

Energy (MeV)	Mass-Attenuation Coefficient in Air (cm <sup>2</sup> /g)	Linear-Attenuation Coefficient in Air (1/cm)
0.001	3604	4.659972
0.0015	1189	1.537377
0.002	526.9	0.6812817
0.003	161.7	0.2090781
0.003203	133	0.171969
0.003203	147.5	0.1907175
0.004	77.22	0.09984546
0.005	39.75	0.05139675
0.006	22.99	0.02972607
0.008	9.626	0.012446418
0.01	4.897	0.006331821
0.015	1.483	0.001917519
0.02	0.6904	0.000892687
0.03	0.3076	0.000397727
0.04	0.2201	0.000284589
0.05	0.1889	0.000244248
0.06	0.1738	0.000224723
0.08	0.1582	0.000204553
0.1	0.1489	0.000192528
0.15	0.1331	0.000172098
0.2	0.1219	0.000157617
0.3	0.1062	0.000137317
0.4	0.09515	0.000123029
0.5	0.08689	0.000112349
0.6	0.08039	0.000103944
0.8	0.07065	9.13505E-05
1	0.06352	8.21314E-05
1.022	0.06288	8.13038E-05
1.25	0.05684	7.34941E-05
1.5	0.05172	6.6874E-05
2	0.04446	5.74868E-05
2.044	0.04393	5.68015E-05
3	0.0358	4.62894E-05
4	0.03079	3.98115E-05
5	0.02751	3.55704E-05
6	0.02522	3.26095E-05
7	0.02354	3.04372E-05
8	0.02225	2.87693E-05
9	0.02125	2.74763E-05
10	0.02045	2.64419E-05
11	0.01979	2.55885E-05
12	0.01925	2.48903E-05
13	0.0188	2.43084E-05
14	0.01843	2.383E-05

15	0.0181	2.34033E-05
16	0.01783	2.30542E-05
18	0.01739	2.24853E-05
20	0.01706	2.20586E-05
22	0.01681	2.17353E-05
24	0.01662	2.14897E-05
26	0.01648	2.13086E-05
28	0.01637	2.11664E-05
30	0.01627	2.10371E-05
40	0.01611	2.08302E-05
50	0.01614	2.0869E-05
60	0.01626	2.10242E-05
80	0.01654	2.13862E-05
100	0.01683	2.17612E-05
150	0.01746	2.25758E-05
200	0.01792	2.31706E-05
300	0.01855	2.39852E-05
400	0.01895	2.45024E-05
500	0.01923	2.48644E-05
600	0.01944	2.51359E-05
800	0.01971	2.5485E-05
1000	0.01991	2.57436E-05
1500	0.02019	2.61057E-05
2000	0.02035	2.63126E-05
3000	0.02053	2.65453E-05
4000	0.02063	2.66746E-05
5000	0.02069	2.67522E-05
6000	0.02073	2.68039E-05
8000	0.02079	2.68815E-05
10000	0.02083	2.69332E-05
15000	0.02088	2.69978E-05
20000	0.02091	2.70366E-05
30000	0.02095	2.70884E-05
40000	0.02095	2.70884E-05
50000	0.02096	2.71013E-05
60000	0.02097	2.71142E-05
80000	0.02099	2.71401E-05
100000	0.02099	2.71401E-05

The Linear Attenuation Coefficient for Air is the product of the Mass-Attenuation Coefficient of Air and the density of Air. The density of air is  $0.001293 \text{ g/cm}^3$

Berger, M.J. et al. (2005). XCOM: Photon Cross Section Database (ver.y1.3). [Online] Available:

<http://physics.nist.gov/xcom>

[2005, Dec. 6]. National Institute of Standards and Technology, Gaithersburg, MD.

## Linear Attenuation Coefficients in Air and Photon Energy

