small fires and only after the other R.A.C.E. procedures have been fully implemented.