

Environmental Health and Safety  
2220 Circle Drive  
Cleveland, Ohio 44106  
P: (216) 368-2906  
F: (216) 368-2236  
[cwruehs@case.edu](mailto:cwruehs@case.edu)

---

## **Cadmium (Cd-109)**

---

**Half Life:** 463 days

**Radiation:** Electron capture  $\bar{\nu}$  Beta, gamma and X-rays

**Shielding:** 1 mm lead for gamma, 1 mm plastic for beta

**Dosimetry:** Body and ring badges when handling. Urine assays may be required after spills or contamination incidents.

8YhYWh]cb#AYUg i fY a Ybh.'

**Special Precautions:**

Use tools to indirectly handle unshielded sources and potentially contaminated containers - no direct hand contact

Ensure that an appropriate, operational survey meter is present in the work area and turned on whenever Cd-109 is handled to immediately detect contamination

Shield waste containers as needed to maintain accessible dose rate ALARA

**Safe Lab Practices**