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The half lives of many radionuclides have been measured in the Radioactivity Group of NIST. The table below, based on "New and revised half-life measurements results,"[§] by M.P. Unterweger, D.D. Hoppes, and F.J. Schima (1992), is a revised listing of the half lives determined at NIST since 1967. This table supersedes the table presented in NBS Special Publication 626 [D.D. Hoppes and F.J. Schima, ed. (1982), p. 85] as well as that presented in "New and revised half-life measurements results." Included in this table are new values not previously tabulated in either publication. The references are given for these values. Values revised since NBS Special Publication 626 for the half lives of various "short-lived" radionuclides arise from improved impurity analysis, incorporation of additional data from new sources, and reevaluation of old data.

Values in common usage in certificates and reports are available from the [National Nuclear Data Center](#). In case of discrepant data, the NIST value is recommended.

[ASCII table \(good for cutting and pasting\)](#)

Radionuclide	Number of Sources	Number of Half Lives Followed	Half Life *	Statistical Standard Uncertainty	Other Standard Uncertainty	Reference
³ H	18	3.0	4500 ± 8 d	8	0	1
¹⁸ F	3	13.1	1.82951 ± 0.00034 h	0.00024	0.00024	
²² Na	5	1.9 - 4.7	950.97 ± 0.15 d	0.09	0.12	
²⁴ Na	14	1.1 - 7.6	14.9512 ± 0.0032 h	0.0009	0.0031	
⁴⁴ Ti	1	0.33	22154 ± 456 d	180	419	2
⁴⁶ Sc	4	3.6 - 10.3	83.831 ± 0.066 d	0.030	0.059	

^{51}Cr	11	2.3 - 8.9	27.7010 ± 0.0012 d	0.0007	0.0009	
^{54}Mn	2	3.3 - 7.4	312.028 ± 0.034 d	0.034	0.0	
^{57}Co	7	4.7 - 10.4	272.11 ± 0.26 d	0.09	0.25	
^{58}Co	1	9.1	70.77 ± 0.11 d	0.11	0.0	
^{59}Fe	6	4.0 - 9.3	44.5074 ± 0.0072 d	0.0048	0.0053	
^{60}Co	8	0.9 - 3.4	1925.12 ± 0.46 d	0.14	0.44	
^{62}Cu	13	4 - 7	9.67 ± 0.03 min	0.03	0.0	3
^{65}Zn	1	3.2	244.164 ± 0.099 d	0.099	0.0	
^{67}Ga	13	1.8 - 8.3	3.26154 ± 0.00054 d	0.00015	0.00052	
^{75}Se	19	2.4 - 8.7	119.809 ± 0.066 d	0.014	0.065	
^{85}Kr	1	1.0	3934.4 ± 1.4 d	1.1	0.9	
^{85}Sr	8	1.1 - 4.8	64.8530 ± 0.0081 d	0.0039	0.0071	
^{88}Y	8	1.3 - 8.1	106.626 ± 0.044 d	0.017	0.041	
^{99}Mo	14	3.6 - 9.5	65.9239 ± 0.0058 h	0.0031	0.0049	
$^{99\text{m}}\text{Tc}$	33	2.1 - 12.0	6.00718 ± 0.00087 h	0.00015	0.00086	
^{109}Cd	2	3.4 - 5.3	463.26 ± 0.63 d	0.36	0.51	
$^{110\text{m}}\text{Ag}$	1	9.3	249.950 ± 0.024 d	0.024	0.0	
^{111}In	11	1.4 - 9.3	2.80477 ± 0.00053 d	0.00017	0.00051	
^{113}Sn	11	2.3 - 11.0	115.079 ± 0.080 d	0.025	0.076	
$^{117\text{m}}\text{Sn}$	10	1.5 - 4	14.00 ± 0.05 d	0.05	0.0	4
^{123}I	3	5.4 - 12.7	13.2235 ± 0.0019 h	0.0019	0.0	
^{125}I	18	1.4 - 6.2	59.49 ± 0.13 d	0.03	0.12	
^{125}Sb	1	3.9	1007.56 ± 0.10 d	0.10	0.01	

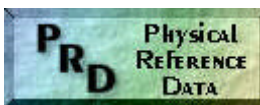
^{127}Xe	5	1.1 - 11.5	36.3446 ± 0.0028 d	0.0028	0.0
^{131}I	21	1.0 - 10.9	8.0197 ± 0.0022 d	0.0005	0.0021
$^{131\text{m}}\text{Xe}$	2	1.8	11.934 ± 0.021 d	0.014	0.016
^{133}Ba	4	1.2	3853.6 ± 3.6 d	1.6	3.2
^{133}Xe	3	4.8 - 11.2	5.24747 ± 0.00045 d	0.00045	0.0
^{134}Cs	5	1.7 - 3.0	753.88 ± 0.15 d	0.11	0.11
^{137}Cs	6	0.4 - 0.6	$11015. \pm 20.$ d	6.	19.
^{139}Ce	9	1.5 - 6.4	137.734 ± 0.091 d	0.029	0.086
^{140}Ba	10	1.8 - 4.4	12.7527 ± 0.0023 d	0.0009	0.0022
^{140}La	2	4.2	40.293 ± 0.012 h	0.008	0.009
^{141}Ce	1	6.1	32.510 ± 0.024 d	0.024	0.0
^{144}Ce	1	3.5	284.558 ± 0.038 d	0.038	0.0
^{152}Eu	4	1.0	4945.5 ± 2.3 d	1.0	2.1
^{153}Gd	2	7.3	239.472 ± 0.069 d	0.041	0.055
^{153}Sm	1	7.3	46.2853 ± 0.0014 h	0.0014	0.0
^{154}Eu	3	1.1 - 1.3	3138.2 ± 6.1 d	3.1	5.2
^{155}Eu	2	2.3 - 2.4	1738.97 ± 0.49 d	0.46	0.18
^{166}Ho	1	7.2	26.7663 ± 0.0044 h	0.0044	0.0
^{169}Yb	14	3.4 - 9.5	32.0147 ± 0.0093 d	0.0026	0.0089
^{177}Lu	4	2 - 5	6.64 ± 0.01 d	0.01	0.0
^{181}W	3	5.9 - 6.6	121.095 ± 0.064 d	0.042	0.048
^{186}Re	2	5.7 - 6.5	89.248 ± 0.069 h	0.018	0.067
^{188}Re	2	7.0 - 7.1	17.021 ± 0.025 h	0.014	0.021

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^{192}Ir	1	2.4	73.810 ± 0.019 d	0.019	0.0
^{195}Au	5	0.6 - 6.0	186.098 ± 0.047 d	0.021	0.042
^{198}Au	4	4.5 - 7.4	2.69517 ± 0.00021 d	0.00021	0.0
^{201}Tl	12	2.6 - 11.5	3.0456 ± 0.0015 d	0.0004	0.0014
^{202}Tl	1	1.4	12.466 ± 0.081 d	0.081	0.0
^{203}Hg	14	1.7 - 6.6	46.619 ± 0.027 d	0.007	0.026
^{203}Pb	7	1.8 - 2.8	51.923 ± 0.037 h	0.013	0.034
^{207}Bi	2	0.6	$11523. \pm 19.$ d	10.	16.
^{228}Th	6	1.7 - 8.3	698.60 ± 0.36 d	0.14	0.33

*The stated uncertainties are the sum, in quadrature, of the statistical uncertainty (the "external standard deviation" in the weighted mean) and other uncertainties which include those from the Stevenson equation (NBS Special Publication 626) and from the correction for the ^{210}Bi ingrowth in the radium reference sources.

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