

Accepted Half-Lives of Commonly Used Radioisotopes

All UAB radioactive materials licensees are required to submit inventories to the Radiation Safety Program quarterly, **even if they do not possess any radioactive materials**.

When decaying radioisotopes for inventory purposes, please use the accepted half-lives listed below.

Isotope	Half-Life	Isotope	Half-Life
Americium-241	432.2 years	Lutetium-177	6.71 days
Barium-133	10.74 years	Molybdenum-99	66 hours
Bismuth-212	60.55 minutes	Nickel-63	96 years
Cadmium-109	464 days	Phosphorus-32	14.29 days
Calcium-45	163 days	Phosphorus-33	25.4 days
Carbon-14	5730 years	Plutonium-239	24,065 years
Cesium-137	30 years	Polonium-210	138.38 days
Chlorine-36	301,000 years	Radium-226	1600 years
Chromium-51	27.704 days	Radon-222	3.8235 days
Cobalt-57	270.9 days	Rhenium-188	16.98 hours
Cobalt-58	70.8 days	Rubidium-81	4.58 hours
Cobalt-60	5.271 years	Selenium-75	119.8 days
Copper-62	9.74 minutes	Sodium-22	2.602 years
Copper-64	12.701 hours	Sodium-24	15 hours
Copper-67	61.86 hours	Strontium-85	64.84 days
Gallium-67	78.26 hours	Strontium-89	50.5 days
Gallium-68	68 minutes	Strontium-90	29.12 years
Gold-195	183 days	Sulfur-35	87.44 days
Hydrogen-3	12.35 years	Technetium-99	213,000 years
Indium-111	2.83 days	Technetium-99m	6.02 hours
Indium-113m	1.658 hours	Tin-113	115.1 days
Iodine-123	13.2 hours	Tungsten-188	69.4 days
Iodine-125	60.14 days	Uranium-235	703,800,000 years
Iodine-129	15,700,000 years	Uranium-238	4,468,000,000 years
Iodine-131	8.04 days	Xenon-127 3	6.41 days
Iron-55	2.7 years	Xenon-133	5.245 days
Iron-59	44.529 days	Yttrium-90	64 hours
Krypton-81m	13 seconds	Ytterbium-169	32.01 days
Krypton-85	10.72 years		