

Radiation Lab Safety Checklist

Lab/Shop/Classroom: _____

Date: _____

Completed By: _____

Supervisor/Instructor: _____

Radiation Program Governance:

- Radiation Safety Officer (RSO) designated
- Written safety program in place
 - Accessible to all participants
- Roles and responsibilities clearly defined
- Program reviewed annually at minimum
 - Review logs available
- Stop-work authority clearly established

Licensing & Regulatory Compliance:

- Federal licensing requirements current
- Provincial licensing requirements current
- Compliance conditions are clear
 - Being adhered to
- Inspection records are available
- CNSC Regulatory correspondence on file
- Operating limits clearly established and documented

Radiation-Producing Equipment:

- Equipment is certified
- Equipment is registered
- Interlocks are functional
- Warning lights/signals operational
- Preventative maintenance completed
 - Maintenance logs available
- No unauthorized modifications
 - Prohibition made clear

Radioactive Source Control:

- Sources are inventoried
 - Inventory is logged and tracked
- Secure storage available
 - Locks are functional/working
 - Clearly labeled
- Restricted access for authorized users enforced
- Leak testing performed when needed
 - Test logs available for review
- Source movement documented
 - Logs available for review

Shielding & Area Controls:

- Structural shielding intact
- Barriers in place where necessary
- Signage posted where appropriate
- Controlled areas clearly marked
- Dose rates within limits
- Access controls enforced

Exposure Monitoring (Dosimetry):

- Personal dosimeters provided
 - Worn correctly by participants
- Dose reports reviewed
- Action levels established
 - records retained for review

PPE & Personal Protection:

- Lead aprons/thyroid shields available
 - Maintained, no rips, tears or unauthorized modifications
- PPE Inspected regularly
 - Inspection logs available
- PPE Stored correctly
- PPE used appropriately
- Defective PPE identified and removed from service

Emergency & Incident Response:

- Incident procedures posted
- Spill/contamination kits available
- Decontamination procedures defined
- Emergency Contact list posted
- Drills conducted
 - Drill logs available for review

Training & Authorization:

- Safety training completed
 - Documentation available
- Authorized user list current & maintained
- Refresher training documented
- Supervision during exposures
- SOPs available and accessible

Waste, Storage, Decommissioning:

- Radioactive waste clearly labelled
- Waste segregated by isotope/type
- Decay-in-storage procedures followed
- Disposal procedures followed
 - Records maintained
- Decommissioning procedures defined

Findings & Actions:

Issues Identified:

Required Actions:

Escalated to: _____

Target Date: _____

Signature: _____

Risk-Rating Safety Checklist Form

(optional tie-in with spreadsheet tracking)

Scoring Guide:

0 – Compliant

1 – Moderate risk

2 – High Risk [immediate action required]

Section Scoring:

Area	0	1	2	Score
Radiation Program Governance				
Licensing & Regulatory Compliance				
Radiation-Producing Equipment				
Radioactive Source Control				
Shielding & Area Controls				
Exposure Monitoring (Dosimetry)				
PPE & Personal Protection				
Emergency & Incident Response				
Training & Authorization				
Waste, Storage, Decommissioning				

Risk Summary:

Total Score: /20

Score	Rating	Action
0-3	Low	Maintain controls
4-7	Moderate	Correct within 30 days
8-12	High	Immediate action
13+	Critical	Stop work

Any risk marked as a “2” in the following areas requires *immediate stop work* action:

- Licensing or authorization gaps
- Failed interlocks or shielding
- Missing dosimetry
- Unsecured radioactive sources
- Untrained personnel exposure