LIFE TABLE INFORMATION

(Apr. 10, 2011; rev. Apr. 20, 2011)

Tables A and B below are based on published life table information for black and white men and women in the United States in 2006 (Arias E., <u>United States Life Tables 2006</u>, NVSS Vol. 58, No. 21). The patterns shown in the tables are pertinent to issues addressed on a number of pages and sub-pages on jpscanlan.com, including the <u>Scanlan's Rule</u> and <u>Mortality and Survival</u> pages and the <u>Cohort Considerations</u> and <u>Irreducible Minimums</u> sub-pages of the <u>Measuring Health</u> <u>Disparities</u> page (MHD) of jpscanlan.com. The tables show the patterns of changes in standard measures of differences between outcome rates with regard to survival and mortality for comparisons of (a) white men and white women, (b) white men and black men, (c) black women and black men, and (d) white women and black women, where the first group mentioned in each pair is the advantaged group in the pair with regard to rate of surviving to a particular age.

Table A presents information on rates at which persons survive/fail to survive to a particular age among the initial population, not the rates of surviving to a particular age among persons surviving to the prior age. The distributional forces affecting the patterns observed in Table A are akin to those resulting from the raising or lowering a cutoff (as observed in <u>Table 1</u> of <u>BSPS</u> 2006). But as discussed in the <u>Cohort Considerations</u> sub-page of MHD, in reality, observers more often examine the survival/mortality among persons already surviving to a particular age. And as shown in Table CC-A, CC-B, and CC-C of the Cohort Considerations page, the EES figure derived from among persons living to a particular age will be lower than that derived from the original cohort. The Interval EES figures in Table A below are akin to the figures in the three Cohort Considerations pages just mentioned.

Table B is based entirely on the rates at which persons surviving to one age who survive or fail to survive to the next age. Since the Interval EES figure that one finds in Table B is also presented in Table A, the only information Table B provides beyond that provided in Table A is the patterns of changes in the standard measures of differences between rates.

In Table A the columns are as follows:

Cat	groups being compared
Age	age to which survival/mortality rates are calculated
AGM	percentage of advantaged group failing to survive to the age
DGM	percentage of disadvantaged group failing to survive to the age
MR	mortality ratio (disadvantage group/advantaged group)
MRCh	direction of change of MR from prior age
SR	survival ratio (advantaged group/disadvantaged group)
SRCh	direction of change of MR from prior age
AbsDf	absolute difference between rates (in percentage points)
ADCh	direction of change of absolute difference
MOR	mortality odds ratio (in terms of disadvantaged group mortality odds over advantaged group mortality odds, which would be the same as the advantaged group survival odds over the disadvantaged group survival odds)

difference between mean of underlying distributions according to the procedure EES described on the Solutions sub-page of MHD

EES based on the survival/mortality rates calculated based on the population IntEES surviving to the prior age (in ten-year intervals)

from Life Tables, US 2006 [b1312 a 4]													
Cat	Age	AM	DM	MR	MRCh	SR	SRCh	AbsDf	ADCh	MOR	MORCh	ES	IntEES
WF-WM	20	0.90%	1.30%	1.45	INC	1.00	INC	0.40	INC	1.46	INC	15	
WF-WM	30	1.38%	2.63%	1.90	INC	1.01	INC	1.25	INC	1.92	INC	27	38
WF-WM	40	2.19%	4.15%	1.90	DEC	1.02	INC	1.96	INC	1.94	INC	29	26
WF-WM	50	4.11%	7.35%	1.79	DEC	1.03	INC	3.24	INC	1.85	DEC	29	23
WF-WM	60	8.19%	13.96%	1.70	DEC	1.07	INC	5.77	INC	1.82	DEC	32	27
WF-WM	70	17.42%	27.03%	1.55	DEC	1.13	INC	9.61	INC	1.76	DEC	33	26
WF-WM	80	37.91%	51.93%	1.37	DEC	1.29	INC	14.02	INC	1.77	INC	37	28
WF-WM	90	73.52%	84.68%	1.15	DEC	1.73	INC	11.16	DEC	1.99	INC	41	29
WF-WM	100	97.63%	99.20%	1.02	DEC	2.95	INC	1.57	DEC	3.00	INC	43	29
					DEC		DEC		DEC		DEC		
WM-BM	20	1.30%	2.52%	1.94	DEC	1.01	INC	1.22	INC	1.96	DEC	28	
WM-BM	30	2.63%	4.73%	1.80	DEC	1.02	INC	2.10	INC	1.84	DEC	27	23
WM-BM	40	4.15%	7.51%	1.81	INC	1.04	INC	3.36	INC	1.88	INC	30	27
WM-BM	50	7.35%	12.79%	1.74	DEC	1.06	INC	5.45	INC	1.85	DEC	32	26
WM-BM	60	13.96%	24.25%	1.74	DEC	1.14	INC	10.30	INC	1.97	INC	39	35
WM-BM	70	27.03%	42.47%	1.57	DEC	1.27	INC	15.44	INC	1.99	INC	44	34
WM-BM	80	51.93%	67.36%	1.30	DEC	1.47	INC	15.43	DEC	1.91	DEC	41	24
WM-BM	90	84.68%	90.05%	1.06	DEC	1.54	INC	5.37	DEC	1.64	DEC	26	4
WM-BM	100	99.20%	99.10%	1.00	DEC	0.89	DEC	-0.10	DEC	0.89	DEC	1	1
					DEC		DEC		DEC		DEC		
BF-BM	20	1.73%	2.52%	1.45	INC	1.01	INC	0.78	INC	1.46	INC	17	
BF-BM	30	2.50%	4.73%	1.89	INC	1.02	INC	2.23	INC	1.93	INC	30	43
BF-BM	40	4.01%	7.51%	1.87	DEC	1.04	INC	3.50	INC	1.94	INC	31	27
BF-BM	50	7.57%	12.79%	1.69	DEC	1.06	INC	5.22	INC	1.79	DEC	30	21
BF-BM	60	14.58%	24.25%	1.66	DEC	1.13	INC	9.68	INC	1.88	INC	36	32
BF-BM	70	27.24%	42.47%	1.56	DEC	1.26	INC	15.23	INC	1.97	INC	42	35
BF-BM	80	49.18%	67.36%	1.37	DEC	1.56	INC	18.18	INC	2.13	INC	50	37
BF-BM	90	78.64%	90.05%	1.15	DEC	2.15	INC	11.41	DEC	2.46	INC	49	31
BF-BM	100	97.16%	99.10%	1.02	DEC	3.14	INC	1.94	DEC	3.21	INC	46	23
					DEC		DEC		DEC		DEC		
WF-BF	20	0.90%	1.73%	1.94	DEC	1.01	INC	0.84	INC	1.95	DEC	26	
WF-BF	30	1.38%	2.50%	1.81	DEC	1.01	INC	1.12	INC	1.83	DEC	25	17
WF-BF	40	2.19%	4.01%	1.83	INC	1.02	INC	1.83	INC	1.87	INC	28	25
WF-BF	50	4.11%	7.57%	1.84	INC	1.04	INC	3.46	INC	1.91	INC	30	28
WF-BF	60	8.19%	14.58%	1.78	DEC	1.07	INC	6.38	INC	1.91	DEC	35	30
WF-BF	70	17.42%	27.24%	1.56	DEC	1.14	INC	9.82	INC	1.78	DEC	33	24
WF-BF	80	37.91%	49.18%	1.30	DEC	1.22	INC	11.27	INC	1.59	DEC	29	17
WF-BF	90	73.52%	78.64%	1.07	DEC	1.24	INC	5.12	DEC	1.33	DEC	17	2
WF-BF	100	97.63%	97.16%	1.00	DEC	0.83	DEC	-0.47	DEC	0.83	DEC	1	1

Table A: Measures of Differences in Survival and Mortality

In Table B the	columns are as follows:
Cat	groups being compared
Age	age to which survival/mortality rates are calculated from among persons living to
prior Age	
PrAge	prior age for interval calculation
IAGM	percentage of advantaged group living to prior age failing to survive to the age
IDGM	percentage of disadvantaged group living to prior age failing to survive to the age
IMR	mortality ratio (disadvantage group/advantaged group)
MRCh	direction of change of MR from prior age
ISR	survival ratio (advantaged group/disadvantaged group)
ISRCh	direction of change of MR from prior age
IAbsDf	absolute difference between rates (in percentage points)
IADCh	direction of change of absolute difference
IMOR	mortality odds ratio (in terms of disadvantaged group mortality odds over
	advantaged group mortality odds, which would be the same as the advantaged
	group survival odds over the disadvantaged group survival odds)
IntEES	EES based on the survival/mortality rates calculated based on the population
	surviving to the prior age (in ten-year intervals)

Table B: Measures of Differences in Mortality and Survival from													
Life Tables, US 2006, Based on Persons Surviving to Prior Age [b1312 b 9]													
Cat	Age	PrAge	IAM	IDM	IMR	IMRCh	ISR	ISRCh	IAD	IADCh	IMOR	IMORCh	INTEES
WF-WM	40	30	0.81%	1.56%	1.92	DEC	1.01	DEC	0.75%	DEC	1.93	DEC	26
WF-WM	50	40	1.96%	3.33%	1.70	DEC	1.01	INC	1.37%	INC	1.72	DEC	23
WF-WM	60	50	4.26%	7.14%	1.67	DEC	1.03	INC	2.88%	INC	1.73	INC	27
WF-WM	70	60	10.05%	15.19%	1.51	DEC	1.06	INC	5.15%	INC	1.60	DEC	26
WF-WM	80	70	24.81%	34.12%	1.38	DEC	1.14	INC	9.31%	INC	1.57	DEC	28
WF-WM	90	80	57.36%	68.13%	1.19	DEC	1.34	INC	10.78%	INC	1.59	INC	29
WF-WM	100	90	91.04%	94.75%	1.04	DEC	1.71	INC	3.71%	DEC	1.78	INC	29
						DEC		DEC		DEC		DEC	
WM-BM	40	30	1.56%	2.92%	1.87	INC	1.01	INC	1.36%	INC	1.90	INC	27
WM-BM	50	40	3.33%	5.71%	1.71	DEC	1.03	INC	2.38%	INC	1.76	DEC	26
WM-BM	60	50	7.14%	13.14%	1.84	INC	1.07	INC	6.00%	INC	1.97	INC	35
WM-BM	70	60	15.19%	24.04%	1.58	DEC	1.12	INC	8.85%	INC	1.77	DEC	34
WM-BM	80	70	34.12%	43.27%	1.27	DEC	1.16	INC	9.14%	INC	1.47	DEC	24
WM-BM	90	80	68.13%	69.51%	1.02	DEC	1.05	DEC	1.38%	DEC	1.07	DEC	4
WM-BM	100	90	94.75%	90.91%	0.96	DEC	0.58	DEC	-3.84%	DEC	0.55	DEC	1
						DEC		DEC		DEC		DEC	
BF-BM	40	30	1.55%	2.92%	1.88	DEC	1.01	DEC	1.37%	DEC	1.91	DEC	27
BF-BM	50	40	3.71%	5.71%	1.54	DEC	1.02	INC	2.01%	INC	1.57	DEC	21
BF-BM	60	50	7.58%	13.14%	1.73	INC	1.06	INC	5.56%	INC	1.84	INC	32
BF-BM	70	60	14.82%	24.04%	1.62	DEC	1.12	INC	9.22%	INC	1.82	DEC	35
BF-BM	80	70	30.15%	43.27%	1.43	DEC	1.23	INC	13.12%	INC	1.77	DEC	37
BF-BM	90	80	57.98%	69.51%	1.20	DEC	1.38	INC	11.53%	DEC	1.65	DEC	31
BF-BM	100	90	86.68%	90.91%	1.05	DEC	1.46	INC	4.23%	DEC	1.54	DEC	23
						DEC		DEC		DEC		DEC	
WF-BF	40	30	0.81%	1.55%	1.91	INC	1.01	INC	0.74%	INC	1.92	INC	25
WF-BF	50	40	1.96%	3.71%	1.89	DEC	1.02	INC	1.74%	INC	1.92	INC	28
WF-BF	60	50	4.26%	7.58%	1.78	DEC	1.04	INC	3.32%	INC	1.84	DEC	30
WF-BF	70	60	10.05%	14.82%	1.48	DEC	1.06	INC	4.78%	INC	1.56	DEC	24
WF-BF	80	70	24.81%	30.15%	1.22	DEC	1.08	INC	5.34%	INC	1.31	DEC	17
WF-BF	90	80	57.36%	57.98%	1.01	DEC	1.01	DEC	0.62%	DEC	1.03	DEC	2
WF-BF	100	90	91.04%	86.68%	0.95	DEC	0.67	DEC	-4.36%	DEC	0.64	DEC	1
						DEC		DEC		DEC		DEC	