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DISABILITY AND DEATH PROBABILITY TABLES FOR INSURED WORKERS BORN IN 2000

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Summary

For an insured worker born in 2000, the probability of becoming disabled between age 20 and normal retirement age is 25 percent, and the probability of dying between age 20 and normal retirement age is 13 percent. These probabilities are based on the intermediate assumptions of the 2020 Trustees Report. The probability of becoming disabled is about the same for males and females, with both at 25 percent. However, the probability of dying is significantly higher for males (16 percent) than for females (10 percent).

Introduction

The Social Security program is not just a program for providing income during retirement. Workers who meet certain requirements for insured status may receive monthly cash benefits before retirement age if they have impairments resulting in disability.[1] Survivors may receive benefits after the death of an insured worker, retired worker, or a disabled worker. This note illustrates the likelihood that a young worker, while maintaining insured status, will become disabled or die, resulting in payment of disability or survivor benefits prior to becoming eligible for full retirement benefits. We make these illustrations using the intermediate assumptions of the 2020 Trustees Report. This note succeeds *Actuarial Note Number 2019.6*, which was based on the intermediate assumptions of the 2019 Trustees Report.

We make projections of the number of insured workers who die or become disabled each year for the next 75 years. These projections depend on age-sex-specific mortality and disabled-worker incidence rates, and age-sex-duration-specific disabled-life mortality and recovery rates. Additional information regarding these projections is provided in annual reports of the Board of Trustees of the Old-Age and Survivors Insurance and Disability Insurance Trust Funds (Trustees Reports) and in actuarial studies.[2]

Using projected rates of disabled-worker incidence, death, and recovery under the intermediate assumptions, we estimate the probability that an illustrative worker will become disabled or die before reaching normal retirement age (NRA). We define an illustrative worker in this note as one who: (a) is born in 2000, that is, belongs to the 2000 birth cohort; (b) becomes insured at age 20 in 2020; (c) maintains insured status thereafter; and (d) retires at NRA. The NRA, the age at which a person may first become entitled to retirement benefits without reduction based on age, is age 67 for our illustrative worker. Tables A and B compare these estimates using the 2000 birth cohort with those published in prior years. The projected probabilities of death before NRA have decreased between the 1966 and 2000 birth cohorts, reflecting in part the actual improvement in mortality experience between 1986 and 2020. The projected probability of becoming disabled before NRA has decreased for insured men between the 1966 and 2000 birth cohorts, but has increased for insured women. For the 2000 birth cohort, we project that the probability of surviving from age 20 to NRA without ever being disabled is 65 percent for males and 70 percent for females. Comparable probabilities projected for the 1966 birth cohort are 58 percent for males and 70 percent for females.

Table B shows the total projected probability of death as the sum of the probability of death and disability and the probability of death and no disability. Between the 1999 and 2000 birth cohorts, the projected probability of death before NRA increased for both males and females. However, the projected probability of becoming disabled (as shown in Table A) decreased between these cohorts.

Assumptions and Methods

Tables C and D provide illustrations of the expected survival and disability status of 1,000,000 insured males and females, respectively, who were born in 2000. These illustrations reflect projected annual death and disability rates by sex and single year of age (20 through 67) for the active, disabled, recovered, and total insured population. The active group is composed of insured

[1] Disabled means inability to engage in any substantial gainful activity as a result of medically determinable physical or mental impairments that can be expected to result in death or to last for a continuous period of not less than 12 months. Special rules apply for workers at ages 55 and over whose disability is based on blindness.The law generally requires that a person be disabled continuously for 5 months before he or she can qualify for a disabled-worker benefit.

[2] These publications may be found at: http://www.ssa.gov/OACT/pubs.html.

workers who are alive and have never become disabled worker beneficiaries. The disabled group consists of workers who are currently entitled to receive a Social Security disabled-worker benefit. The recovered group consists of insured workers who have had a prior disability, but are not currently entitled to receive a disabled-worker benefit. The total group is the sum of the active, disabled, and recovered groups, otherwise known as the insured population. All workers are assumed to be fully and disability insured at all times after reaching age 20.[3] For each age, we calculate deaths, entitlements to disabled-worker benefits, and recoveries from the disability rolls. For each population group (active, disabled, recovered, and total), we determine the number of persons alive at the beginning of the next year by adding or subtracting the relevant components of change to the number of persons alive at the beginning of the year.

For those born in 2000, we develop cohort insured life tables for each sex, from age 20 to age 67. To calculate total deaths for the insured population, we apply the age-sex-specific mortality rates of the general population to the total insured population at the beginning of the year.[4]

We calculate deaths for the disabled-worker population by applying age-sex-duration-specific[5] disabled-life mortality rates to the disabled-worker population at the beginning of the year. We assume that newly entitled disabled-worker beneficiaries, that is, those in duration 0, are exposed for half a year, because on average they become entitled at mid-year. We calculate deaths for those who have recovered from disability ("recovered deaths") by applying the age-sex-specific mortality rates of the general population to the recovered population at the beginning of the year, with adjustments. To make these adjustments, we add half of the newly recovered population and subtract half of those newly disabled from the recovered population for that year. Active deaths are the residual: we subtract the disabled deaths and recovered deaths from the total population deaths.

We develop cohort disabled-worker incidence rates for each sex, from age 20 to age 67, for those born in 2000. To calculate the number of newly entitled disabled-worker beneficiaries, we apply the age-sex-specific incidence rates to the active and recovered populations at the beginning of the year.

Finally, we develop rates of recovery from disability for each sex, from age 20 to age 67, for those born in 2000. To calculate the number of recoveries from the disabled-worker population, we apply age-sex-duration-specific[5] recovery rates to the beginning of the year disabled-worker population. We assume that newly entitled disabled-worker beneficiaries (in duration 0) are exposed for half a year in the year of their initial entitlement.

Results

Table C provides illustrations which allow for the computation of various probabilities of survival, death, and disability for insured males born in 2000. Table D provides the same information for insured females born in 2000. For example, the probability that an insured female, age 25 in 2025, will survive to age 60 without ever becoming disabled is 78 percent. To get this result, we divide the number of active lives at age 60 (777,190) by the number of active lives at age 25 (990,883).

Table E uses the illustrations in tables C and D to derive various probabilities of disability, death, and survival for insured males and females born in 2000. We calculate the probability of survival without disability from age 20 to age *x* by dividing the active insured population at the beginning of the year at age *x* by the active insured population at the beginning of the year at age 20. The probability of dying or becoming disabled after age 20 and before age *x* is calculated as the complement, that is, 1 minus the probability of surviving without disability from age 20 to age *x*. For example, we project that an insured male worker who attained age 20 in 2020 has a 65 percent chance of surviving to age 67 without ever becoming disabled and a 35 percent chance of either dying or becoming disabled prior to age 67.

Table E also includes probabilities of an insured worker becoming disabled and of an insured worker dying and never becoming disabled. These probabilities are shown from age 20 to age *x.* We calculate these values by dividing the total newly disabled and the total deaths from the active insured population from age 20 to age *x,* respectively, by the active insured population alive at the beginning of the year of attaining age 20. For example, we project that an insured female worker who attained age 20 in 2020 has a 19 percent chance of becoming disabled between age 20 and age 60. In addition, the probability that she will die between age 20 and age 60 without ever receiving Social Security disability benefits is only 4 percent.

[3] Computing disabled-worker incidence rates by age using insured workers gives a larger probability of disability entitlement than if all workers were included in the calculations.
[4] Using general population mortality rates may slightly overstate death rates for the insured population because the group excluded, the uninsured, are likely to have higher death rates than the general population.
[5] Age is age at entitlement to a disabled-worker benefit. Duration refers to the complete number of years since entitlement to a disabled-worker benefit.

Table A: Probability of Disability and Death for Illustrative Cases of Insured Workers

Trustees Report Year [1] *(Year of Attainment of Age 20)*	Year of Birth	Probability of Disability Before NRA			Probability of Death And Never Disabled Before NRA			Probability of Survival to NRA With No Disability		
		Male	Female	Total[2]	Male	Female	Total[2]	Male	Female	Total[2]
1986	1966	0.322	0.240	0.281	0.095	0.060	0.077	0.583	0.700	0.642
2011	1991	0.276	0.260	0.268	0.091	0.049	0.070	0.633	0.691	0.662
2012	1992	0.276	0.264	0.270	0.090	0.048	0.069	0.634	0.688	0.661
2013	1993	0.275	0.264	0.270	0.085	0.044	0.065	0.639	0.692	0.666
2014	1994	0.277	0.263	0.270	0.082	0.042	0.062	0.641	0.695	0.668
2015	1995	0.279	0.265	0.272	0.078	0.040	0.059	0.643	0.695	0.669
2016	1996	0.277	0.262	0.270	0.078	0.041	0.059	0.645	0.697	0.671
2017	1997	0.275	0.260	0.268	0.080	0.042	0.061	0.645	0.697	0.671
2018	1998	0.277	0.262	0.269	0.081	0.042	0.062	0.642	0.696	0.669
2019	1999	0.264	0.261	0.262	0.090	0.046	0.068	0.647	0.693	0.670
2020	2000	0.253	0.253	0.253	0.098	0.049	0.074	0.649	0.698	0.673

[1] Calculations are based on the intermediate assumptions of that year's Trustees Report (alternative II-B for the 1986 Trustees Report).
[2] Totals are obtained by combining tables C and D. For example, the probability of death and never disabled before NRA equals 7.4 percent for the 2000 birth cohort (98,297 + 49,346) / (1,000,000 + 1,000,000).

Notes: Probabilities are determined assuming all illustrative workers are disability insured throughout their working lives.

For a recent historical perspective, see Actuarial Study 123, Social Security Disability Insurance Program Worker Experience, at: http://www.ssa.gov/OACT/NOTES/actstud.html.

Table B: Probability of Death for Illustrative Cases of Insured Workers by Disabled Status

Trustees Report Year[1] *(Year of Attainment of Age 20)*	Year of Birth	(A) = (B) + (C) Probability of Death Before NRA			(B) Probability of Death and Disability Before NRA			(C) Probability of Death and No Disability Before NRA[2]		
		Male	Female	Total[3]	Male	Female	Total[3]	Male	Female	Total[3]
1986	1966	0.221	0.129	0.175	0.121	0.067	0.094	0.100	0.062	0.081
2011	1991	0.155	0.096	0.125	0.061	0.045	0.053	0.094	0.050	0.072
2012	1992	0.153	0.095	0.124	0.061	0.045	0.053	0.092	0.049	0.071
2013	1993	0.149	0.090	0.119	0.061	0.045	0.053	0.088	0.045	0.066
2014	1994	0.145	0.088	0.116	0.061	0.045	0.053	0.084	0.043	0.064
2015	1995	0.143	0.087	0.115	0.063	0.045	0.054	0.080	0.042	0.061
2016	1996	0.142	0.087	0.115	0.062	0.045	0.053	0.081	0.042	0.061
2017	1997	0.144	0.088	0.116	0.061	0.045	0.053	0.082	0.043	0.063
2018	1998	0.146	0.090	0.118	0.063	0.046	0.055	0.083	0.044	0.063
2019	1999	0.152	0.093	0.122	0.060	0.046	0.053	0.092	0.047	0.069
2020	2000	0.158	0.096	0.127	0.057	0.045	0.051	0.100	0.051	0.076

[1] Calculations are based on the intermediate assumptions of that year's Trustees Report (alternative II-B for the 1986 Trustees Report).
[2] Includes workers who recovered from disabilities.
[3] Totals are obtained by combining tables C and D. For example, the probability of death and disability before NRA equals 5.1 percent for the 2000 birth cohort (57,169 + 45,050) / (1,000,000 + 1,000,000).

Notes:

1. Probabilities are determined assuming all illustrative workers are disability insured throughout their working lives.

For a recent historical perspective, see Actuarial Study 123, Social Security Disability Insurance Program Worker Experience, at: http://www.ssa.gov/OACT/NOTES/actstud.html.

2. Totals do not necessarily equal the sum of rounded components.

Table C: Illustrations of Survival and Disability Status for Insured Males Attaining Age 20 in 2020 (2000 Birth Cohort)

					Deaths								Newly Disabled							
	Living At Beginning Of Year				Total		Active		Disabled		Recovered		Total		Active		Recovered		Newly Recovered	
Age x	Total	Active	Disabled	Recovered	x to x+1	20 to x+1	x to x+1	20 to x+1	x to x+1	20 to x+1	x to x+1	20 to x+1	x to x+1	20 to x+1	x to x+1	20 to x+1	x to x+1	20 to x+1	x to x+1	20 to x+1
20	1,000,000	1,000,000	-	-	1,046	1,046	1,037	1,037	9	9	-	-	1,935	1,935	1,935	1,935	-	-	5	5
21	998,954	997,028	1,921	5	1,185	2,231	1,161	2,198	24	33	-	-	1,829	3,764	1,829	3,764	-	-	16	21
22	997,769	994,038	3,710	21	1,299	3,530	1,263	3,461	36	69	-	-	1,789	5,553	1,789	5,553	-	-	28	49
23	996,470	990,986	5,435	49	1,379	4,909	1,331	4,792	48	117	-	-	1,997	7,550	1,997	7,550	-	-	47	96
24	995,091	987,658	7,337	96	1,436	6,345	1,371	6,163	65	182	-	-	2,204	9,754	2,204	9,754	-	-	97	193
25	993,655	984,083	9,379	193	1,485	7,830	1,401	7,564	84	266	-	-	1,822	11,576	1,822	11,576	-	-	260	453
26	992,170	980,860	10,857	453	1,536	9,366	1,438	9,002	97	363	1	1	1,399	12,975	1,398	12,974	1	1	399	852
27	990,634	978,024	11,760	850	1,586	10,952	1,480	10,482	104	467	2	3	1,490	14,465	1,489	14,463	1	2	442	1,294
28	989,048	975,055	12,704	1,289	1,638	12,590	1,522	12,004	113	580	3	6	1,580	16,045	1,578	16,041	2	4	473	1,767
29	987,410	971,955	13,698	1,757	1,689	14,279	1,561	13,565	125	705	3	9	1,668	17,713	1,665	17,706	3	7	481	2,248
30	985,721	968,729	14,760	2,232	1,738	16,017	1,582	15,147	152	857	4	13	1,804	19,517	1,800	19,506	4	11	501	2,749
31	983,983	965,347	15,911	2,725	1,779	17,796	1,598	16,745	176	1,033	5	18	1,946	21,463	1,941	21,447	5	16	517	3,266
32	982,204	961,808	17,164	3,232	1,815	19,611	1,617	18,362	192	1,225	6	24	2,045	23,508	2,038	23,485	7	23	519	3,785
33	980,389	958,153	18,498	3,738	1,843	21,454	1,622	19,984	213	1,438	8	32	2,155	25,663	2,147	25,632	8	31	531	4,316
34	978,546	954,384	19,909	4,253	1,866	23,320	1,615	21,599	242	1,680	9	41	2,258	27,921	2,248	27,880	10	41	545	4,861
35	976,680	950,521	21,380	4,779	1,895	25,215	1,620	23,219	265	1,945	10	51	2,367	30,288	2,355	30,235	12	53	558	5,419
36	974,785	946,546	22,924	5,315	1,922	27,137	1,616	24,835	295	2,240	11	62	2,471	32,759	2,457	32,692	14	67	550	5,969
37	972,863	942,473	24,550	5,840	1,938	29,075	1,598	26,433	328	2,568	12	74	2,584	35,343	2,568	35,260	16	83	549	6,518
38	970,925	938,307	26,257	6,361	1,938	31,013	1,563	27,996	362	2,930	13	87	2,717	38,060	2,699	37,959	18	101	549	7,067
39	968,987	934,045	28,063	6,879	1,930	32,943	1,510	29,506	406	3,336	14	101	2,876	40,936	2,855	40,814	21	122	552	7,619
40	967,057	929,680	29,981	7,396	1,930	34,873	1,469	30,975	446	3,782	15	116	3,113	44,049	3,088	43,902	25	147	579	8,198
41	965,127	925,123	32,069	7,935	1,950	36,823	1,453	32,428	480	4,262	17	133	3,353	47,402	3,324	47,226	29	176	572	8,770
42	963,177	920,346	34,370	8,461	1,990	38,813	1,441	33,869	531	4,793	18	151	3,539	50,941	3,507	50,733	32	208	572	9,342
43	961,187	915,398	36,806	8,983	2,058	40,871	1,450	35,319	588	5,381	20	171	3,751	54,692	3,715	54,448	36	244	555	9,897
44	959,129	910,233	39,414	9,482	2,154	43,025	1,480	36,799	652	6,033	22	193	3,974	58,666	3,933	58,381	41	285	569	10,466
45	956,975	904,820	42,167	9,988	2,269	45,294	1,536	38,335	709	6,742	24	217	4,178	62,844	4,132	62,513	46	331	595	11,061
46	954,706	899,152	45,041	10,513	2,405	47,699	1,626	39,961	752	7,494	27	244	4,401	67,245	4,350	66,863	51	382	628	11,689
47	952,301	893,176	48,062	11,063	2,575	50,274	1,690	41,651	854	8,348	31	275	4,652	71,897	4,595	71,458	57	439	610	12,299
48	949,726	886,891	51,250	11,585	2,783	53,057	1,797	43,448	951	9,299	35	310	4,855	76,752	4,792	76,250	63	502	588	12,887
49	946,943	880,302	54,566	12,075	3,024	56,081	1,942	45,390	1,043	10,342	39	349	5,013	81,765	4,945	81,195	68	570	556	13,443
50	943,919	873,415	57,980	12,524	3,283	59,364	2,124	47,514	1,115	11,457	44	393	6,277	88,042	6,188	87,383	89	659	580	14,023
51	940,636	865,103	62,562	12,971	3,558	62,922	2,302	49,816	1,206	12,663	50	443	7,759	95,801	7,644	95,027	115	774	616	14,639
52	937,078	855,157	68,499	13,422	3,858	66,780	2,417	52,233	1,385	14,048	56	499	7,777	103,578	7,657	102,684	120	894	575	15,214
53	933,220	845,083	74,316	13,821	4,182	70,962	2,551	54,784	1,568	15,616	63	562	7,624	111,202	7,501	110,185	123	1,017	575	15,789
54	929,038	835,031	79,797	14,210	4,523	75,485	2,734	57,518	1,719	17,335	70	632	7,865	119,067	7,733	117,918	132	1,149	515	16,304
55	924,515	824,564	85,428	14,523	4,887	80,372	2,967	60,485	1,842	19,177	78	710	9,868	128,935	9,697	127,615	171	1,320	526	16,830
56	919,628	811,900	92,928	14,800	5,257	85,629	3,091	63,576	2,080	21,257	86	796	12,121	141,056	11,904	139,519	217	1,537	572	17,402
57	914,371	796,905	102,397	15,069	5,603	91,232	3,155	66,731	2,355	23,612	93	889	12,144	153,200	11,919	151,438	225	1,762	568	17,970
58	908,768	781,831	111,618	15,319	5,913	97,145	3,201	69,932	2,611	26,223	101	990	12,057	165,257	11,825	163,263	232	1,994	551	18,521
59	902,855	766,805	120,513	15,537	6,201	103,346	3,221	73,153	2,872	29,095	108	1,098	12,635	177,892	12,384	175,647	251	2,245	532	19,053
60	896,654	751,200	129,744	15,710	6,496	109,842	3,233	76,386	3,148	32,243	115	1,213	12,958	190,850	12,693	188,340	265	2,510	627	19,680
61	890,158	735,274	138,927	15,957	6,824	116,666	3,238	79,624	3,462	35,705	124	1,337	13,335	204,185	13,052	201,392	283	2,793	769	20,449
62	883,334	718,984	148,031	16,319	7,194	123,860	3,248	82,872	3,811	39,516	135	1,472	13,717	217,902	13,413	214,805	304	3,097	705	21,154
63	876,140	702,323	157,232	16,585	7,626	131,486	3,344	86,216	4,136	43,652	146	1,618	13,100	231,002	12,798	227,603	302	3,399	629	21,783
64	868,514	686,181	165,567	16,766	8,121	139,607	3,522	89,738	4,441	48,093	158	1,776	11,004	242,006	10,742	238,345	262	3,661	514	22,297
65	860,393	671,917	171,616	16,860	8,693	148,300	4,074	93,812	4,447	52,540	172	1,948	8,476	250,482	8,269	246,614	207	3,868	439	22,736
66	851,700	659,574	175,206	16,920	9,300	157,600	4,485	98,297	4,629	57,169	186	2,134	6,138	256,620	5,984	252,598	154	4,022	360	23,096
67	842,400	649,105	176,355	16,940																

Table D: Illustrations of Survival and Disability Status for Insured Females Attaining Age 20 in 2020 (2000 Birth Cohort)

					Deaths								Newly Disabled							
	Living At Beginning Of Year				Total		Active		Disabled		Recovered		Total		Active		Recovered		Newly Recovered	
Age x	Total	Active	Disabled	Recovered	x to x+1	20 to x+1	x to x+1	20 to x+1	x to x+1	20 to x+1	x to x+1	20 to x+1	x to x+1	20 to x+1	x to x+1	20 to x+1	x to x+1	20 to x+1	x to x+1	20 to x+1
20	1,000,000	1,000,000	0	0	396	396	391	391	5	5	0	0	1,330	1,330	1,330	1,330	0	0	4	4
21	999,604	998,279	1,321	4	443	839	429	820	14	19	0	0	1,259	2,589	1,259	2,589	0	0	13	17
22	999,161	996,591	2553	17	486	1,325	465	1,285	21	40	0	0	1,241	3,830	1,241	3,830	0	0	24	41
23	998,675	994,885	3,749	41	521	1,846	492	1,777	29	69	0	0	1,410	5,240	1,410	5,240	0	0	41	82
24	998,154	992,983	5,089	82	553	2,399	514	2,291	39	108	0	0	1,586	6,826	1,586	6,826	0	0	77	159
25	997,601	990,883	6,559	159	582	2,981	527	2,818	55	163	0	0	1,469	8,295	1,469	8,295	0	0	179	338
26	997,019	988,887	7,794	338	614	3,595	548	3,366	66	229	0	0	1,320	9,615	1,320	9,615	0	0	277	615
27	996,405	987,019	8,771	615	652	4,247	577	3,943	74	303	1	1	1,422	11,037	1,421	11,036	1	1	326	941
28	995,753	985,021	9,793	939	697	4,944	609	4,552	87	390	1	2	1,528	12,565	1,527	12,563	1	2	362	1,303
29	995,056	982,885	10,872	1,299	747	5,691	646	5,198	100	490	1	3	1,648	14,213	1,646	14,209	2	4	372	1,675
30	994,309	980,593	12,048	1,668	799	6,490	676	5,874	122	612	1	4	1,817	16,030	1,814	16,023	3	7	387	2,062
31	993,510	978,103	13,356	2,051	849	7,339	699	6,573	148	760	2	6	1,992	18,022	1,988	18,011	4	11	402	2,464
32	992,661	975,416	14,798	2,447	892	8,231	720	7,293	170	930	2	8	2,139	20,161	2,134	20,145	5	16	407	2,871
33	991,769	972,562	16,360	2,847	927	9,158	731	8,024	193	1,123	3	11	2,310	22,471	2,303	22,448	7	23	417	3,288
34	990,842	969,528	18,060	3,254	954	10,112	733	8,757	218	1,341	3	14	2,483	24,954	2,475	24,923	8	31	440	3,728
35	989,888	966,320	19,885	3,683	984	11,096	739	9,496	241	1,582	4	18	2,683	27,637	2,673	27,596	10	41	448	4,176
36	988,904	962,908	21,879	4,117	1,018	12,114	754	10,250	260	1,842	4	22	2,886	30,523	2,874	30,470	12	53	462	4,638
37	987,886	959,280	24,043	4,563	1,049	13,163	751	11,001	293	2,135	5	27	3,056	33,579	3,042	33,512	14	67	477	5,115
38	986,837	955,487	26,329	5,021	1,078	14,241	746	11,747	326	2,461	6	33	3,220	36,799	3,203	36,715	17	84	481	5,596
39	985,759	951,538	28,742	5,479	1,108	15,349	748	12,495	354	2,815	6	39	3,422	40,221	3,402	40,117	20	104	489	6,085
40	984,651	947,388	31,321	5,942	1,144	16,493	751	13,246	386	3,201	7	46	3,738	43,959	3,715	43,832	23	127	520	6,605
41	983,507	942,922	34,153	6,432	1,190	17,683	753	13,999	429	3,630	8	54	4,052	48,011	4,025	47,857	27	154	550	7,155
42	982,317	938,144	37,226	6,947	1,245	18,928	762	14,761	474	4,104	9	63	4,245	52,256	4,214	52,071	31	185	572	7,727
43	981,072	933,168	40,425	7,479	1,309	20,237	776	15,537	523	4,627	10	73	4,478	56,734	4,442	56,513	36	221	591	8,318
44	979,763	927,950	43,789	8,024	1,386	21,623	793	16,330	581	5,208	12	85	4,732	61,466	4,691	61,204	41	262	595	8,913
45	978,377	922,466	47,345	8,566	1,471	23,094	828	17,158	630	5,838	13	98	5,003	66,469	4,957	66,161	46	308	638	9,551
46	976,906	916,681	51,080	9,145	1,571	24,665	880	18,038	676	6,514	15	113	5,276	71,745	5,224	71,385	52	360	692	10,243
47	975,335	910,577	54,988	9,770	1,695	26,360	933	18,971	744	7,258	18	131	5,515	77,260	5,456	76,841	59	419	696	10,939
48	973,640	904,188	59,063	10,389	1,850	28,210	1,007	19,978	823	8,081	20	151	5,719	82,979	5,654	82,495	65	484	679	11,618
49	971,790	897,527	63,280	10,983	2,028	30,238	1,100	21,078	904	8,985	24	175	5,866	88,845	5,795	88,290	71	555	642	12,260
50	969,762	890,632	67,600	11,530	2,214	32,452	1,229	22,307	958	9,943	27	202	7,186	96,031	7,094	95,384	92	647	642	12,902
51	967,548	882,309	73,186	12,053	2,403	34,855	1,334	23,641	1,038	10,981	31	233	8,710	104,741	8,593	103,977	117	764	682	13,584
52	965,145	872,382	80,176	12,587	2,606	37,461	1,414	25,055	1,157	12,138	35	268	8,607	113,348	8,485	112,462	122	886	674	14,258
53	962,539	862,483	86,952	13,104	2,820	40,281	1,508	26,563	1,273	13,411	39	307	8,329	121,677	8,204	120,666	125	1,011	643	14,901
54	959,719	852,771	93,365	13,583	3,040	43,321	1,602	28,165	1,394	14,805	44	351	8,469	130,146	8,336	129,002	133	1,144	603	15,504
55	956,679	842,833	99,837	14,009	3,288	46,609	1,765	29,930	1,474	16,279	49	400	10,133	140,279	9,967	138,969	166	1,310	631	16,135
56	953,391	831,101	107,865	14,425	3,534	50,143	1,824	31,754	1,656	17,935	54	454	12,026	152,305	11,821	150,790	205	1,515	653	16,788
57	949,857	817,456	117,582	14,819	3,723	53,866	1,786	33,540	1,878	19,813	59	513	11,936	164,241	11,723	162,513	213	1,728	621	17,409
58	946,134	803,947	127,019	15,168	3,834	57,700	1,727	35,267	2,045	21,858	62	575	11,742	175,983	11,525	174,038	217	1,945	607	18,016
59	942,300	790,695	136,109	15,496	3,901	61,601	1,628	36,895	2,208	24,066	65	640	12,110	188,093	11,877	185,915	233	2,178	560	18,576
60	938,399	777,190	145,451	15,758	3,970	65,571	1,579	38,474	2,324	26,390	67	707	11,733	199,826	11,500	197,415	233	2,411	624	19,200
61	934,429	764,111	154,236	16,082	4,098	69,669	1,484	39,958	2,542	28,932	72	779	11,463	211,289	11,227	208,642	236	2,647	676	19,876
62	930,331	751,400	162,481	16,450	4,320	73,989	1,455	41,413	2,788	31,720	77	856	11,733	223,022	11,482	220,124	251	2,898	640	20,516
63	926,011	738,463	170,786	16,762	4,665	78,654	1,519	42,932	3,061	34,781	85	941	11,243	234,265	10,993	231,117	250	3,148	509	21,025
64	921,346	725,951	178,459	16,936	5,120	83,774	1,687	44,619	3,338	38,119	95	1,036	9,538	243,803	9,321	240,438	217	3,365	454	21,479
65	916,226	714,943	184,205	17,078	5,656	89,430	2,195	46,814	3,355	41,474	106	1,142	7,475	251,278	7,301	247,739	174	3,539	361	21,840
66	910,570	705,447	187,964	17,159	6,226	95,656	2,532	49,346	3,576	45,050	118	1,260	5,511	256,789	5,380	253,119	131	3,670	295	22,135
67	904,344	697,535	189,604	17,205																

Table E: Probabilities of Disability, Death, and Survival for Insured Workers Attaining Age 20 in 2020 (2000 Birth Cohort)

	Males Attaining Age 20 in 2020					Females Attaining Age 20 in 2020				
Age x	Probability of Survival With No Disability From Age 20 To Age x	Probability of Disability From Age 20 To Age x	Probability of Death And Never Disabled From Age 20 To Age x	Probability of Death or Disability From Age 20 To Age x	Age x	Probability of Survival With No Disability From Age 20 To Age x	Probability of Disability From Age 20 To Age x	Probability of Death And Never Disabled From Age 20 To Age x	Probability of Death or Disability From Age 20 To Age x
21	99.7	0.2	0.1	0.3	21	99.8	0.1	0.0	0.2
22	99.4	0.4	0.2	0.6	22	99.7	0.3	0.1	0.3
23	99.1	0.6	0.3	0.9	23	99.5	0.4	0.1	0.5
24	98.8	0.8	0.5	1.2	24	99.3	0.5	0.2	0.7
25	98.4	1.0	0.6	1.6	25	99.1	0.7	0.2	0.9
26	98.1	1.2	0.8	1.9	26	98.9	0.8	0.3	1.1
27	97.8	1.3	0.9	2.2	27	98.7	1.0	0.3	1.3
28	97.5	1.4	1.0	2.5	28	98.5	1.1	0.4	1.5
29	97.2	1.6	1.2	2.8	29	98.3	1.3	0.5	1.7
30	96.9	1.8	1.4	3.1	30	98.1	1.4	0.5	1.9
31	96.5	2.0	1.5	3.5	31	97.8	1.6	0.6	2.2
32	96.2	2.1	1.7	3.8	32	97.5	1.8	0.7	2.5
33	95.8	2.3	1.8	4.2	33	97.3	2.0	0.7	2.7
34	95.4	2.6	2.0	4.6	34	97.0	2.2	0.8	3
35	95.1	2.8	2.2	4.9	35	96.6	2.5	0.9	3.4
36	94.7	3.0	2.3	5.3	36	96.3	2.8	0.9	3.7
37	94.2	3.3	2.5	5.8	37	95.9	3.0	1.0	4.1
38	93.8	3.5	2.6	6.2	38	95.5	3.4	1.1	4.5
39	93.4	3.8	2.8	6.6	39	95.2	3.7	1.2	4.8
40	93.0	4.1	3.0	7.0	40	94.7	4.0	1.2	5.3
41	92.5	4.4	3.1	7.5	41	94.3	4.4	1.3	5.7
42	92.0	4.7	3.2	8.0	42	93.8	4.8	1.4	6.2
43	91.5	5.1	3.4	8.5	43	93.3	5.2	1.5	6.7
44	91.0	5.4	3.5	9.0	44	92.8	5.7	1.6	7.2
45	90.5	5.8	3.7	9.5	45	92.2	6.1	1.6	7.8
46	89.9	6.3	3.8	10.1	46	91.7	6.6	1.7	8.3
47	89.3	6.7	4.0	10.7	47	91.1	7.1	1.8	8.9
48	88.7	7.1	4.2	11.3	48	90.4	7.7	1.9	9.6
49	88.0	7.6	4.3	12.0	49	89.8	8.2	2.0	10.2
50	87.3	8.1	4.5	12.7	50	89.1	8.8	2.1	10.9
51	86.5	8.7	4.8	13.5	51	88.2	9.5	2.2	11.8
52	85.5	9.5	5.0	14.5	52	87.2	10.4	2.4	12.8
53	84.5	10.3	5.2	15.5	53	86.2	11.2	2.5	13.8
54	83.5	11.0	5.5	16.5	54	85.3	12.1	2.7	14.7
55	82.5	11.8	5.8	17.5	55	84.3	12.9	2.8	15.7
56	81.2	12.8	6.0	18.8	56	83.1	13.9	3.0	16.9
57	79.7	14.0	6.4	20.3	57	81.7	15.1	3.2	18.3
58	78.2	15.1	6.7	21.8	58	80.4	16.3	3.4	19.6
59	76.7	16.3	7.0	23.3	59	79.1	17.4	3.5	20.9
60	75.1	17.6	7.3	24.9	60	77.7	18.6	3.7	22.3
61	73.5	18.8	7.6	26.5	61	76.4	19.7	3.8	23.6
62	71.9	20.1	8.0	28.1	62	75.1	20.9	4.0	24.9
63	70.2	21.5	8.3	29.8	63	73.8	22.0	4.1	26.2
64	68.6	22.8	8.6	31.4	64	72.6	23.1	4.3	27.4
65	67.2	23.8	9.0	32.8	65	71.5	24.0	4.5	28.5
66	66.0	24.7	9.4	34.0	66	70.5	24.8	4.7	29.5
67	64.9	25.3	9.8	35.1	67	69.8	25.3	4.9	30.2

Note: Totals do not necessarily equal the sums of rounded components.