

**Table 5.7**  
**Career External Dose (DDE) Distribution By Dose and Career Length At Reactor Facilities**  
**Career Ending 1977 - 2013 (inclusive)**

Number of Persons in Dose Range (rems)																
Career Length	No Meas.	.001 - .1	.1 - .5	.5 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 50	>=50	Grand Total
<=30 days	163,788	28,848	9,650	2,768	3,182	1,104	63	7	3	-	-	-	-	1	-	209,414
31 days - 6 mos	77,434	43,241	26,404	8,816	6,999	2,479	1,178	304	48	3	2	-	-	-	-	166,908
6 mos - 1 yr	34,733	18,774	10,530	3,255	2,541	1,230	673	301	246	3	-	-	-	-	-	72,286
1 - 2 yrs	31,714	20,173	13,202	4,955	4,031	1,810	1,020	618	758	34	2	1	-	-	-	78,318
2 - 3 yrs	15,511	11,997	8,818	3,617	3,179	1,553	849	562	945	104	9	1	-	-	-	47,145
3 - 4 yrs	9,803	8,608	6,834	3,167	2,772	1,371	751	466	884	169	32	3	1	-	-	34,861
4 - 5 yrs	7,107	6,640	5,520	2,699	2,527	1,288	769	470	932	205	39	15	3	-	-	28,214
5 - 10 yrs	17,820	19,498	16,810	8,613	8,934	4,952	3,049	2,064	4,420	1,204	398	131	49	23	2	87,967
10 - 15 yrs	7,098	9,891	9,211	4,919	5,580	3,333	2,230	1,641	3,942	1,311	537	246	107	91	6	50,143
15 - 20 yrs	3,390	5,798	5,694	3,139	3,505	2,264	1,613	1,169	3,302	1,298	534	307	174	165	7	32,359
20 - 25 yrs	1,721	3,608	3,710	2,085	2,406	1,617	1,133	894	2,561	1,213	547	324	188	239	35	22,281
25 - 30 yrs	805	2,198	2,461	1,351	1,633	1,108	887	664	1,957	980	536	279	161	212	35	15,267
30 - 35 yrs	262	847	1,157	732	904	573	451	379	1,136	596	354	228	131	185	22	7,957
>=35 yrs	77	209	314	185	274	157	139	117	358	216	121	101	55	124	15	2,462
<b>Grand Total</b>	<b>371,263</b>	<b>180,330</b>	<b>120,315</b>	<b>50,301</b>	<b>48,467</b>	<b>24,839</b>	<b>14,805</b>	<b>9,656</b>	<b>21,492</b>	<b>7,336</b>	<b>3,111</b>	<b>1,636</b>	<b>869</b>	<b>1,040</b>	<b>122</b>	<b>855,582</b>

Average Career Length for Individuals with Measurable Career Exposure: 6.41 yrs

Average Career Dose for Individuals with Measurable Dose (695,822 rem / 484,319 persons): 1.44 rem

Average Career Length for Individuals with Measurable Career Exposure and Careers Lengths of at Least One Year: 9.81 yrs

Average Career Dose for Individuals with Measurable Dose with career length of at least one year (630,229 rem / 311,666 persons): 2.02 rem

	Values where individuals averaged 5 rem/yr during their career - established by querying cumulative dose divided by cumulative number of work years.
	Values where individuals averaged 2 rem/yr during their career - established by querying cumulative dose divided by cumulative number of work years.

Only individuals that ended monitoring during or after 1977 through 2013 are included in this analysis.

For career length and dose bins, values that are equal to the maximum end of the range are assigned to the next higher bin (i.e., a dose of 0.1 would be assigned to the 0.1-0.5 dose bin).

DoseRange	CareerLen	NumPersons
1	1	163788
1	2	77434
1	3	34733
1	4	31714
1	5	15511
1	6	9803
1	7	7107
1	8	17820
1	9	7098
1	10	3390
1	11	1721
1	12	805
1	13	262
1	14	77
2	1	28848
2	2	43241
2	3	18774
2	4	20173
2	5	11997
2	6	8608
2	7	6640
2	8	19498
2	9	9891
2	10	5798
2	11	3608
2	12	2198
2	13	847
2	14	209
3	1	9650
3	2	26404
3	3	10530
3	4	13202
3	5	8818
3	6	6834
3	7	5520
3	8	16810
3	9	9211
3	10	5694
3	11	3710
3	12	2461
3	13	1157
3	14	314
4	1	2768
4	2	8816
4	3	3255
4	4	4955
4	5	3617
4	6	3167
4	7	2699

DoseRange	CareerLen	NumPersons
No Meas.	<=30 days	163,788
No Meas.	31 days - 6 mos	77,434
No Meas.	6 mos - 1 yr	34,733
No Meas.	1 - 2 yrs	31,714
No Meas.	2 - 3 yrs	15,511
No Meas.	3 - 4 yrs	9,803
No Meas.	4 - 5 yrs	7,107
No Meas.	5 - 10 yrs	17,820
No Meas.	10 - 15 yrs	7,098
No Meas.	15 - 20 yrs	3,390
No Meas.	20 - 25 yrs	1,721
No Meas.	25 - 30 yrs	805
No Meas.	30 - 35 yrs	262
No Meas.	> 35 yrs	77
.001 - .1	<=30 days	28,848
.001 - .1	31 days - 6 mos	43,241
.001 - .1	6 mos - 1 yr	18,774
.001 - .1	1 - 2 yrs	20,173
.001 - .1	2 - 3 yrs	11,997
.001 - .1	3 - 4 yrs	8,608
.001 - .1	4 - 5 yrs	6,640
.001 - .1	5 - 10 yrs	19,498
.001 - .1	10 - 15 yrs	9,891
.001 - .1	15 - 20 yrs	5,798
.001 - .1	20 - 25 yrs	3,608
.001 - .1	25 - 30 yrs	2,198
.001 - .1	30 - 35 yrs	847
.001 - .1	> 35 yrs	209
.1 - .5	<=30 days	9,650
.1 - .5	31 days - 6 mos	26,404
.1 - .5	6 mos - 1 yr	10,530
.1 - .5	1 - 2 yrs	13,202
.1 - .5	2 - 3 yrs	8,818
.1 - .5	3 - 4 yrs	6,834
.1 - .5	4 - 5 yrs	5,520
.1 - .5	5 - 10 yrs	16,810
.1 - .5	10 - 15 yrs	9,211
.1 - .5	15 - 20 yrs	5,694
.1 - .5	20 - 25 yrs	3,710
.1 - .5	25 - 30 yrs	2,461
.1 - .5	30 - 35 yrs	1,157
.1 - .5	> 35 yrs	314
.5 - 1	<=30 days	2,768
.5 - 1	31 days - 6 mos	8,816
.5 - 1	6 mos - 1 yr	3,255
.5 - 1	1 - 2 yrs	4,955
.5 - 1	2 - 3 yrs	3,617
.5 - 1	3 - 4 yrs	3,167
.5 - 1	4 - 5 yrs	2,699

4	8	8613
4	9	4919
4	10	3139
4	11	2085
4	12	1351
4	13	732
4	14	185
5	1	3182
5	2	6999
5	3	2541
5	4	4031
5	5	3179
5	6	2772
5	7	2527
5	8	8934
5	9	5580
5	10	3505
5	11	2406
5	12	1633
5	13	904
5	14	274
6	1	1104
6	2	2479
6	3	1230
6	4	1810
6	5	1553
6	6	1371
6	7	1288
6	8	4952
6	9	3333
6	10	2264
6	11	1617
6	12	1108
6	13	573
6	14	157
7	1	63
7	2	1178
7	3	673
7	4	1020
7	5	849
7	6	751
7	7	769
7	8	3049
7	9	2230
7	10	1613
7	11	1133
7	12	887
7	13	451
7	14	139
8	1	7

.5 - 1	5 - 10 yrs	8,613
.5 - 1	10 - 15 yrs	4,919
.5 - 1	15 - 20 yrs	3,139
.5 - 1	20 - 25 yrs	2,085
.5 - 1	25 - 30 yrs	1,351
.5 - 1	30 - 35 yrs	732
.5 - 1	> 35 yrs	185
1 - 2	<=30 days	3,182
1 - 2	31 days - 6 mos	6,999
1 - 2	6 mos - 1 yr	2,541
1 - 2	1 - 2 yrs	4,031
1 - 2	2 - 3 yrs	3,179
1 - 2	3 - 4 yrs	2,772
1 - 2	4 - 5 yrs	2,527
1 - 2	5 - 10 yrs	8,934
1 - 2	10 - 15 yrs	5,580
1 - 2	15 - 20 yrs	3,505
1 - 2	20 - 25 yrs	2,406
1 - 2	25 - 30 yrs	1,633
1 - 2	30 - 35 yrs	904
1 - 2	> 35 yrs	274
2 - 3	<=30 days	1,104
2 - 3	31 days - 6 mos	2,479
2 - 3	6 mos - 1 yr	1,230
2 - 3	1 - 2 yrs	1,810
2 - 3	2 - 3 yrs	1,553
2 - 3	3 - 4 yrs	1,371
2 - 3	4 - 5 yrs	1,288
2 - 3	5 - 10 yrs	4,952
2 - 3	10 - 15 yrs	3,333
2 - 3	15 - 20 yrs	2,264
2 - 3	20 - 25 yrs	1,617
2 - 3	25 - 30 yrs	1,108
2 - 3	30 - 35 yrs	573
2 - 3	> 35 yrs	157
3 - 4	<=30 days	63
3 - 4	31 days - 6 mos	1,178
3 - 4	6 mos - 1 yr	673
3 - 4	1 - 2 yrs	1,020
3 - 4	2 - 3 yrs	849
3 - 4	3 - 4 yrs	751
3 - 4	4 - 5 yrs	769
3 - 4	5 - 10 yrs	3,049
3 - 4	10 - 15 yrs	2,230
3 - 4	15 - 20 yrs	1,613
3 - 4	20 - 25 yrs	1,133
3 - 4	25 - 30 yrs	887
3 - 4	30 - 35 yrs	451
3 - 4	> 35 yrs	139
4 - 5	<=30 days	7

8	2	304
8	3	301
8	4	618
8	5	562
8	6	466
8	7	470
8	8	2064
8	9	1641
8	10	1169
8	11	894
8	12	664
8	13	379
8	14	117
9	1	3
9	2	48
9	3	246
9	4	758
9	5	945
9	6	884
9	7	932
9	8	4420
9	9	3942
9	10	3302
9	11	2561
9	12	1957
9	13	1136
9	14	358
10	1	
10	2	3
10	3	3
10	4	34
10	5	104
10	6	169
10	7	205
10	8	1204
10	9	1311
10	10	1298
10	11	1213
10	12	980
10	13	596
10	14	216
11	1	
11	2	2
11	3	
11	4	2
11	5	9
11	6	32
11	7	39
11	8	398
11	9	537

4 - 5	31 days - 6 mos	304
4 - 5	6 mos - 1 yr	301
4 - 5	1 - 2 yrs	618
4 - 5	2 - 3 yrs	562
4 - 5	3 - 4 yrs	466
4 - 5	4 - 5 yrs	470
4 - 5	5 - 10 yrs	2,064
4 - 5	10 - 15 yrs	1,641
4 - 5	15 - 20 yrs	1,169
4 - 5	20 - 25 yrs	894
4 - 5	25 - 30 yrs	664
4 - 5	30 - 35 yrs	379
4 - 5	> 35 yrs	117
5 - 10	<=30 days	3
5 - 10	31 days - 6 mos	48
5 - 10	6 mos - 1 yr	246
5 - 10	1 - 2 yrs	758
5 - 10	2 - 3 yrs	945
5 - 10	3 - 4 yrs	884
5 - 10	4 - 5 yrs	932
5 - 10	5 - 10 yrs	4,420
5 - 10	10 - 15 yrs	3,942
5 - 10	15 - 20 yrs	3,302
5 - 10	20 - 25 yrs	2,561
5 - 10	25 - 30 yrs	1,957
5 - 10	30 - 35 yrs	1,136
5 - 10	> 35 yrs	358
10 - 15	<=30 days	-
10 - 15	31 days - 6 mos	3
10 - 15	6 mos - 1 yr	3
10 - 15	1 - 2 yrs	34
10 - 15	2 - 3 yrs	104
10 - 15	3 - 4 yrs	169
10 - 15	4 - 5 yrs	205
10 - 15	5 - 10 yrs	1,204
10 - 15	10 - 15 yrs	1,311
10 - 15	15 - 20 yrs	1,298
10 - 15	20 - 25 yrs	1,213
10 - 15	25 - 30 yrs	980
10 - 15	30 - 35 yrs	596
10 - 15	> 35 yrs	216
15 - 20	<=30 days	-
15 - 20	31 days - 6 mos	2
15 - 20	6 mos - 1 yr	-
15 - 20	1 - 2 yrs	2
15 - 20	2 - 3 yrs	9
15 - 20	3 - 4 yrs	32
15 - 20	4 - 5 yrs	39
15 - 20	5 - 10 yrs	398
15 - 20	10 - 15 yrs	537

11	10	534
11	11	547
11	12	536
11	13	354
11	14	121
12	1	
12	2	
12	3	
12	4	1
12	5	1
12	6	3
12	7	15
12	8	131
12	9	246
12	10	307
12	11	324
12	12	279
12	13	228
12	14	101
13	1	
13	2	
13	3	
13	4	
13	5	
13	6	1
13	7	3
13	8	49
13	9	107
13	10	174
13	11	188
13	12	161
13	13	131
13	14	55
14	1	1
14	2	
14	3	
14	4	
14	5	
14	6	
14	7	
14	8	23
14	9	91
14	10	165
14	11	239
14	12	212
14	13	185
14	14	124
15	1	
15	2	
15	3	

15 - 20	15 - 20 yrs	534
15 - 20	20 - 25 yrs	547
15 - 20	25 - 30 yrs	536
15 - 20	30 - 35 yrs	354
15 - 20	> 35 yrs	121
20 - 25	<=30 days	-
20 - 25	31 days - 6 mos	-
20 - 25	6 mos - 1 yr	-
20 - 25	1 - 2 yrs	1
20 - 25	2 - 3 yrs	1
20 - 25	3 - 4 yrs	3
20 - 25	4 - 5 yrs	15
20 - 25	5 - 10 yrs	131
20 - 25	10 - 15 yrs	246
20 - 25	15 - 20 yrs	307
20 - 25	20 - 25 yrs	324
20 - 25	25 - 30 yrs	279
20 - 25	30 - 35 yrs	228
20 - 25	> 35 yrs	101
25 - 30	<=30 days	-
25 - 30	31 days - 6 mos	-
25 - 30	6 mos - 1 yr	-
25 - 30	1 - 2 yrs	-
25 - 30	2 - 3 yrs	-
25 - 30	3 - 4 yrs	1
25 - 30	4 - 5 yrs	3
25 - 30	5 - 10 yrs	49
25 - 30	10 - 15 yrs	107
25 - 30	15 - 20 yrs	174
25 - 30	20 - 25 yrs	188
25 - 30	25 - 30 yrs	161
25 - 30	30 - 35 yrs	131
25 - 30	> 35 yrs	55
30 - 50	<=30 days	1
30 - 50	31 days - 6 mos	-
30 - 50	6 mos - 1 yr	-
30 - 50	1 - 2 yrs	-
30 - 50	2 - 3 yrs	-
30 - 50	3 - 4 yrs	-
30 - 50	4 - 5 yrs	-
30 - 50	5 - 10 yrs	23
30 - 50	10 - 15 yrs	91
30 - 50	15 - 20 yrs	165
30 - 50	20 - 25 yrs	239
30 - 50	25 - 30 yrs	212
30 - 50	30 - 35 yrs	185
30 - 50	> 35 yrs	124
>50	<=30 days	-
>50	31 days - 6 mos	-
>50	6 mos - 1 yr	-

