

Muons in cortical bone (ICRP)

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.52130	1.850	106.4	0.06198	3.5919	0.1161	3.0919	3.6488	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm ²]		
				[MeV cm ² /g]					
10.0 MeV	4.704×10^1	7.142				7.142		7.765×10^{-1}	
14.0 MeV	5.616×10^1	5.581				5.581		1.417×10^0	
20.0 MeV	6.802×10^1	4.366				4.366		2.646×10^0	
30.0 MeV	8.509×10^1	3.393				3.393		5.281×10^0	
40.0 MeV	1.003×10^2	2.900				2.901		8.489×10^0	
80.0 MeV	1.527×10^2	2.179				2.179		2.489×10^1	
100. MeV	1.764×10^2	2.044				2.044		3.440×10^1	
140. MeV	2.218×10^2	1.907				1.907		5.475×10^1	
200. MeV	2.868×10^2	1.830				1.830		8.700×10^1	
300. MeV	3.917×10^2	1.803			0.000	1.803		1.422×10^2	
303. MeV	3.950×10^2	1.803			0.000	1.803			<i>Minimum ionization</i>
400. MeV	4.945×10^2	1.812			0.000	1.812		1.976×10^2	
800. MeV	8.995×10^2	1.888	0.000		0.000	1.889		4.138×10^2	
1.00 GeV	1.101×10^3	1.922	0.000		0.000	1.923		5.187×10^2	
1.40 GeV	1.502×10^3	1.976	0.000	0.000	0.001	1.978		7.237×10^2	
2.00 GeV	2.103×10^3	2.036	0.001	0.000	0.001	2.039		1.022×10^3	
3.00 GeV	3.104×10^3	2.105	0.001	0.001	0.001	2.108		1.504×10^3	
4.00 GeV	4.104×10^3	2.152	0.002	0.002	0.002	2.158		1.973×10^3	
8.00 GeV	8.105×10^3	2.260	0.005	0.005	0.004	2.274		3.773×10^3	
10.0 GeV	1.011×10^4	2.293	0.007	0.007	0.005	2.311		4.645×10^3	
14.0 GeV	1.411×10^4	2.340	0.010	0.011	0.006	2.368		6.354×10^3	
20.0 GeV	2.011×10^4	2.388	0.016	0.018	0.009	2.431		8.853×10^3	
30.0 GeV	3.011×10^4	2.439	0.026	0.031	0.013	2.510		1.290×10^4	
40.0 GeV	4.011×10^4	2.474	0.036	0.046	0.017	2.574		1.683×10^4	
80.0 GeV	8.011×10^4	2.553	0.082	0.111	0.033	2.780		3.176×10^4	
100. GeV	1.001×10^5	2.578	0.106	0.146	0.041	2.872		3.884×10^4	
140. GeV	1.401×10^5	2.614	0.157	0.219	0.058	3.048		5.235×10^4	
200. GeV	2.001×10^5	2.652	0.236	0.335	0.082	3.305		7.125×10^4	
300. GeV	3.001×10^5	2.696	0.371	0.530	0.123	3.720		9.975×10^4	
400. GeV	4.001×10^5	2.726	0.511	0.734	0.163	4.135		1.252×10^5	
749. GeV	7.492×10^5	2.794	1.018	1.467	0.309	5.588			<i>Muon critical energy</i>
800. GeV	8.001×10^5	2.801	1.094	1.576	0.330	5.801		2.065×10^5	
1.00 TeV	1.000×10^6	2.825	1.394	2.009	0.415	6.644		2.387×10^5	
1.40 TeV	1.400×10^6	2.862	1.999	2.873	0.588	8.322		2.924×10^5	
2.00 TeV	2.000×10^6	2.902	2.926	4.195	0.851	10.875		3.553×10^5	
3.00 TeV	3.000×10^6	2.947	4.479	6.394	1.304	15.125		4.330×10^5	
4.00 TeV	4.000×10^6	2.980	6.056	8.622	1.765	19.423		4.912×10^5	
8.00 TeV	8.000×10^6	3.061	12.435	17.589	3.680	36.766		6.384×10^5	
10.0 TeV	1.000×10^7	3.088	15.657	22.103	4.667	45.515		6.872×10^5	
14.0 TeV	1.400×10^7	3.128	22.089	31.100	6.698	63.016		7.616×10^5	
20.0 TeV	2.000×10^7	3.172	31.812	44.665	9.817	89.467		8.411×10^5	
30.0 TeV	3.000×10^7	3.223	47.990	67.238	15.228	133.678		9.319×10^5	
40.0 TeV	4.000×10^7	3.259	64.243	89.878	20.778	178.159		9.965×10^5	
80.0 TeV	8.000×10^7	3.349	129.413	180.511	44.052	357.325		1.152×10^6	
100. TeV	1.000×10^8	3.378	162.080	225.877	56.108	447.445		1.202×10^6	