

one-half. This makes the variance estimates less stable (i.e., the variance of the variance estimates is increased).

Variance estimation from complex samples such as NHANES III is a complicated process. Because of the estimation techniques used, exact expressions for sampling errors are often not available and approximations must be used. Also, estimates of sampling error are themselves subject to variability. Thus, analysts and users should be careful in analyzing data from complex samples and drawing inferences. It is tempting to treat survey data as if it were derived from a simple random sample; if this were the case then standard methods and software could be employed. However, it must be emphasized that standard statistical analyses based on simple random sampling are generally NOT directly applicable to complex samples.

If topics or methods mentioned in this report are not clear or problems occur with computation, users should seek the help of expert survey statisticians who are familiar with these methods. The software developers for the SUDAAN and WesVarPC can usually be contacted for further assistance with specific applications. ***Again, please consider that (1) sampling weights should be used in estimation to account for sampling variability and to adjust for differential probability of selection of persons in such a complex sample, and (2) the survey design structure should be used to estimate measures of statistical confidence.***

APPENDIX A

Table A.1: 1980 Census Population by age groups

Age groups	U.S. population		
	Proportion (total)	Proportion (20+ years)	Total
Under 1 year	0.0156		3,533,692
1 - 2 years	0.0287		6,493,373
3 - 5 years	0.0419		9,483,880
6 - 11 years	0.0920		20,834,439
12 - 19 years	0.1418		32,113,079
20 - 29 years	0.1803	0.2650	40,839,623
30 - 39 years	0.1392	0.2046	31,526,222
40 - 49 years	0.1005	0.1477	22,759,163
50 - 59 years	0.1030	0.1514	23,325,286
60 - 69 years	0.0833	0.1225	18,870,102
70 - 79 years	0.0512	0.0752	11,591,846
80 years plus	0.0228	0.0336	5,175,100
Total			226,545,805

Source: 1980 civilian noninstitutionalized population of the U.S., U.S. Bureau of the Census, U.S. Department of Commerce.

Table A.2: 1980 Census population by single year of age

Age	Total population	Age	Total population	Age	Total population
Under 1 year	3,533,692	40 years	2,468,083	80 years	723,049
1 years	3,269,557	41 years	2,375,849	81 years	640,276
2 years	3,223,816	42 years	2,325,572	82 years	566,548
3 years	3,179,441	43 years	2,237,108	83 years	527,982
4 years	3,141,748	44 years	2,262,796	84 years	477,178
5 years	3,162,691	45 years	2,242,318	85 years	412,549
6 years	3,109,095	46 years	2,139,385	86 years	350,655
7 years	3,273,052	47 years	2,222,969	87 years	306,906
8 years	3,394,998	48 years	2,163,709	88 years	236,314
9 years	3,760,120	49 years	2,321,374	89 years	213,778
10 years	3,716,530	50 years	2,347,068	90 years	175,900
11 years	3,580,644	51 years	2,295,077	91 years	140,003
12 years	3,518,982	52 years	2,363,152	92 years	101,492
13 years	3,643,189	53 years	2,337,138	93 years	78,233
14 years	3,782,784	54 years	2,367,597	94 years	60,964
15 years	4,059,898	55 years	2,390,440	95 years	46,219
16 years	4,180,875	56 years	2,329,790	96 years	32,789
17 years	4,223,848	57 years	2,312,737	97 years	23,471
18 years	4,251,779	58 years	2,330,373	98 years	16,215
19 years	4,451,724	59 years	2,251,914	99 years	12,385
20 years	4,387,100	60 years	2,160,937	100 years	9,663
21 years	4,285,763	61 years	2,073,764	101 years	5,231
22 years	4,284,351	62 years	2,008,093	102 years	3,886
23 years	4,199,711	63 years	1,931,425	103 years	2,800
24 years	4,161,779	64 years	1,913,402	104 years	2,015
25 years	4,116,218	65 years	1,904,641	105 years	1,573
26 years	3,977,515	66 years	1,813,987	106 years	1,276
27 years	3,931,620	67 years	1,763,637	107 years	1,038
28 years	3,708,968	68 years	1,678,740	108 years	883
29 years	3,786,598	69 years	1,621,476	109 years	852
30 years	3,726,525	70 years	1,516,900	110 years	819
31 years	3,607,610	71 years	1,439,723	111 years	623
32 years	3,712,217	72 years	1,371,235	112+ years	1,535
33 years	3,653,921	73 years	1,261,994		
34 years	2,860,647	74 years	1,208,272		
35 years	2,902,331	75 years	1,111,480		
36 years	2,929,040	76 years	1,028,927		
37 years	2,982,533	77 years	951,774		
38 years	2,598,636	78 years	828,866		
39 years	2,552,762	79 years	872,675		
				Total	226,545,805

Source: 1980 civilian noninstitutionalized population of the U.S., U.S. Bureau of the Census, U.S. Department of Commerce.

Table A.3: Overall interview and examination response rates, NHANES III, 1988-94

Status	Sample size	Percent	Weighted Percent
Total	39695	100.0	100.0
Not interviewed	5701	14.4	18.2
Interviewed, not examined	2683	6.8	7.5
MEC examined	30818	77.6	73.4
Home examined	493	1.2	0.8

Source: The NHANES III data file, 1988-94