Birth Certificate Linkage to Growth and Health Measures Using National Health and Nutrition Examination Survey, NHANES III Natality File.

INTRODUCTION

The documentation for birth certificate information on this data file was based on documentation prepared in the Division of Vital Statistics, National Center for Health Statistics (NCHS). Since 1985, natality statistics for all States, the District of Columbia, U.S. Virgin Islands, Puerto Rico, and Guam have been based on information from the total file of birth records. The information is received on computer data tapes coded by the States and provided to NCHS through the Vital Statistics Cooperative Program.

Natality data for the United States (U.S.) are limited to births occurring within the U.S. to residents and nonresidents. Births occurring to U.S. citizens outside the United States are not included in this file.

PURPOSE/OBJECTIVES

The National Center for Health Statistics (NCHS) obtained copies of birth certificates for children examined during the third National Health and Nutrition Examination Survey (NHANES III) in order to link abstracted information from the birth certificates to the extensive biomedical and demographic measures from NHANES III.

SAMPLE DESIGN

NHANES III collected public health data for use in evaluating the health status of the U.S. population to determine how health status is affected by social and economic conditions. The target population of NHANES III was the non-institutionalized, civilian population aged two months and older. The household interview included demographic, socioeconomic, dietary, and health history questions. African Americans, Mexican Americans, children under 7 years, and older persons were over-sampled.

The survey had a sample size of 39,695 persons including 8,836 children, two months

through six years of age from whom interview data were obtained, born between 1982 and

1994. Descriptive data, physical measures and biomedical samples were collected from

8,324 of the 8,836 total children. To link birth certificate information for these

children with the other data from NHANES III, parents or guardians of the interviewed

sample children were asked to sign consent forms giving permission to obtain copies of

the children's birth certificates.

A total of 7,779 birth certificates were obtained for children having either an interview

or an interview and examination. 7,547 of these children were interviewed and examined

and 232 were interviewed only. Certificate information could not be obtained for 1057

children of which 777 were interviewed and examined and 280 were interviewed only.

The 280 children who were interviewed only were eliminated from the linkage project

file due to insufficient birth origin information (birth mother or birth place), or lack

of a signed consent. A detailed verification process was implemented to determine if

the NHANES child's name was identical to the name that appeared on the birth certificate.

RESPONSE RATE

Ninety five percent of the requested birth certificates were obtained from the States.

If birth certificates were not found on the initial search which was done by the State

Registrars' offices, the States were asked to do a second search.

LINKAGE PROCESS

The certificate information was manually entered into a database. The next step was to merge/link the information extracted from the birth certificates with the Natality data

files. After completion of data entry for all the birth certificates, the correct

Natality records were matched to the NHANES data file.

CONFIDENTIALITY

All data collected are kept in the strictest confidence as guaranteed by Federal law: Section 308(d) of the Public Health Service Act (42 USC 242m) and the Privacy

Act of 1974 (5 USC 552a). Nothing that would permit identification of an individual

is disclosed or released to others without the consent of the individual.

QUESTIONS

Questions should be directed to the Data Dissemination Branch, Division of Data Services, NCHS at (301) 458-4636.

	Variable	
Description	Name	Positions
GENERAL INFORMATION		
Sample Person identification number	SEQN	1-5
Family sequence number	DMPFSEQ	6-10
Examination/interview status	DMPSTAT	11
Race-ethnicity	DMARETHN	12
Race	DMARACER	13
Ethnicity	DMAETHNR	14
Sex	HSSEX	15
Date of screener: month	HSDOIMO	16-17
Age at interview (screener) - qty	HSAGEIR	18-19
Age at interview (screener) - unit	HSAGEU	20
Age in months at interview (screener)	HSAITMOR	21-24
Age at exam - in days	MXPAXTDR	25-28
Family size (persons in family)	HSFSIZER	29-30
Household size (persons in dwelling)	HSHSIZER	31-32
Rural/urban code based on USDA code	DMPMETRO	33
Census region	DMPCREGN	34
Poverty Income Ratio (unimputed income)	DMPPIR	35-40
Phase of NHANES III Survey	SDPPHASE	41
Total NHANES III pseudo-PSU	SDPPSU6	42
Total NHANES III pseudo-stratum	SDPSTRA6	43-44
Pseudo-PSU for phase 1	SDPPSU1	45
Pseudo-stratum for phase 1	SDPSTRA1	46-47
Pseudo-PSU for phase 2	SDPPSU2	48
Pseudo-stratum for phase 2	SDPSTRA2	49-50
Total interviewed sample final weight	WTPFQX6	51-58
Total MEC examined sample final weight	WTPFQX6	59-66
Total M+H examined sample final weight	WTPFEX6	67-74
Total allergy subsample final weight	WTPFALG6	75-82
Phase 1 interviewed sample final wgt	WTPFQX1	83-91
Phase 1 MEC examined sample final wgt	WTPFEX1	92-100
Phase 1 M+H examined sample final wgt	WTPFHX1	101-109
Phase 1 allergy subsample final wgt	WTPFALG1	110-118
Phase 2 interviewed sample final wgt	WTPFOX2	119-127
Phase 2 M+H examined sample final wgt	WTPFHX2	128-136

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Variable Description Name Positions ______ Phase 2 MEC examined sample final wgt WTPFEX2 Phase 2 allergy subsample final wgt WTPFALG2 146-154 Replicate 1 final interview weight WTPQRP1 155-162 Replicate 2 final interview weight WTPQRP2 Replicate 3 final interview weight WTPQRP3 171-178 Replicate 4 final interview weight WTPQRP4 179-186 Replicate 5 final interview weight WTPQRP5 187-194 Replicate 6 final interview weight WTPQRP6 195-202 Replicate 7 final interview weight WTPQRP7 203-210 Replicate 8 final interview weight WTPQRP8 211-218 Replicate 9 final interview weight WTPQRP9 219-226 Replicate 10 final interview weight WTPQRP10 227-234 Replicate 11 final interview weight WTPQRP11 235-242 Replicate 12 final interview weight WTPQRP12 243-250 251-258 Replicate 13 final interview weight WTPQRP13 Replicate 14 final interview weight WTPQRP14 259-266 Replicate 15 final interview weight WTPQRP15 267-274 Replicate 16 final interview weight WTPQRP16 275-282 Replicate 17 final interview weight WTPQRP17 283-290 Replicate 18 final interview weight WTPQRP18 291-298 299-306 Replicate 19 final interview weight WTPQRP19 Replicate 20 final interview weight WTPQRP20 307-314 Replicate 21 final interview weight WTPQRP21 315-322 Replicate 22 final interview weight WTPQRP22 323-330 Replicate 23 final interview weight WTPQRP23 331-338 Replicate 24 final interview weight WTPQRP24 339-346 Replicate 25 final interview weight WTPQRP25 347-354 355-362 Replicate 26 final interview weight WTPQRP26 363-370 Replicate 27 final interview weight WTPQRP27 Replicate 28 final interview weight WTPQRP28 371-378 Replicate 29 final interview weight WTPQRP29 379-386 Replicate 30 final interview weight WTPQRP30 387-394 Replicate 31 final interview weight WTPQRP31 395-402 Replicate 32 final interview weight WTPQRP32 403-410 Replicate 33 final interview weight WTPQRP33 411-418 419-426 Replicate 34 final interview weight WTPQRP34 Replicate 35 final interview weight WTPQRP35 427-434 Replicate 36 final interview weight WTPQRP36 435-442

Variable Description Name Positions ______ Replicate 37 final interview weight WTPQRP37 Replicate 38 final interview weight WTPQRP38 451-458 Replicate 39 final interview weight WTPQRP39 459-466 Replicate 40 final interview weight WTPQRP40 467-474 Replicate 41 final interview weight WTPQRP41 475-482 Replicate 42 final interview weight WTPQRP42 483-490 Replicate 43 final interview weight WTPQRP43 491-498 Replicate 44 final interview weight WTPQRP44 499-506 Replicate 45 final interview weight WTPQRP45 507-514 Replicate 46 final interview weight WTPQRP46 515-522 Replicate 47 final interview weight WTPQRP47 523-530 Replicate 48 final interview weight WTPQRP48 531-538 Replicate 49 final interview weight WTPQRP49 539-546 Replicate 50 final interview weight WTPQRP50 547-554 Replicate 51 final interview weight WTPQRP51 555-562 563-570 Replicate 52 final interview weight WTPQRP52 Replicate 1 final exam weight WTPXRP1 571-578 Replicate 2 final exam weight WTPXRP2 579-586 Replicate 3 final exam weight WTPXRP3 587-594 Replicate 4 final exam weight WTPXRP4 595-602 Replicate 5 final exam weight WTPXRP5 603-610 Replicate 6 final exam weight WTPXRP6 611-618 Replicate 7 final exam weight WTPXRP7 619-626 Replicate 8 final exam weight WTPXRP8 627-634 Replicate 9 final exam weight WTPXRP9 635-642 Replicate 10 final exam weight WTPXRP10 643-650 Replicate 11 final exam weight WTPXRP11 651-658 Replicate 12 final exam weight WTPXRP12 659-666 Replicate 13 final exam weight WTPXRP13 667-674 Replicate 14 final exam weight WTPXRP14 675-682 Replicate 15 final exam weight WTPXRP15 683-690 Replicate 16 final exam weight WTPXRP16 691-698 Replicate 17 final exam weight WTPXRP17 699-706 Replicate 18 final exam weight WTPXRP18 707-714 Replicate 19 final exam weight WTPXRP19 715-722 Replicate 20 final exam weight WTPXRP20 723-730 Replicate 21 final exam weight WTPXRP21 731-738 Replicate 22 final exam weight WTPXRP22 739-746 Replicate 23 final exam weight WTPXRP23 747-754

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Variable Description Name Positions ______ Replicate 24 final exam weight WTPXRP24 755-762 Replicate 25 final exam weight WTPXRP25 763-770 Replicate 26 final exam weight WTPXRP26 771-778 Replicate 27 final exam weight WTPXRP27 779-786 Replicate 28 final exam weight WTPXRP28 787-794 Replicate 29 final exam weight WTPXRP29 795-802 Replicate 30 final exam weight WTPXRP30 803-810 Replicate 31 final exam weight WTPXRP31 811-818 Replicate 32 final exam weight WTPXRP32 819-826 Replicate 33 final exam weight WTPXRP33 827-834 Replicate 34 final exam weight WTPXRP34 835-842 Replicate 35 final exam weight WTPXRP35 843-850 Replicate 36 final exam weight WTPXRP36 851-858 Replicate 37 final exam weight WTPXRP37 859-866 Replicate 38 final exam weight WTPXRP38 867-874 Replicate 39 final exam weight WTPXRP39 875-882 Replicate 40 final exam weight WTPXRP40 883-890 Replicate 41 final exam weight WTPXRP41 891-898 Replicate 42 final exam weight WTPXRP42 899-906 Replicate 43 final exam weight WTPXRP43 907-914 Replicate 44 final exam weight WTPXRP44 915-922 Replicate 45 final exam weight WTPXRP45 923-930 Replicate 46 final exam weight WTPXRP46 931-938 Replicate 47 final exam weight WTPXRP47 939-946 Replicate 48 final exam weight WTPXRP48 947-954 Replicate 49 final exam weight WTPXRP49 955-962 Replicate 50 final exam weight WTPXRP50 963-970 Replicate 51 final exam weight WTPXRP51 971-978 Replicate 52 final exam weight WTPXRP52 979-986 Certificate availability status NTCERT 987 Record type NTRECTYP 988 Resident status recode NTRSTATR 989 Record weight NTRECWT 990 Place or facility of birth NTPLDEL 991-992 Attendant at birth NTBIRATT 993 Metropolitan - nonmetropolitan recode NTMETROR 994 995 Reported age of mother used flag NTMAGEFL Age of mother imputation flag NTMAGEIM 996 997-998

Variable Description Name Positions ______ Hispanic origin of mother recode NTMETHNR 999 Race of mother imputation flag NTMRACIM 1000 1001 Race of mother NTMRACE Education of mother recode NTMEDUCR 1002-1003 Marital status of mother imputation flg NTMSTIMP Marital Status of mother NTMMRST 1005 Place of birth of mother recode NTMPOBR 1006 Adequacy of care recode (Kessner index) NTADEQUA Number of previous live births-living NTNLBNLR 1008-1009 Number of previous live births-dead NTNLBNDR 1010 Interval since last live birth recode NTISLLBR 1011-1013 Number of other terminations recode NTTERMR Interv. months since last other term. NTISLTR 1015-1017 Interv. between deliveries recode NTINDLVR 1018-1020 Outcome of last pregnancy NTOUTCOM 1021 Interpregnancy interval - in months NTINTPGR 1022-1024 Live birth order recode NTLBOR 1025-1026 Total birth order recode NTTBOR 1027-1028 Month pregnancy prenatal care began NTMONPRE 1029-1030 Number of prenatal visits recode NTTNPVR 1031-1032 Reported age of father used flag NTFAGEFL 1033 Age of father recode NTFAGER 1034-1036 Hispanic origin of father recode NTFETHNR 1037 Race of father NTFRACE 1038 1039-1040 Education of father recode NTFEDUCR Clinical estimate of gestation used NTGESTFL 1041 Gestation imputation flag NTGESTIM 1042 Period of gestation recode NTGESTR 1043-1045 Sex imputation flag NTSEXIMP 1046 1047 1048 Birth weight recode - in grams NTBWTR 1049-1052 Plurality imputation flag NTPLUIMP 1053 Plurality recode NTPLURR 1.054 One minute Apgar score recode NTOMAPSR 1055-1056 1057-1058 Five minute Apgar score recode NTFMAPSR 1059-1060 Clinical estimate of gestation recode NTCGESTR Vaginal NTVAGINA 1061

Variable Description Name Positions _____ Vaginal birth after previous C-section NTVBAC 1062 Primary C-section NTPRIMAC 1063 1064 Repeat C-section NTREPEAC Vaginal or C-section recode NTDELIVR 1065 Forceps NTFORCEP Vacuum NTVACUUM 1067 1068 Cardiac disease NTCARDIA 1069 Acute or chronic lung disease NTLUNG 1070 Diabetes NTDIABET 1071 Genital herpes NTHERPES 1072 Hydramnios/Olighydramnios NTHYDRA 1073 Hypertension, chronic NTCHYPER 1074 Hypertension, pregnancy-associated NTPHYPER 1075 Eclampsia NTECLAMP 1076 1077 Incompetent cervix NTINCERV 1078 Previous infant 4000+ grams NTPR4000 Previous preterm or small-for-gestation NTPRTERM 1079 1080 Rh sensitization NTRH 1081 Uterine bleeding NTUTERIN 1082 Other medical risk factors NTOTHRMR 1083 Tobacco use during pregnancy recode NTTOBACR 1084 Avg. number of cigarettes per day rec. NTCIGARR 1085-1086 Alcohol use during pregnancy recode NTALCOHR 1087 Average number of drinks per week recode NTDRINKR 1088 1089-1090 Amniocentesis NTAMNIO 1091 Electronic fetal monitoring NTMONITO 1092 Induction of labor NTINDUCT 1093 Stimulation of labor NTSTIMUL 1094 Tocolysis NTTOCOL 1095 Ultrasound NTULTRAS 1096 Other obstetric procedures NTOTHROB 1097 1098 Febrile NTFEBRIL 1099 Meconium, moderate/heavy NTMECONI Premature rupture of membrane NTRUPTUR 1100

Variable Description Name Positions ______ Abruptio placenta NTABRUPT 1101 Placenta previa NTREPLAC 1102 1103 Other excessive bleeding NTEXCBLD Seizures during labor NTSEIZUR 1104 Precipitous labor (<3 hours) NTPRECIP Prolonged labor (>20 hours) NTPRLONG 1106 Dysfunctional labor NTDYSFUN 1107 Breech/malpresentation NTBREECH 1108 Cephalopelvic disproportion NTCEPHAL 1109 1110 Anesthetic complications NTANESTH 1111 Fetal distress NTDISTRE 1112 Other complications of labor NTOTHRLB 1113 Anemia (Hct.<39/Hgb.<13) NTNANEMI 1114 1115 Birth injury NTINJURY Fetal alcohol syndrome NTALCOSY 1116 Hyaline membrane disease NTHYALIN 1117 Meconium aspiration syndrome NTMECONS 1118 1119 Assisted ventilation, < 30 minutes NTVENL30 Assisted 30+ minutes NTVEN30M 1120 Other abnormal conditions recode NTOTHABR 1121 Other circulatory/respiratory anomalies NTCIRCUL 1122 Club foot NTCLUBFT 1123 Othr musculoskeletal/integumental anom. NTMUSCUL 1124 Major congenital anomalies recode NTCONMJR 1125 Minor congenital anomalies recode NTCONMNR 1126 Marital status (by state) NTFLMSST 1127 Education of parents (by state) NTFLEPST 1128 1129 Education of mother NTFLEDM Education of father NTFLEDF 1130 Date of last menses (by state) NTFLNMST 1131 Date of last live birth (by state) NTFLLBST 1132 Date of last other termination by state NTFLLTST 1133 Number of prenatal visits (by state) NTFLPVST 1134 1135 One minute Apgar score (by state) NTFL1APS 1136 Five minute Apgar score (by state) NTFL5APS Clinical estimate of gestation NTFLGEST 1137

Description	Variable Name	Positions
Tobacco use	NTFLALCU NTFLWTGN	1138 1139 1140 1141

N=8836		DOCUMENTATION	DATE=12/18/00
Positions SAS name	Counts	Item description and code	Notes
1-5 SEQN	8836	Sample person identification number 00007-53622	
6-10 DMPFSEQ	8836	Family sequence number 00001-20073	See note
11 DMPSTAT	512 8288 36		See note

HOUSEHOLD SCREENER QUESTIONNAIRE (HSQ)					
Positions SAS name		Item de	scription	Note	es
12 DMARETHN			ethnicity Non-Hispanic white Non-Hispanic black Mexican-American	See	note
13 DMARACER	5997 2478 359 2	Race 1 2 3 8	White Black Other Mexican-American of unknown race	See	note
14 DMAETHNR	2703 332 5801	Ethni 1 2 3	city Mexican-American Other Hispanic Not Hispanic	See	note
15 HSSEX	4374 4462	Sex 1 2	Male Female		
16-17 HSDOIMO	822 862 769 828 842 436 722 673 659 797 914 512	Date 01 02 03 04 05 06 07 08 09 10 11 12	of screener (month) January February March April May June July August September October November December		

HOUSEHOLD SCREENER QUESTIONNAIRE (HSQ)			
Positions SAS name	Counts	Item description and code	Notes
18-19 HSAGEIR	8836	Age at interview (Screener) 01-11	See note
20 HSAGEU	2107 6729		
21-24 HSAITMOR		Age in months (Screener) 0002-9999	See note
25-28 MXPAXTDR		Age at NHANES III exam - in days	
		0065-2614 Blank	
29-30 HSFSIZER	489 320	02 03 04 05 06 07 08	See note
31-32 HSHSIZER	514 344 159	03 04 05 06	See note

	HOUS	HOLD SCREENER QUESTIONNAIRE (HSQ)	
Positions		tem description	
		and code	Notes
33 DMPMETRO		Urbanization classification based USDA Rural/Urban continuum codes	on See note
	4691	<pre>1 Central counties of metro ar 1 million population or more OR.</pre>	
		Fringe counties of metro are 1 million population or more	
	4145	2 All other areas	
34		Census region	See note
DMPCREGN	1133	1 Northeast	
	1672	2 Midwest	
	3614	3 South	
	2417	4 West	
35-40		Poverty Income Ratio	See note
DMPPIR	21	00.000 No reported income	
		000.02-08.472	
	805		

SURVEY DESIGN DATA			
		Item description and code	Notes
41 SDPPHASE	4728	Phase of NHANES III Survey 1 1988-1991 2 1991-1994	See note
42 SDPPSU6	4615 4221		See note
43-44 SDPSTRA6	8836		See note
45 SDPPSU1	2522 2206 4108		See note
46-47 SDPSTRA1	4728	Pseudo-stratum for phase 1 01-23 Blank	See note
48 SDPPSU2	2134	1	See note
49-50 SDPSTRA2	4108 4728	Pseudo-stratum for phase 2 01-23 Blank	See note

SAMPLING WEIGHTS			
		Item description and code	Notes
51-58 WTPFQX6	8836	Total NHANES III interviewed sample final weight 00215.53-67904.26	See note
59-66 WTPFEX6	548 8288	Total NHANES III MEC-examined sample final weight 00000.00 00213.45-00072760	See note
67-74 WTPFHX6	512 8324	Total NHANES III MEC and home- examined final weight 00000.00 00214.25-72684.05	See note
75-82 WTPFALG6	540	Total NHANES III allergy subsample final weight 00000.00 00213.45-00072760 Blank	See note
83-91 WTPFQX1	4728 4108	Phase 1 interviewed sample final weight 000535.87-135808.52 Blank	See note
92-100 WTPFEX1	354 4374	Phase 1 MEC-examined sample final weight 000000.00 000552.43-000145520 Blank	See note
101-109 WTPFHX1	329 4399	Phase 1 MEC and home-examined sample final weight 000000.00 000551.87-145368.09 Blank	See note

SAMPLING WEIGHTS			
Positions SAS name		Item description and code	Notes
110-118 WTPFALG1	22 305	Phase 1 allergy subsample final weight 000000.00 000821.62-000145520 Blank	See note
119-127 WTPFQX2	4108	Phase 2 interviewed sample final weight 000431.06-127915.98 Blank	See note
128-136 WTPFHX2	3925	Phase 2 MEC and home-examined sample final weight 000000.00 0000428.5-129716.91 Blank	See note
137-145 WTPFEX2	3914	Phase 2 MEC-examined sample final weight 000000.00 000426.91-130117.93 Blank	See note
146-154 WTPFALG2	13 235	Phase 2 allergy subsample final weight 000000.00 000426.91-130117.93 Blank	See note

FAY'S BRR REPLICATE INTERVIEW WEIGHTS				
Positions SAS name	Counts	tem description and code		Notes
155-162 WTPQRP1	8836	Replicate 1 final 00089.73-67276.45		See note
163-170 WTPQRP2	8836	Replicate 2 final 00069.61-71279.73	interview weight	See note
171-178 WTPQRP3	8836	Replicate 3 final 00073.29-70076.29	interview weight	See note
179-186 WTPQRP4	8836	Replicate 4 final 000076.5-70709.57	_	See note
187-194 WTPQRP5	8836	Replicate 5 final 00057.54-68999.98		See note
195-202 WTPQRP6	8836	Replicate 6 final 00076.93-70573.73	interview weight	See note
203-210 WTPQRP7	8836	Replicate 7 final 00000093-72276.33	interview weight	See note
211-218 WTPQRP8	8836	Replicate 8 final 00063.18-76172.01		See note
219-226 WTPQRP9	8836	Replicate 9 final 00053.27-71664.44		See note
227-234 WTPQRP10	8836	Replicate 10 fina 00078.88-67388.04		t See note
235-242 WTPQRP11	8836	Replicate 11 fina 00058.56-71212.69	l interview weigh	t See note
243-250 WTPQRP12	8836	Replicate 12 fina 00053.67-61124.78	l interview weigh	t See note

FAY'S BRR REPLICATE INTERVIEW WEIGHTS				
Positions SAS name		Item description and code		Notes
251-258 WTPQRP13	8836	Replicate 13 fina: 00067.93-73070.19	l interview weight	See note
259-266 WTPQRP14	8836	Replicate 14 final 00072.64-71141.21	l interview weight	See note
267-274 WTPQRP15	8836	Replicate 15 final 000065.1-68998.89	l interview weight	See note
275-282 WTPQRP16	8836	Replicate 16 final 00061.05-69502.91	l interview weight	See note
283-290 WTPQRP17	8836	Replicate 17 fina 00058.85-75065.62	l interview weight	See note
291-298 WTPQRP18	8836	Replicate 18 final 00079.28-76105.69	l interview weight	See note
299-306 WTPQRP19	8836	Replicate 19 fina 00061.49-066273.4	l interview weight	See note
307-314 WTPQRP20	8836	Replicate 20 final 00060.59-65496.35	l interview weight	See note
315-322 WTPQRP21	8836	Replicate 21 final 00054.87-57684.82	l interview weight	See note
323-330 WTPQRP22	8836	Replicate 22 final 000059.5-74472.08	l interview weight	See note
331-338 WTPQRP23	8836	Replicate 23 final 00068.76-072236.2	l interview weight	See note
339-346 WTPQRP24	8836	Replicate 24 fina 00057.42-67203.35	l interview weight	See note

FAY'S BRR REPLICATE INTERVIEW WEIGHTS				
Positions SAS name		Item description and code	Notes	
347-354 WTPQRP25	8836	Replicate 25 final interview weight 00050.63-75715.33	See note	
355-362 WTPQRP26	8836	Replicate 26 final interview weight 00070.53-71147.35	See note	
363-370 WTPQRP27	8836	Replicate 27 final interview weight 00063.26-68329.38	See note	
371-378 WTPQRP28	8836	Replicate 28 final interview weight 00000046-65381.75	See note	
379-386 WTPQRP29	8836	Replicate 29 final interview weight 00093.76-72552.13	See note	
387-394 WTPQRP30	8836	Replicate 30 final interview weight 00058.09-73840.38	See note	
395-402 WTPQRP31	8836	Replicate 31 final interview weight 000077.1-78909.13	See note	
403-410 WTPQRP32	8836	Replicate 32 final interview weight 00066.17-75113.46	See note	
411-418 WTPQRP33	8836	Replicate 33 final interview weight 000057.8-70689.57	See note	
419-426 WTPQRP34	8836	Replicate 34 final interview weight 00062.28-070754.4	See note	
427-434 WTPQRP35	8836	Replicate 35 final interview weight 00098.94-79291.74	See note	
435-442 WTPQRP36	8836	Replicate 36 final interview weight 000069.1-070495.3	See note	

	FAY'S	S BRR REPLICATE INT	ERVIEW WEIGHTS	
Positions SAS name	Counts	tem description and code		Notes
443-450 WTPQRP37	8836	Replicate 37 fina 00043.47-70619.74	al interview weight	See note
451-458 WTPQRP38	8836	Replicate 38 fina 00054.27-075782.2	al interview weight	See note
459-466 WTPQRP39	8836	Replicate 39 fina 000057.1-68666.52	al interview weight	See note
467-474 WTPQRP40	8836	Replicate 40 fina 000057.2-71713.76	al interview weight	See note
475-482 WTPQRP41	8836	Replicate 41 fina 00060.59-72146.09	al interview weight	See note
483-490 WTPQRP42	8836	Replicate 42 fina 00091.95-74129.59	al interview weight	See note
491-498 WTPQRP43	8836	Replicate 43 fina 00061.37-65177.34	al interview weight	See note
499-506 WTPQRP44	8836	Replicate 44 fina 00061.71-67062.02	al interview weight	See note
507-514 WTPQRP45	8836	Replicate 45 fina 00061.04-70353.83	al interview weight	See note
515-522 WTPQRP46	8836	Replicate 46 fina 00078.43-69832.78	al interview weight	See note
523-530 WTPQRP47	8836	Replicate 47 fina 00076.83-70545.88	al interview weight	See note
531-538 WTPQRP48	8836	Replicate 48 fina 00061.69-77285.79	al interview weight	See note

	FAY'	S BRR REPLICATE INTERVIEW WEIGHTS	
Positions SAS name	Counts	Item description and code	Notes
539-546 WTPQRP49		Replicate 49 final interview weight 00000081-072350.5	See note
547-554 WTPQRP50	8836	Replicate 50 final interview weight 000079.2-76063.31	See note
555-562 WTPQRP51	8836	Replicate 51 final interview weight 00055.85-70789.05	See note
563-570 WTPQRP52	8836	Replicate 52 final interview weight 00072.04-73233.72	See note
571-578 WTPXRP1	548 8288	Replicate 1 final exam weight 00000.00 00092.06-73019.02	See note
579-586 WTPXRP2	548 8288	Replicate 2 final exam weight 00000.00 00068.89-74736.66	See note
587-594 WTPXRP3	548 8288	Replicate 3 final exam weight 00000.00 00074.17-75143.45	See note
595-602 WTPXRP4	548 8288	Replicate 4 final exam weight 00000.00 00076.95-73311.85	See note
603-610 WTPXRP5	548 8288	Replicate 5 final exam weight 00000.00 00058.95-68498.79	See note
611-618 WTPXRP6	548 8288		See note

	FAY'S BE	RR REPLICATE MEC EXAMINATION WEIGHTS	
	Counts	Item description and code	Notes
619-626 WTPXRP7		00000.00	See note
627-634 WTPXRP8	548 8288		See note
635-642 WTPXRP9	548 8288		See note
643-650 WTPXRP10	548 8288		See note
651-658 WTPXRP11	548 8288		See note
659-666 WTPXRP12	548 8288		See note
667-674 WTPXRP13	548 8288	Replicate 13 final exam weight 00000.00 000067.9-74278.36	See note
675-682 WTPXRP14	548 8288	Replicate 14 final exam weight 00000.00 00074.55-72892.64	See note
683-690 WTPXRP15	548 8288		See note

	FAY'S BR	RR REPLICATE MEC EXAMINATION WEIGHTS	
Positions SAS name	Counts	tem description and code	Notes
691-698 WTPXRP16			See note
699-706 WTPXRP17	548 8288	Replicate 17 final exam weight 00000.00 000059.3-74787.22	See note
707-714 WTPXRP18	548 8288		See note
715-722 WTPXRP19	548 8288		See note
723-730 WTPXRP20	548 8288		See note
731-738 WTPXRP21	548 8288	Replicate 21 final exam weight 00000.00 00056.22-66263.36	See note
739-746 WTPXRP22	548 8288	Replicate 22 final exam weight 00000.00 00057.38-75301.77	See note
747-754 WTPXRP23	548 8288	Replicate 23 final exam weight 00000.00 00068.85-074047.6	See note
755-762 WTPXRP24	548 8288	Replicate 24 final exam weight 00000.00 00054.91-71326.24	See note

	FAY'S BE	RR REPLICATE MEC EXAMINATION WEIGH	GHTS
	Counts	tem description and code	Notes
763-770 WTPXRP25			See note
771-778 WTPXRP26	548 8288	Replicate 26 final exam weight 00000.00 00071.23-65998.12	See note
779-786 WTPXRP27	548 8288		See note
787-794 WTPXRP28	548 8288		See note
795-802 WTPXRP29	548 8288	Replicate 29 final exam weight 00000.00 00097.18-75075.78	See note
803-810 WTPXRP30	548 8288	Replicate 30 final exam weight 00000.00 00059.05-76089.32	See note
811-818 WTPXRP31	548 8288	Replicate 31 final exam weight 00000.00 00079.65-77239.87	See note
819-826 WTPXRP32	548 8288		See note
827-834 WTPXRP33	548 8288		See note

	FAY'S BR	RR REPLICATE MEC EXAMINATION WEIGHTS	
Positions SAS name	Counts	tem description and code	Notes
835-842 WTPXRP34			See note
843-850 WTPXRP35	548 8288	Replicate 35 final exam weight 00000.00 000100.8-74501.86	See note
851-858 WTPXRP36	548 8288		See note
859-866 WTPXRP37	548 8288		See note
867-874 WTPXRP38	548 8288		See note
875-882 WTPXRP39	548 8288		See note
883-890 WTPXRP40	548 8288	Replicate 40 final exam weight 00000.00 00057.86-73754.93	See note
891-898 WTPXRP41	548 8288	Replicate 41 final exam weight 00000.00 000061.4-71825.34	See note
899-906 WTPXRP42	548 8288	Replicate 42 final exam weight 00000.00 000094.7-72767.42	See note

	FAY'S B	RR REPLICATE MEC EXAMINATION WEIGHTS	
Positions SAS name		Item description and code	Notes
907-914 WTPXRP43	548 8288	Replicate 43 final exam weight 00000.00 00059.85-65924.96	See note
915-922 WTPXRP44	548 8288	Replicate 44 final exam weight 00000.00 00060.92-72691.83	See note
923-930 WTPXRP45	548 8288	Replicate 45 final exam weight 00000.00 00062.13-75561.19	See note
931-938 WTPXRP46	548 8288	Replicate 46 final exam weight 00000.00 00000081-072099.5	See note
939-946 WTPXRP47	548 8288	Replicate 47 final exam weight 00000.00 00077.82-72086.79	See note
947-954 WTPXRP48	548 8288	Replicate 48 final exam weight 00000.00 00057.31-74215.86	See note
955-962 WTPXRP49	548 8288	Replicate 49 final exam weight 00000.00 00082.75-75257.97	See note
963-970 WTPXRP50	548 8288	Replicate 50 final exam weight 00000.00 00082.82-75947.78	See note
971-978 WTPXRP51	548 8288	Replicate 51 final exam weight 00000.00 00054.04-74192.54	See note

FAY'S BRR REPLICATE MEC EXAMINATION WEIGHTS

Positions SAS name	Counts	and	scription code	Notes
979-986 WTPXRP52	548	Replic	cate 52 final exam weight	See note
987 NTCERT	7779	Certif 1 2		See note
988 NTRECTYP		Record 1	d type Resident: State and county of occurrence and residence are the same	
		2 Blank	Nonresident: State and/or county of occurrence and residence are different	
	1057	Blank		
989 NTRSTATR			ent status recode Resident: State and county of occurrence and residence are the same	See note
	1436	2	Intrastate nonresident: State of occurrence and residence are the same, but county is different	
	82	3	Nonresident: State of occurrence and residence are different or mother is foreign (resides outside of U.S.)	
	1057	Blank		

			NATALITY RECORD	
Positions SAS name	Counts	Item des	scription	Notes
990 NTRECWT	7562		d weight Constant as of the 1985 data year, this file contains data on a 100-percent basis from all reporting areas 50-percent reporting areas	
	1057		30-percent reporting areas	
991-992 NTPLDEL	7704 12 17 9 36	01 02 04 05 55	or facility of birth Hospital Freestanding birthing center A residence Other Nonhospital births, not otherwise specified Blank but applicable	See note
993 NTBIRATT	7306 93 313	1 2 3 4 5	dant at birth Doctor of Medicine (M.D.) Doctor of Osteopathy (D.O.) Certified Nurse Midwife (C.N.M.) Other Midwife Other Blank but applicable	See note
994 NTMETROR	6317	county 1 2	politan - nonmetropolitan y of residence recode Metropolitan county Nonmetropolitan county or foreign	See note

NATALITY RECORD

		NATALITY RECORD	
		Item description and code	Notes
995 NTMAGEFL	373 3224	Reported age of mother used flag 1 Reported age is used 2 Reported age is not used Blank	See note
996 NTMAGEIM	2 3595	Age of mother imputation flag 1 Age is imputed 2 Age is not imputed Blank	See note
997-998 NTMAGER	27	15-40 41 Forty-one years or over	
999 NTMETHNR	1690 442 4526 89	Hispanic origin of mother recode Mexican-American Other Hispanic or Latino Not Hispanic/Latino Blank but applicable Blank	
100 NTMRACIM	4 3593	±	
100 NTMRACE	5510 2076 175	Race of mother 1 White 2 Black 3 Other Blank	

NATALITY RECORD _____ Item description SAS name Counts and code ______ 1002-1003 Education of mother recode NTMEDUCR 434 01 Less than 1 year of high school 329 09 1 year of high school 397 10 2 years of high school 508 11 3 years of high school 2327 12 4 years of high school 405 13 1 year of college 450 14 2 years of college 184 15 3 years of college 479 16 4 years of college 292 17 5 or more years of college 1974 88 Blank but applicable 1057 Blank 1004 Marital status of mother imputation flag NTMSTIMP 2 1 Marital status is imputed 3595 2 Marital status is not imputed 5239 Blank 1005 Marital Scale
ST 2383 1 Married
1214 2 Unmarried Marital status of mother See note NTMMRST 1006 Place of birth of mother recode 6159 1 United States NTMPOBR 1029 2 Mexico 3 Other 8 Blank but applicable

573 18

		-	
		NATALITY RECORD	
SAS name	Counts	Item description and code	Notes
	313 148	Adequacy of care recode (Kessner index 1 Adequate 2 Intermediate 3 Inadequate 8 Blank but applicable Blank) See note
1008-100 NTNLBNLR	3133 2440 1245 527 221 98 42 20 29 24	04 05 06 07 08 Eight or more births 88 Blank but applicable	
10: NTNLBNDR	7599	Number of previous live births, now dead recode 0 None 1 One 2 Two 3 Three or more 8 Blank but applicable Blank	

NATALITY RECORD ______ Positions Item description SAS name Counts and code Notes ______ 1011-1013 Interval since last live birth See note NTISLLBR recode (months) 71 000 Zero months (plural birth) 58 001 1-11 months 3781 012-168 51 170 170 months or more 3114 555 No previous live birth 704 888 Blank but applicable 1057 Blank 1014 Number of other terminations recode NTTERMR 7745 0-5 9 6 Six or more 6 Six or more 8 Blank but applicable 25 1057 Blank 1015-1017 Interval in months since last See note other termination recode NTISLTR (interval between last other termination and birth of sample child) 010 Ten months or less 25 443 011-097 44 100 One hundred months or more 3319 555 No previous other termination

351 888 Blank but applicable

			NATALITY RECORD	
Positions			scription	
SAS name	Counts	and 	code 	Notes
1018-102	0	in mo	val between deliveries recode nths (interval in months en last delivery and this one)	See note
	31	000	Zero months (plural birth)	
	33		Ten months or less	
	1892			
	45	135	One hundred thirty-five months or more	
	1430	555	No previous pregnancy	
	751	888	Blank but applicable	
	4654	Blank		
102	1	Outco	me of last delivery	See note
NTOUTCOM	1430	0	Not applicable (no previous delivery)	
	2106	1	Last delivery was a live birth	
	498	2	Last delivery was some other termination	
	148	3	Last delivery's outcome is unknown	
	4654	Blank		
1022-102	4		pregnancy interval recode (months) rval in months between beginning	See note
WI INTI OK		date	of this pregnancy and ending date st pregnancy)	
	17		Zero (plural delivery)	
	3726			
	3092	555	No previous pregnancy	
	944		Blank but applicable	
	1057	D11-		

_____ NATALITY RECORD ______ Positions Item description SAS name Counts and code _____ 1025-1026 Live birth order recode: See note NTLBOR Number of children born alive to mother 7718 01-08 35 09 Nine or more 26 88 Blank but applicable 1057 Blank 1027-1028 Total birth order recode: Total number of live births NTTBOR and other terminations 7715 01-09 35 10 Ten or more 88 Blank but applicable 29 1057 Blank 1029-1030 Month of pregnancy prenatal care began See note 190 00 No prenatal care NTMONPRE 1126 01 1st month 2715 02 2nd month 1579 03 3rd month 845 04 4th month 489 05 5th month 314 06 6th month 208 07 7th month 110 08 8th month 09 9th month 88 Blank but applicable 09 45 158 1057 Blank Total number of prenatal visits recode 1031-1032 NTTNPVR 188 00 No prenatal visits 6432 01-30 11 32 Thirty-two or more visits

1148 88 Blank but applicable

NATALITY RECORD			
		Item description and code	Notes
103 NTFAGEFL	3319	Reported age of father used flag 1 Reported age is used 2 Reported age is not used Blank	See note
1034-103 NTFAGER	32 6352 15 1380	Age of father recode 016 Sixteen years or under 017-054 055 Fifty-five years or over 888 Blank but applicable Blank	See note
103 NTFETHNR	374 3749 1030		
103 NTFRACE	4981 1395 167	Race of father 1 White 2 Black 3 Other Blank	

NATALITY RECORD ______ Positions Item description SAS name Counts and code Notes ______ Education of father recode 1039-1040 See note NTFEDUCR 359 01 Less than one year of high school 182 09 1 year of high school 236 10 2 years of high school 336 11 3 years of high school 1908 12 4 years of high school 236 13 1 year of college 387 14 2 years of college 138 15 3 years of college 484 16 4 years of college 356 17 5 or more years of college 3157 88 Blank but applicable 1057 Blank 1041 Clinical estimate of gestation used flag See note 119 1 Clinical estimate is used NTGESTFL 3478 2 Clinical estimate is not used 5239 Blank Gestation imputation 11100 1 Gestation is imputed 6679 2 Gestation is not imputed NTGESTIM See note 1043-1045 Period of gestation recode NTGESTR (using LMP date) (weeks) 33 026 Twenty-six weeks or less 7447 027-046 54 047 Forty-seven weeks or more 245 888 Blank but applicable 1057 Blank

Sex imputation riag

IMP 3597 2 Sex is not imputed

NTSEXIMP

		NATALITY RECORD	
		Item description and code	Notes
104 NTSEX	3899 3880	Sex 1 Male 2 Female Blank	See note
104 NTCRACE	5285 2139 213 142	Race of child White Black Other Blank but applicable Blank	See note
1049-105 NTBWTR	42 7678 51	1219-4740 4750 4750 grams or more 8888 Blank but applicable	
105 NTPLUIMP	1	1 Plurality is imputed 2 Plurality is not imputed	
105 NTPLURR	7597 182	1 Single	See note

		NATALITY RECORD	
Positions SAS name	Counts	Item description and code	Notes
1055 105			Q
1055-105		One minute Apgar score recode 01 A score of 0 or 1	See note
NTOMAPSR	33		
		03	
		04	
		05	
	163		
	438		
	2038		
	2020		
		10	
	2822	88 Blank but applicable	
	1057	Blank	
1057-105	58	Five minute Apgar score recode	See note
NTFMAPSR	4	02 A score of 2 or less	
	5	03	
	9	04	
		0.5	
		06	
		07	
	394	08	
	3570		
	859		
		88 Blank but applicable Blank	
1059-106 NTCGESTR		Clinical estimate of gestation recode (weeks)	
	44	32 Thirty-two weeks or less 33-41	
		42 Forty-two weeks or more 88 Blank but applicable	
		Blank but applicable	
	5439	DTally	

_____ METHOD OF DELIVERY ______ Positions Item description SAS name Counts and code ______ 1061 Vaginal See note NTVAGINA 2667 1 The method was used 783 2 The method was not used 147 8 Blank but applicable 5239 Blank 1062 Vaginal birth after previous C-section See note 76 1 The method was used NTVBAC 3374 2 The method was not used 147 8 Blank but applicable 5239 Blank 1063 Primary C-section See note 487 1 The method was used NTPRIMAC 2963 2 The method was not used 147 8 Blank but applicable 5239 Blank Repeat C-section

EAC 296 1 The method was used

3154 2 The method was not u See note NTREPEAC The method was not used 147 8 Blank but applicable 5239 Blank Vaginal or C-section recode 1065 See note 2591 1 Vaginal (no previous C-section)
76 2 Vaginal after previous C-section
487 3 Primary C-section
296 4 Repeat C-section
147 8 Blank but applicable NTDELIVR Vaginal after previous C-section

5239 Blank

			NATALITY RECORD	
Positions SAS name	Counts	and		Notes
106 NTFORCEP	157 3293 147	2.	The method was used The method was not used Blank but applicable	See note
106 NTVACUUM	136 3314	2 8	The method was used The method was not used Blank but applicable	See note
106 NTAORHR		hemogi 1 2 8	a (Hct.<30/Hgb.<10) or lobinopathy recode Factor reported Factor not reported Blank but applicable	See note
106 NTCARDIA	8 3406 183	1 2	ac disease Factor reported Factor not reported Factor not classifiable	See note
107 NTLUNG	9 3405 183	1 2	or chronic lung disease Factor reported Factor not reported Factor not classifiable	See note
107 NTDIABET	90 3324 183		Factor reported Factor not reported Factor not classifiable	See note

NATALITY RECORD

Positions Item description

Positions SAS name		Item description and code	Notes
107 NTHERPES	24 2941 78 554	Genital herpes 1 Factor reported 2 Factor not reported 3 Factor not classifiable 8 Blank but applicable Blank	See note
107 NTHYDRA	17 3274	Factor reported Factor not reported Factor not classifiable Blank but applicable	See note
107 NTCHYPER	32 3382 183	Hypertension, chronic 1 Factor reported 2 Factor not reported 3 Factor not classifiable Blank	See note
107 NTPHYPER	105 3309 183 5239	2 Factor not reported 3 Factor not classifiable	See note
107 NTECLAMP	11 3403	Factor not reported Factor not classifiable	See note

		NATALITY RECORD			
Positions Item description					
SAS name	Counts 	and code	Notes 		
107'	7	Incompetent cervix	See note		
NTINCERV		1 Factor reported	200 11000		
	3286	2 Factor not reported			
	177	3 Factor not classifiable			
	129	8 Blank but applicable			
	5239	Blank			
1078	8	Previous infant 4000+ grams	See note		
NTPR4000	49				
	3242				
	177				
	129	8 Blank but applicable			
	5239	Blank			
1079	9	Previous preterm or small-for-gestation	See note		
NTPRTERM		age infant			
	42	1 Factor reported			
	3249				
		3 Factor not classifiable			
		8 Blank but applicable			
	5239	Blank			
108	0	Renal disease	See note		
NTRENAL	10				
	3404	2 Factor not reported			
		3 Factor not classifiable			
	5239	Blank			
108	1	Rh sensitization	See note		
NTRH	15				
	3396				
	185	3 Factor not classifiable			

1 8 Blank but applicable 5239 Blank

		NATALITY RECORD	
Positions SAS name		Item description and code	Notes
108	32	Uterine bleeding	See note
NTUTERIN	3064 84 425	<pre>1 Factor reported 2 Factor not reported 3 Factor not classifiable 8 Blank but applicable Blank</pre>	
10: NTOTHRMR	312 3102 183	Other medical risk factors 1 Factor reported 2 Factor not reported 3 Factor not classifiable Blank	See note
10: NTTOBACR	450 1975 1172		See note
1085-108 NTCIGARR	1975 425 4	Average number of cigarettes per day recode 00 None 01-30 40 Forty cigarettes or more 88 Blank but applicable Blank	See note
10: NTALCOHR	77 2361 1159		See note

		NATALITY RECORD		
		NATABITI RECORD		
Positions		Item description		
SAS name	Counts	and code	Note	es
1088	3	Average number of drinks per week recod	le See	note
NTDRINKR	2361	0 None		
	42	4		
	4	5 Five or more drinks per week		
	1190	8 Blank but applicable		
	5239	Blank		
1089-1090)	Weight gain recode (pounds)	See	note
NTWTGNR	44	04 Four pounds or less		
	2370	05-59		
	62	60 Sixty pounds or more		
	1121	88 Blank but applicable		
	5239	Blank		

NHANES III Detail Natality Record			
		OBSTETRIC PROCEDURES	
Positions	Counts	Item description and code	Notes
109	1	Amniocentesis	See note
NTAMNIO		1 Procedure reported	200 11000
	146	2 Procedure not reported3 Procedure not classifiable	
		Blank	
109	2	Electronic fetal monitoring	See note
NTMONITO	2417	1 Procedure reported	
	1034	2 Procedure not reported	
	146	<pre>3 Procedure not classifiable</pre>	
	5239	Blank	
109	3	Induction of labor	See note
NTINDUCT	309	<u> </u>	
	3142	<pre>2 Procedure not reported</pre>	
	146	<pre>3 Procedure not classifiable</pre>	
	5239	Blank	
109	4	Stimulation of labor	See note
NTSTIMUL	369		
	3082	<pre>2 Procedure not reported</pre>	
	146	<pre>3 Procedure not classifiable</pre>	
	5239	Blank	
109	5	Tocolysis	See note
NTTOCOL	64	1 Procedure reported	
	3387		
	146	<pre>3 Procedure not classifiable</pre>	
	5239	Blank	
109		Ultrasound	See note
NTULTRAS	1683	1 Procedure reported	
	1580	2 Procedure not reported	
	140	3 Procedure not classifiable	
	194	8 Blank but applicable	
	5239	Blank	

NATALITY RECORD						
Positions SAS name	Counts		cription code	Notes		
109 NTOTHROB	7 131 3320 146 5239	1	obstetric procedures Procedure reported Procedure not reporte Procedure not classif			

	COMPI	LICATIONS OF LABOR AND/OR DELIVERY	
Positions SAS name (Item description and code	Notes
1098 NTFEBRIL	46 3380 171		See note
1099 NTMECONI	216 3209 171 1 5239	Meconium, moderate/heavy Complication reported Complication not reported Complication not classifiable Blank but applicable Blank	See note
1100 NTRUPTUR	131 3295 171 5239	2 Complication not reported	See note
1101 NTABRUPT	14 3412	Abruptio placenta Complication reported Complication not reported Complication not classifiable Blank	See note
1102 NTREPLAC	7 3419 171 5239	Placenta previa Complication reported Complication not reported Complication not classifiable Blank	See note

		NATALITY RECORD	
Positions SAS name	Counts	Item description and code	Notes
110 NTEXCBLD	15 3411 171 5239	1 Complication reported 2 Complication not reported	See note
11(NTSEIZUR	3426 171 5239		See note
11(NTPRECIP	05 64 3362 171 5239		See note
110 NTPRLONG	35 3391 171 5239	Prolonged labor (>20 hours) Complication reported Complication not reported Complication not classifiable Blank	See note
110 NTDYSFUN	105 3321 171 5239	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	See note
110 NTBREECH	117 3309 171 5239	Breech/malpresentation Complication reported Complication not reported Complication not classifiable Blank	See note

_____ NATALITY RECORD ______ Positions Item description SAS name Counts and code ______ 1109 Cephalopelvic disproportion See note NTCEPHAL 118 1 Complication reported 2851 2 Complication not reported 74 3 Complication not classifiable 554 8 Blank but applicable 5239 Blank 1110 Cord prolapse
14 1 Complication reported See note NTCORD 3353 2 Complication not reported 171 3 Complication not classifiable 59 8 Blank but applicable 5239 Blank 1111 Anesthetic complications See note 4 1 Complication reported NTANESTH 3091 2 Complication not reported 77 3 Complication not classifiable 425 8 Blank but applicable 5239 Blank 1112 Fetal distress See note NTDISTRE 140 1 Complication reported 2954 2 Complication not reported 3 Complication not classifiable 8 Blank but applicable 77 426 5239 Blank Other complications of labor and/or See note 1113

delivery

3134 2

5239 Blank

292 1 Complication reported

Complication not reported

171 3 Complication not classifiable

NTOTHRLB

		NATALITY RECORD	
Positions SAS name	Counts	Item description and code	Notes
111 NTNANEMI	4 6 3393 198	Anemia (Hct.<39/Hgb.<13) Condition reported Condition not reported Condition not classifiable Blank	See note
111 NTINJURY	3 3029 101 464	Birth injury 1 Condition reported 2 Condition not reported 3 Condition not classifiable 8 Blank but applicable Blank	See note
111 NTALCOSY	3269 197 131	Fetal alcohol syndrome Condition not reported Condition not classifiable Blank but applicable Blank	See note
111 NTHYALIN	15 3384 198	Hyaline membrane disease 1 Condition reported 2 Condition not reported 3 Condition not classifiable Blank	See note
111 NTMECONS	9 3262 197 129		See note

NATALITY RECORD					
Positions SAS name	Counts	Item des	cription	Note	es
111 NTVENL30	31 3114 193 259	minute: 1	ed ventilation, less than 30 s Condition reported Condition not reported Condition not classifiable Blank but applicable	See	note
112 NTVEN30M	14 3131 193	1 2 3 3 8 1	ed ventilation, 30 minutes or more Condition reported Condition not reported Condition not classifiable Blank but applicable	See	note
112 NTOTHABR	112 3287	recode 1 (2 (8 (abnormal conditions of the newborn Condition reported Condition not reported Condition not classifiable	See	note
112 NTCIRCUL	2 7270 461 44 1057	1 2 2 3 3 3 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	circulatory/respiratory anomalies Anomaly reported Anomaly not reported Anomaly not classifiable Blank but applicable	See	note
112 NTCLUBFT	45 7273 461	2	oot Anomaly reported Anomaly not reported Anomaly not classifiable	See	note

						_
		I	NATALITY RECORD			
Positions SAS name			cription code		Notes	_
						_
1124 NTMUSCUL	_	anoma	musculoskeletal/integument lies Anomaly reported	al	See not	е
	7268 461 44	2	Anomaly not reported Anomaly not classifiable Blank but applicable			
1125 NTCONMJR	5 6 7268 505	Major 1 2	congenital anomalies recod Anomaly reported Anomaly not reported Blank but applicable	e	See not	е
1126 NTCONMNR	33 7241 505	1 2	congenital anomalies recod Anomaly reported Anomaly not reported Blank but applicable	е	See not	е

		REPORTING FLAG VARIABLES	
Positions		Item description	
SAS name	Counts	and code	Notes
112'	7	Marital status (by state)	
NTFLMSST	80	O The item is not reported	
		1 The item is reported	
		Blank	
110	_		
112	-	Education of parents (by state)	
NTFLEPST		O The item is not reported	
		1 The item is reported	
	4656	Blank	
1129	9	Education of mother	
NTFLEDM	147	O The item is not reported	
	3450	1 The item is reported or partially	
		reported	
	5239	Blank	
112	1	Education of father	
113			
NTFLEDF		O The item is not reported	
	3450	1 The item is reported or partially reported	
	5230	Blank	
	3237	DIGIIK	
113		Date of last menses (by state)	
NTFLNMST	34	O The item is not reported	
	4146	1 The item is reported	
		Blank	
113:	2	Date of last live birth (by state)	
NTFLLBST		0 The item is not reported	
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3510	1 The item is reported	
	2210		

4656 Blank

NATALITY RECORD						
		Item description and code	Notes			
113	3	Date of last other termination				
NTFLLTST		(by state)				
	670	O The item is not reported				
	3510	1 The item is reported				
	4656	Blank				
113	4	Number of prenatal visits (by state)				
NTFLPVST	984	O The item is not reported				
		1 The item is reported				
	4656					
113	5	One minute Apgar score (by state)				
NTFL1APS	2777	0 The item is not reported				
		1 The item is reported				
	1059					
113	6	Five minute Apgar score (by state)				
NTFL5APS	~	0 The item is not reported				
NITHOAFS		1 The item is reported				
	1059	-				
112	7					
113	-	Clinical estimate of gestation				
NTFLGEST						
	2886	1 The item is reported or partially reported				
	5239					
113	8	Tobacco use				
NTFLTOBU	1032	O The item is not reported				
	2565	1 The item is reported or partially				
		reported				

5239 Blank

NATALITY RECORD						
Positions SAS name			cription code	Notes		
1139 NTFLALCU	1029 2568		l use The item is not reported The item is reported or partially reported	-		
1140 NTFLWTGN	711 2886		gain The item is not reported The item is reported or partially reported	•		
1141 NTFLCONG	279 3318	0	ital anomalies The item is not reported The item is reported or partially reported	,		

GENERAL NOTES

Many variables on this data file were recoded to protect confidentiality. The minimum or maximum categories were collapsed in order to prevent potential identification of individuals.

A few variables from the birth certificates, age of mother or father, race, Hispanic origin, marital status of mother, gestation period, and plurality were imputed.

Variables beginning with the letters NTFL... are reporting flags which indicate whether or not the specified item is included on the birth certificates of the state of residence OR that the SMSA of residence is composed entirely of state(s)

which report the specified item.

Variables that contain a blank or missing value on a record indicate that the variable did not appear on that state's birth certificates. Variables that contain a code of 8, 88, 888, etc. where the documentation says the code stands for "blank but applicable" indicate that the item to be completed did appear on the state's standard birth certificate but there was no codable value on the birth record for this particular child.

Analysts should use caution when using NTOUTCOM (outcome of previous delivery), interval since last delivery (NTINDLVR), interval since last pregnancy (NTINTPGR), and interval since last other termination (NTISLTR). These variables

were not computed if the month or year of last other termination was blank even when it is clear that the mother never had any fetal deaths, miscarriages, or abortions. For example, the total birth order may be stated as 2, the number of previous live births may be stated as 1, and the month and year of last live birth may be given. It seems obvious that the mother had no other terminations, but if the date of last other termination was blank on the birth certificate file, the NTOUTCOM variable was not computed (it is blank) and the other intervals that involve the date of last other termination (NTINDLVR, NTINTPGR, and NTISLTR) are blank.

DMPFSEQ: Family sequence number

This variable can be used to determine all family members who participated in the

survey. Sample persons who have identical family sequence numbers (i.e., match on all 5 digits) are members of the same family.

DMPSTAT: Examination/interview status

This variable identifies the interview or examination status of all persons selected for the NHANES III sample. Interviewed persons completed preselected questions in specific sections of the Household Adult or Youth Questionnaires. Mobile examination center (MEC) examined persons were interviewed and successfully completed at least one examination component in the MEC. Home-examined persons were interviewed and successfully completed at least one home examination component. The home examination was an option for frail older adults, infants 2-11 months of age, and other adults who were unable to come to the MEC.

DMARETHN: Race-ethnicity

This variable, based on the NHANES III survey design, was derived from many sources of data and is based on reported race and ethnicity. The "Other" category includes all Hispanics, regardless of race, who were not Mexican-American and also includes all non-Hispanics from racial groups other than white or black.

DMARACER: Race

This variable was obtained from two primary sources: the Screener and the Family Questionnaire. Prior to the selection of the sample, race (Black, White, Other) was self-reported or reported by proxy in the Screener Questionnaire. During the

administration of the Family Questionnaire, race was self-reported or reported by

the respondent of the Family Questionnaire from five categories (Aleut, Eskimo, American Indian; Asian or Pacific Islander; Black; White; Other). Responses from

the two sources were adjudicated, as necessary, to create a three level variable (Black, White, Other).

DMAETHNR: Ethnicity

This variable was obtained from two primary sources: the Screener and the Family Questionnaire. As part of both interviews, hand cards were used to determine Mexican/Mexican-American or Other Latin American/ Spanish ancestry or national origin. Responses of non-Hispanic ancestry or national origin were categorized as "Other." Responses from the two interviews were adjudicated, as necessary, and this three level variable was created.

HSAGEIR: Age at interview (Screener)

Age is calculated using the birth date which is obtained from the Screener Questionnaire. The variable HSAGEU provides the age unit (months or years) for HSAGEIR.

HSAITMOR: Age at interview in months (Screener)

Age of the sample child in months is calculated by computing number of months between the Screener Questionnaire date and the child's date of birth. This variable is created for analyses where exact age at the interview is needed. HSAITMOR differs slightly from the age in years (HSAGEIR), the variable most often used for analyses.

HSFSIZER: Family Size

Family size represents the total number of related persons living in a household (single dwelling unit). All household members are rostered by family during the Screener interview. Household members related to the family reference person (knowledgeable household member 17 years or older who owned or rented the dwelling unit) by blood or marriage are considered part of the family. Adopted children, foster- and god-children are also included, if they were living in the dwelling unit. However, family members who are away at college or living independently are not included. Other household members who were unrelated to the reference person are considered members of separate families. See note for Household Size (HSHSIZER).

HSHSIZER: Household Size

Household size represents the total number of persons living in a single dwelling

unit, both related and unrelated. All permanent household members are rostered according to their family as part the Screener interview. This is done in order to obtain a complete list of all persons living or staying in the dwelling unit, and to distinguish household and family members. See note for Family Size (HFHSIZER).

DMPMETRO: Urbanization classification based on USDA Rural-Urban continuum codes

These classifications are based on the USDA Rural-Urban codes (Butler and Beale, 1993) that describe metropolitan and non-metropolitan counties by degree of urbanization and nearness to metropolitan areas. The USDA codes are recoded into

two categories to prevent identification of counties that were sampled in the survey.

DMPCREGN: Census region

The United States was divided into four broad geographic regions as defined by the Bureau of Census. Because all states were not included in the selected sample, regional estimates may not be representative for a given region.

DMPPIR: Poverty income ratio (or poverty index)
The poverty income ratio (PIR) is computed as a ratio of two components. The numerator is the midpoint of the observed family income category in the Family Questionnaire variable: HFF19R. The denominator is the poverty threshold based on the family composition, the age of family reference person, and the calendar year in which the family was interviewed.

Poverty threshold values (in dollars) are produced annually by the Census Bureau (Series P-60). These threshold values are based on calendar years and adjusted for changes caused by inflation between calendar years. Reports for each of the calendar years in the survey (1988-94) were used in the calculation of PIR. For the years 1991 and 1994, data from preliminary reports were used. The poverty income ratio allows income data to be analyzed in a comparable manner across the six years of the survey and with previous NHANES.

Persons who reported having had no income are assigned a zero value for PIR. A substantial proportion of persons refused to report their income or income category during the Family Questionnaire. Due to the income nonresponse the potential for bias in PIR may be high. Users are cautioned to examine potential nonresponse bias for PIR and other income variables.

Survey Design Data

SDPPHASE: Phase of NHANES III survey

For operational purposes, 81 primary sampling units are divided into 89 survey locations (or stands) and randomly allocated to two three-year phases. Phase 1 data were collected from October 1988 through October 1991 and Phase 2 data were collected from October 1991 through October 1994.

SDPPSU6, SDPPSU1, SDPPSU2 and SDPSTRA6, SDPSTRA1, SDPSTRA2: Pseudo PSU pair

codes and pseudo strata codes

Because NHANES III is based upon a complex sample design, the assumptions of many

statistical tests and routinely available statistical programs are not met. For this reason, when estimates of the variances of statistics are computed, the technique of estimation must be based upon complex sampling theory. In order to provide users with the capability of estimating the complex sample variances, 49 pseudo strata and a pair of Primary Sampling Unit (PSU) codes per stratum were designed.

A software package, "SUDAAN- Software for the Statistical Analysis of Correlated

Data" (Shah, 1995), was developed by the Research Triangle Institute to analyze complex sample design data like NHANES. SUDAAN uses strata and PSU codes to conduct analysis with two PSU per stratum design. Therefore, definitions of pseudo strata and PSU provided in this data file should be used to compute complex sample variances in analyses. Other software available for estimation of

complex sample variance may also be used. For further discussion of methods of variance estimation in NHANES III, see additional information on this subject in Weighting and Estimation Methodology (U.S. DHHS, 1996) and NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996).

Sampling Weights

WTPFQX6, WTPFQX1, WTPFQX2: Total NHANES III and phase-specific final interview weights

These sampling weights are used only for items collected during the household interviews. To compute final interview weights, final basic weights were first adjusted for nonresponse to household interview, then post-stratified to the unpublished Current Population Survey 1990 (Phase 1) and 1993 (Phase 2) population control estimates of the U.S. population adjusted for undercount. For details, see Weighting and Estimation Methodology (U.S. DHHS, 1996) and NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996).

WTPFEX6, WTPFEX1, WTPFEX2: Total NHANES III and phase-specific final MEC examination weights

These MEC sampling weights are used for analysis of measurements or interview items collected in the MEC. Persons who were not examined in the MEC have a sampling weight of zero and should be excluded from analyses. To compute final MEC examination weights, final interview weights were first adjusted for nonresponse to MEC examinations, then post-stratified to the unpublished Current Population Survey 1990 (Phase 1) and 1993 (Phase 2) population control estimates of the U.S. population adjusted for undercount. For details, see Weighting and Estimation Methodology (U.S. DHHS, 1996) and NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996).

WTPFHX6, WTPFHX1, WTPFHX2: Total NHANES III and phase-specific MEC+home examination weights

These MEC+home sampling weights are used for analysis of the examination items where measurements or interview items were collected in the MEC and home. Persons who were not examined in the MEC or home have a sampling weight of zero and should be excluded from analyses. To compute final MEC+home examination

weights, final interview weights were first adjusted for non-response to MEC and home examinations, then post-stratified to unpublished Current Population Survey 1990 (Phase 1) and 1993 (Phase 2) population control estimates of the U.S. population adjusted for undercount. No separate sampling weights were computed for home examinees. For details, see Weighting and Estimation Methodology (U.S. DHHS, 1996) and NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996).

WTPFALG6, WTPFALG1, WTPFALG2: Total NHANES III and phase-specific allergy examination subsample weights

These subsample weights are for analysis of allergy measurements. Allergy skin reactivity tests were administered to all MEC-examined persons aged 6-19 years and a random half-sample of the adults aged 20-59 years. Eligible MEC-examined persons who did not complete the allergy tests have a sampling weight of zero and

should be excluded from the analyses. Final MEC examination weights were first adjusted for selection of the half-sample among adults (20-59 years), and post-stratified to the unpublished Current Population Survey 1990 (Phase 1) and 1993 (Phase 2) population control estimates of the U.S. population adjusted for undercount in the final step. For details, see Weighting and Estimation Methodology (U.S. DHHS, 1996) and NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996).

WTPQRP1--WTPQRP52: Fay's BRR Replicate interview sample weights

To allow for alternative methods to estimate variance, 52 replicate weights were computed using repeated sampling method where WESVAR or other software that use repeated samples can be used for estimating variance. Fay's method (see Fay, 1990; Judkins, 1990) was used to draw half samples and adjust sampling weights in

each of the random half samples. Sampling weights in one half sample were multiplied by the factor k=1.7 and in the other half sample by k=0.3 using the Fay's method. After this adjustment, sampling weights were further adjusted for non-response and post-stratified using the same procedure as the final full sample interview weights. These weights should be used only for estimating variance of items from the household adult and youth interviews. For details, see Weighting and Estimation Methodology (U.S. DHHS, 1996) and NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996).

WTPXRP1--WTPXRP52: Fay's BRR Replicate weights for MEC-examined sample

To allow for alternative methods to estimate variance, 52 replicate weights were computed using repeated sampling method where WESVAR or other BRR type software can be used to estimate variance. Fay's method (see Fay, 1990; Judkins, 1990) was used to draw half samples and adjust sampling weights in each of the random half samples. Sampling weights in one half sample were multiplied by the factor k=1.7 and in the other half sample by k=0.3 using Fay's method. After this adjustment, weights were further adjusted for nonresponse and were post-stratified using the same procedure as the full sample final weights. These

weights should be used only for estimating variance of outcome measurements or interview items from the MEC Examination. For details, see additional information on this subject in Weighting and Estimation Methodology U.S. DHHS, 1996) and NHANES III Analytic and Reporting Guidelines (U.S. DHHS, 1996).

Data Based on Birth Certificates

FOR IMPORTANT ADDITIONAL INFORMATION AND DEFINITIONS REGARDING THE BIRTH CERTIFICATE VARIABLES WHICH ALL BEGIN WITH THE LETTERS "NT", PLEASE BE SURE TO READ THE SECTION ENTITLED: CLASSIFICATION IN "Vital Statistics Classification and Coding Instructions for Live Birth Records, 1994," NCHS Instruction Manual, Part 3a.

The general rules used to classify geographic and personal items for live births are set forth in "Vital Statistics Classification and Coding Instructions for Live Birth Records, 1994," NCHS Instruction Manual, Part 3a. The classification of certain important items is discussed in the following pages.

The rules followed in the classification of geographic areas for live births are contained in the instruction manual mentioned previously. The geographic code structure is in another manual, "Vital Records Geographic Classification, 1982," NCHS Instruction Manual, Part 8.

NTCERT: Certificate availability

If a matching birth certificate could not be obtained for any reason, this variable was coded 2. Reasons for failure to obtain a matching certificate included inability to obtain parental consent, state unable to locate matching certificate, incorrect last name, missing or incorrect mother's maiden name, adopted children, incorrect birth date, wrong state or county listed on consent form, etc.

NTRSTATR: Resident status recode

Code 3, "Nonresident: State of occurrence and residence are different or mother is foreign," includes three cases where the mother resides outside of the United States, according to the birth certificate.

NTPLDEL and NTBIRATT: Place or facility of birth and attendant

The 1989 revision of the U.S. Standard Certificate of Live Birth includes separate categories for freestanding birthing centers, the mother's residence, and clinic or doctor's office as the place of birth. In previous years, place of

birth was classified simply as either "In hospital" or "Not in hospital."

occurring in hospitals, institutions, clinics, centers, or homes were included in

the category "In hospital." In this context the word "homes" does not refer to the mother's residence but to an institution, such as a home for unmarried women.

Birthing centers were included in either category, depending on each State's assessment of the facility. Beginning in 1989, births occurring in clinics and in birthing centers not attached to a hospital are classified as "Not in hospital."

The "Not in hospital" category includes births for which no information is reported on place of birth. Babies born on the way to or on arrival at the hospital are classified as having been born in the hospital. This may account for some of the hospital births not delivered by physicians or midwives.

NTMETROR: Metropolitan-nonmetropolitan county of residence recode

Metropolitan statistical areas are those established by the U.S. Office of Management and Budget as of April 1, 1990, and used by the U.S. Bureau of the Census (U.S. Bureau of the Census, 1991) except in the New England States.

Except in the New England States, an MSA has either a city with a population of at least 50,000, or a Bureau of the Census urbanized area of at least 50,000 and a total MSA population of at least 100,000.

In the New England States, the U.S. Office of Management and Budget uses towns and cities rather than counties as geographic components of MSAs. NCHS cannot, however, use this classification for these States because its data are not coded to identify all towns. Instead, the New England County Metropolitan Areas (NECMAs) are used. These areas are established by the U.S. Office of Management and Budget (U.S. Office of Management and Budget, 1975) and are made up of county units.

Independent cities and counties included in MSAs or NECMAs are included in data for metropolitan counties; all other counties are classified as nonmetropolitan.

Code 2, "Nonmetropolitan county or foreign", includes three cases where the mother resides outside of the United States, according to the birth certificate.

NTMAGEFL: Reported age of mother used flag

This variable indicates whether the mother's age is derived from the mother's date of birth or from her age in years.

Beginning in 1989 an item on the birth certificate asks for "Date of Birth." In previous years, "Age (at time of this birth)" was requested. Not all States have

revised this item, and therefore the age of mother either is derived from the reported month and year of birth or coded as stated on the certificate. The age of mother is edited for upper and lower limits. When the age of mother is computed to be under 10 years or 50 years or over, it is considered not stated and is assigned as described below.

NTMAGEIM: Age of mother imputation flag

Not stated date of birth of mother -- Beginning in 1964 birth records with date of birth of mother and/or age of mother not stated have had age imputed according

to the age of mother from the previous birth record of the same race and total-birth order (total of fetal deaths and live births). (See "Vital Statistics

Computer Edits for Natality Data, " NCHS Instruction Manual, Part 12, page 9.)

NTMEDUCR: Education of mother recode

The educational attainment of either parent is defined as "the number of years of

school completed." Only those years completed in "regular" schools are counted, that is, a formal educational system of public schools or the equivalent in accredited private or parochial schools. Business or trade schools, such as beauty and barber schools, are not considered "regular" schools for the purposes

of this item. No attempt has been made to convert years of school completed in foreign school systems, ungraded school systems, and so forth, to equivalent grades in the American school system. Such entries are included in the category "Not stated."

Persons who have completed only a partial year in high school or college are tabulated as having completed the highest preceding grade. For those certificates on which a specific degree is stated, years of school completed is coded to the level at which the degree is most commonly attained; for example, persons reporting B.A., A.B., or B.S. degrees are considered to have completed 16

years of school.

Education not stated -- The category "Not stated" includes all records in reporting areas for which there is no information on years of school completed as

well as all records for which the information provided is not compatible with coding specifications.

NTMMRST: Marital status

Beginning in 1980, a birth in a nonreporting State is classified as occurring to a married woman if the parents' surnames are the same, or if the child's and father's surnames are the same and the mother's current surname cannot be obtained from the informant item of the birth certificate. A birth is classified

as occurring to an unmarried woman if the father's name is missing, if the parents' surnames are different, or if the father's and child's surnames are different and the mother's current surname is missing.

When births to unmarried women are reported as second or higher-order births, it is not known whether the mother was married or unmarried when the previous deliveries occurred, because her marital status at the time of these earlier births is not available from the birth record.

NTADEQUA: Adequacy of care recode (Kessner index)

This recode is based on a modified Kessner criterion. Month Prenatal Care Began,

Number of Prenatal Visits, and Gestation are the items used to generate this recode.

NTISLLBR: Interval since last live birth recode

The interval since the last live birth is the difference in months between the date of last live birth and the date of present birth. For an interval to be computed, both the month and year of the last live birth must be valid. This interval is computed only for events to mothers who have had at least one previous live birth.

Zero interval - An interval of zero months since the last live birth indicates the second born of a set of twins, the second or third born of a set of triplets,

and so forth.

NTISLTR: Interval since last other termination recode

This number is the difference in months between the date of the last "other termination" (non-live birth prior to the NHANES III sample child) and the date of the NHANES III child's birth. The interval is computed only if month and year

of last other termination are valid. The interval is computed only if the mother

has had a previous pregnancy that terminated in a non-live birth.

NTINDLVR: Interval between deliveries recode

This variable is the number of months between the delivery just prior to that of the sample child and the date of birth of the sample child. It is calculated by subtracting the date of the previous delivery (prior to the NHANES III sample child) from the date of the NHANES III child's birth. An interval of zero indicates that the sample child is the second or higher order child of a multiple

pregnancy. The interval is computed only if both the month and year of the previous delivery are valid. The date of previous delivery depends on the presence of both a valid date of last live birth and a valid date of last other termination. The interval is calculated only for cases where the mother had a delivery prior to that of the sample child.

NTOUTCOM: Outcome of last delivery

This variable refers to the delivery immediately prior to the birth of the sample

child. NTOUTCOM was calculated only if both month and year of last live birth and last other termination were valid. If the sample child is the second or higher order born of a multiple pregnancy, NTOUTCOM, if present, reflects the outcome of the delivery just prior to the sample child, i.e., the older twin, triplet, etc.

NTINTPGR: Interval since last pregnancy recode

This variable represents the interval in months between the end of the last pregnancy and the beginning of the pregnancy with the sample child. The variable

was computed using the date of last menstrual period (LMP), the date of last live

birth, and the date of last other termination. NTINTPGR was not calculated if the month or year of LMP, of last live birth and last other termination are not all valid. Since the date of LMP is prior to the date of last live birth or other termination in a multiple delivery where the sample child is not the first born of the multiples, NTINTPGR is 0.

NTLBOR: Live birth order recode

Live-birth order indicates what number the NHANES III sample child represents; for example, a baby born to a mother who has had two previous live births (even if one or both are not now living) has a live-birth order of three. Live-birth order is determined from two items on the birth certificate, "Live births now living" and "Live births now dead."

NTMONPRE: Month of pregnancy prenatal care began

For those records in which the name of the month is entered for this item instead

of first, second, third, and so forth, the month of pregnancy in which prenatal care began is determined from the month named and the month last normal menses began. For these births, if the item "Date last normal menses began" is not stated, the month of pregnancy in which prenatal care began is tabulated as not stated.

NTFAGEFL: Reported age of father used flag

A code of 1 indicates that the father's age as reported in years on the certificate was used rather than the father's date of birth, which was not on the certificate.

NTFAGER: Age of father recode

Age of father is derived from the reported date of birth or coded as stated on the birth certificate. If the age is under 10 years, it is considered not stated

and grouped with those cases for which age is not stated on the certificate.

NTFEDUCR: Education of father recode

The educational attainment of either parent is defined as "the number of years of

school completed." Only those years completed in "regular" schools are counted, that is, a formal educational system of public schools or the equivalent in accredited private or parochial schools. Business or trade schools, such as beauty and barber schools, are not considered "regular" schools for the purposes of this item. No attempt has been made to convert years of school completed in foreign school systems, ungraded school systems, and so forth, to equivalent grades in the American school system. Such entries are included in the category "Not stated."

Persons who have completed only a partial year in high school or college are tabulated as having completed the highest preceding grade. For those certificates on which a specific degree is stated, years of school completed is coded to the level at which the degree is most commonly attained; for example, persons reporting B.A., A.B., or B.S. degrees are considered to have completed 16 years of school.

Education not stated--The category "Not stated" includes all records in reporting

areas for which there is no information on years of school completed as well as all records for which the information provided is not compatible with coding specifications.

NTGESTFL: Clinical estimate of gestation used flag; and NTGESTR: Period of gestation recode

The period of gestation is defined as beginning with the first day of the last normal menstrual period (LMP) and ending with the day of the birth. The LMP is used as the initial date because it can be more accurately determined than the date of conception, which usually occurs 2 weeks after the LMP.

Births occurring before 37 completed weeks of gestation are considered to be "preterm" or "premature" for purposes of classification. At 37-41 weeks gestation, births are considered to be "term," and at 42 completed weeks and

over, "postterm." These distinctions are according to the ICD-9 definitions.

The 1989 revision of the U.S. Standard Certificate of Live Birth includes a new item, "clinical estimate of gestation," that is being compared with length of gestation computed from the LMP date when the latter appears to be inconsistent with birth weight. This is done for normal-weight births of apparently short gestations and very low-birth weight births reported to be full term. The clinical estimate also was used if the date of the LMP was not reported. In cases where the reported birth weight was inconsistent with both the LMP-computed

gestation and the clinical estimate of gestation, the LMP-computed gestation was used and birth weight was reclassified as "not stated." These changes result in only a very small discontinuity in the data. For further information on the use of the clinical estimate of gestation see "Computer Edits for Natality Data, Effective 1989," NCHS Instruction Manual, Part 12, pages 34-36.

Beginning in 1981, weeks of gestation have been imputed for records with missing day of LMP when there is a valid month and year. Each such record is assigned the gestational period in weeks of the preceding record that has a complete LMP date with the same computed months of gestation and the same 500-gram birth weight interval. The effect of the imputation procedure is to increase slightly the proportion of preterm births and to lower the proportion of births at 39, 40, 41, and 42 weeks of gestation. A more complete discussion of this procedure and its implications is presented in a previous report (Taffel S, Johnson D, Heuser R, 1982).

Because of postconception bleeding or menstrual irregularities, the presumed date

of LMP may be in error. In these instances the computed gestational period may be longer or shorter than the true gestational period, but the extent of such errors is unknown.

NTSEX and NTCRACE: Sex of child and Race of child

These items may differ from the values recorded in NHANES III for this child. The NTSEX and NTCRACE variables came from the birth certificate.

NTPLURR: Plurality recode

Plurality refers to a multiple pregnancy, i.e., twins, triplets, etc. If the child on the certificate was part of a multiple pregnancy, this variable will reflect that status regardless of the birth order within the multiples. Even if the other twin, triplet, etc. was a fetal death, the plurality variable will still reflect the multiple pregnancy.

NTOMAPSR and NTFMAPSR: One minute and Five minute Apgar score recodes

One- and 5-minute Apgar scores were added to the U.S. Standard Certificate of Live Birth in 1978 to evaluate the condition of the newborn infant at 1 and 5 minutes after birth. The Apgar score is a useful measure of the need for resuscitation and a predictor of the infant's chances of surviving the first year

of life. It is a summary measure of the infant's condition based on heart rate, respiratory effort, muscle tone, reflex irritability, and color. Each of these factors is given a score of 0, 1, or 2; the sum of these 5 values is the Apgar score, which ranges from 0 to 10. A score of 10 is optimal, and a low score raises some doubts about the survival and subsequent health of the infant.

NTVAGINA, NTVBAC, NTPRIMAC, NTREPEAC, NTDELIVR, NTFORCEP, NTVACUUM:

Methods of delivery - Vaginal, Vaginal birth after previous C-section, Primary C-section, Repeat C-section, Vaginal or C-section recode, Forceps, and Vacuum.

The birth certificate contains a check box item on method of delivery. The choices include vaginal delivery, with the additional options of forceps, vacuum,

and vaginal birth after previous cesarean section (VBAC), as well as a choice of primary or repeat cesarean. When only forceps, vacuum, or VBAC is checked, a vaginal birth is assumed.

NTAORHR, NTCARDIA, NTLUNG, NTDIABET, NTHERPES, NTHYDRA, NTCHYPER, NTPHYPER, NTECLAMP, NTINCERV, NTPR4000, NTPRTERM, NTRENAL, NTRH, NTUTERIN, NTOTHRMR:

Medical risk factors for this pregnancy - Anemia or hemoglobinopathy recode (also

see separate note below for NTAORHR), Cardiac disease, Acute or chronic lung disease, Diabetes, Genital herpes, Hydramnios/Olighydramnios, Chronic hypertension, Pregnancy-associated hypertension, Eclampsia, Incompetent cervix, Previous infant 4000+ grams, Previous infant preterm or small for gestational age, Renal disease, RH sensitization, Uterine bleeding, or Other medical risk factors.

The birth certificate format allows for the designation of more than one risk factor and includes a choice of "None." Accordingly, if the item is not completed, it is classified as "Not stated."

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the Association for Vital Records and Health Statistics (Brockert JE, Stockbauer JW, Senner JW, et al, 1990).

Anemia--Hemoglobin level of less than 10.0~g/dL during pregnancy or a hematocrit of less than 30~percent during pregnancy.

Cardiac disease -- Disease of the heart.

Acute or chronic lung disease -- Disease of the lungs during pregnancy.

Diabetes--Metabolic disorder characterized by excessive discharge of urine and persistent thirst; includes juvenile onset, adult onset, and gestational diabetes during pregnancy.

Genital herpes--Infection of the skin of the genital area by herpes simplex virus.

Hydramnios/Oligohydramnios--Any noticeable excess (hydramnios) or lack (oligohydramnios) of amniotic fluid.

Hemoglobinopathy--A blood disorder caused by alteration in the genetically determined molecular structure of hemoglobin (for example, sickle cell anemia).

Hypertension, chronic--Blood pressure persistently greater than 140/90, diagnosed

prior to onset of pregnancy or before the 20th week of gestation.

Hypertension, pregnancy-associated--An increase in blood pressure of at least 30 mm Hg systolic or 15 mm Hg diastolic on two measurements taken 6 hours apart after the 20th week of gestation.

Eclampsia -- The occurrence of convulsions and/or coma unrelated to other cerebral conditions in women with signs and symptoms of pre-eclampsia.

Incompetent cervix--Characterized by painless dilation of the cervix in the second trimester or early in the third trimester of pregnancy, with prolapse of membranes through the cervix and ballooning of the membranes into the vagina, followed by rupture of membranes and subsequent expulsion of the fetus.

Previous infant 4,000+ grams--The birth weight of a previous live-born child was over 4,000 grams (8 lbs 13 oz).

Previous preterm or small-for-gestational-age infant--Previous birth of an infant

prior to term (before 37 completed weeks of gestation) or of an infant weighing less than the 10th percentile for gestational age using a standard weight-forage chart.

Renal disease -- Kidney disease.

Rh sensitization--the process or state of becoming sensitized to the Rh factor as

when an Rh-negative woman is pregnant with an Rh-positive fetus.

Uterine bleeding--Any clinically significant bleeding during the pregnancy, taking into consideration the stage of pregnancy; any second or third trimester bleeding of the uterus prior to the onset of labor.

NTAORHR: Anemia or hemoglobinopathy recode

The anemia and hemoglobinopathy variables are combined due to small cell sizes in

order to prevent potential identification of individuals.

NTTOBACR, NTCIGARR, NTALCOHR, NTDRINKR: Tobacco and alcohol use during pregnancy recodes

The check box format on the birth certificate allows for classification of a mother as a smoker or drinker during pregnancy and for reporting the average number of cigarettes smoked per day or drinks consumed per week. When smoking and/or drinking status is not reported or is inconsistent with the quantity of cigarettes or drinks reported, the status is changed to be consistent with the amount reported. For example, if the drinking status is reported as "no" but one

or more average drinks a week are reported, the mother is classified as a drinker. If the number of cigarettes smoked per day is reported as one or more, the mother is considered a smoker. When one (or a fraction of one) drink a week is recorded, the mother is classified as a drinker. For records on which the

number of drinks or number of cigarettes is reported as a span, for example, 10-15, the lower number is used. The number of drinkers and number of drinks reported on birth certificates are believed to underestimate actual alcohol use.

NTWTGNR: Weight gain (during pregnancy) recode

Weight gain is reported in pounds. A loss of weight is reported as zero gain.

NTAMNIO, NTMONITO, NTINDUCT, NTSTIMUL, NTTOCOL, NTULTRAS, NTOTHROB:

Obstetric procedures - Amniocentesis, Electronic fetal monitoring, Induction of labor, Stimulation of Labor, Tocolysis, Ultrasound, Other obstetric procedures

This birth certificate item includes six specific obstetric procedures. Birth records with "Obstetric procedures" left blank are considered "not stated."

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the Association for Vital Records and Health Statistics (Brockert JE, Stockbauer JW, Senner JW, et al, 1990).

Amniocentesis--Surgical transabdominal perforation of the uterus to obtain amniotic fluid to be used in the detection of genetic disorders, fetal abnormalities, and fetal lung maturity.

Electronic fetal monitoring--Monitoring with external devices applied to the maternal abdomen or with internal devices with an electrode attached to the fetal

scalp and a catheter through the cervix into the uterus, to detect and record fetal heart tones and uterine contractions.

Induction of labor--The initiation of uterine contractions before the spontaneous

onset of labor by medical and/or surgical means for the purpose of delivery.

Stimulation of labor--Augmentation of previously established labor by use of oxytocin.

Tocolysis--Use of medications to inhibit preterm uterine contractions to extend the length of pregnancy and therefore avoid a preterm birth.

Ultrasound--Visualization of the fetus and placenta by means of sound waves.

NTFEBRIL, NTMECONI, NTRUPTUR, NTABRUPT, NTREPLAC, NTEXCBLD, NTSEIZUR, NTPRECIP, NTPRLONG, NTDYSFUN, NTBREECH, NTCEPHAL, NTCORD, NTANESTH, NTDISTRE, NTOTHRLB:

Complications of labor and/or delivery - Febrile, Meconium- moderate/heavy, Premature rupture of membrane, Abruptio placenta, Placenta previa, Other excessive bleeding, Seizures during labor, Precipitous labor, Prolonged labor, Dysfunctional labor, Breech/malpresentation, Cephalopelvic disproportion, Cord prolapse, Anesthetic complications, Fetal distress, Other complications of labor and/or delivery

The birth certificate check box format allows for the selection of 15 specific complications and for the designation of more than 1 complication where appropriate. A choice of "None" is also included. Accordingly, if the item is

not completed, it is classified as "not stated." Not all of the complications were reported by all reporting States.

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the Association for Vital Records and Health Statistics (Brockert JE, Stockbauer JW, Senner JW, et al, 1990).

Febrile--A fever greater than 100 degrees F. or 38 C. occurring during labor and/or delivery.

Meconium, moderate/heavy--Meconium consists of undigested debris from swallowed amniotic fluid, various products of secretion, excretion and shedding by the gastrointestinal tract; moderate to heavy amounts of meconium in the amniotic fluid noted during labor and/or delivery.

Premature rupture of membranes (more than 12 hours)--Rupture of the membranes at any time during pregnancy and more than 12 hours before the onset of labor.

Abruptio placenta--Premature separation of a normally implanted placenta from the uterus.

Placenta previa--Implantation of the placenta over or near the internal opening of the cervix.

Other excessive bleeding--The loss of a significant amount of blood from conditions other than abruptio placenta or placenta previa.

Seizures during labor -- Maternal seizures occurring during labor from any cause.

Precipitous labor (less than 3 hours)--Extremely rapid labor and delivery lasting less than 3 hours.

Prolonged labor (more than 20 hours)--Abnormally slow progress of labor lasting more than 20 hours.

Dysfunctional labor--Failure to progress in a normal pattern of labor.

Breech/Malpresentation--At birth, the presentation of the fetal buttocks rather than the head, or other malpresentation.

Cephalopelvic disproportion--The relationship of the size, presentation and position of the fetal head to the maternal pelvis prevents dilation of the cervix

and/or descent of the fetal head.

Cord prolapse--Premature expulsion of the umbilical cord in labor before the fetus is delivered.

Anesthetic complications—Any complication during labor and/or delivery brought on by an anesthetic agent or agents.

Fetal distress--Signs indicating fetal hypoxia (deficiency in amount of oxygen reaching fetal tissues).

NTNANEMI, NTINJURY, NTALCOSY, NTHYALIN, NTMECONS, NTVENL30, NTVEN30M, NTOTHABR:

Abnormal conditions of the newborn - Anemia, Birth injury, Fetal alcohol syndrome, Hyaline membrane disease, Meconium aspiration syndrome, Assisted ventilation less than 30 minutes, Assisted ventilation 30 minutes or more, Other abnormal conditions of the newborn recode

This certificate item provides information on eight specific abnormal conditions.

More than one abnormal condition may be reported for a given birth or "None" may be selected. If the item is not completed it is tabulated as "not stated."

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the Association for Vital Records and Health Statistics (Brockert JE, Stockbauer JW, Senner JW, et al, 1990).

Anemia--Hemoglobin level of less than $13.0~\mathrm{g/dL}$ or a hematocrit of less than $39~\mathrm{percent}$.

Birth injury--Impairment of the infant's body function or structure due to adverse influences that occurred at birth.

Fetal alcohol syndrome--A syndrome of altered prenatal growth and development occurring in infants born of women who consumed excessive amounts of alcohol during pregnancy.

Hyaline membrane disease/RDS--A disorder primarily of prematurity, manifested clinically by respiratory distress and pathologically by pulmonary hyaline membranes and incomplete expansion of the lungs at birth.

Meconium aspiration syndrome--Aspiration of meconium by the fetus or newborn, affecting the lower respiratory system.

Assisted ventilation (less than 30 minutes)——A mechanical method of assisting respiration for newborns with respiratory failure.

Assisted ventilation (30 minutes or more)--Newborn placed on assisted ventilation

for 30 minutes or longer.

Seizures--A seizure of any etiology.

NTOTHABR: Other abnormal conditions of the newborn recode

This category includes seizures. The two categories were combined because of small cell sizes in order to prevent potential identification of individuals.

NTCIRCUL, NTCLUBFT, NTMUSCUL, NTCONMJR, NTCONMNR: Congenital anomalies of child - Other circulatory/respiratory anomalies, Club foot, Other musculoskeletal/integumental anomalies, Major congenital anomalies recode, Minor congenital anomalies recode

The data provided in this certificate item relate to 21 specific anomalies or anomaly groups. It is well documented that congenital anomalies, except for the

most visible and most severe, are incompletely reported on birth certificates. The completeness of reporting specific anomalies depends on how easily they are recognized in the short time between birth and birth registration. The format allows for the identification of more than one anomaly including a choice of "None" should no anomalies be evident. The category "not stated" includes birth records for which the item is not completed.

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the Association for Vital Records and Health Statistics (Brockert JE, Stockbauer JW, Senner JW, et al, 1990).

Anencephalus -- Absence of the cerebral hemispheres.

Spina Bifida/meningocele--Developmental anomaly characterized by defective closure of the bony encasement of the spinal cord, through which the cord and meninges may or may not protrude.

Hydrocephalus--Excessive accumulation of cerebrospinal fluid within the ventricles of the brain with consequent enlargement of the cranium.

Microcephalus -- A significantly small head.

Other central nervous system anomalies--Other specified anomalies of the brain, spinal cord, and nervous system.

Heart malformations -- Congenital anomalies of the heart.

Other circulatory/respiratory anomalies--Other specified anomalies of the circulatory and respiratory systems.

Rectal atresia/stenosis--Congenital absence, closure, or narrowing of the rectum.

Tracheo-esophageal fistula/Esophageal atresia--An abnormal passage between the trachea and the esophagus; esophageal atresia is the congenital absence or closure of the esophagus.

Omphalocele/gastroschisis--An omphalocele is a protrusion of variable amounts of abdominal viscera from a midline defect at the base of the umbilicus. In gastroschisis, the abdominal viscera protrude through an abdominal wall defect, usually on the right side of the umbilical cord insertion.

Other gastrointestinal anomalies--Other specified congenital anomalies of the gastrointestinal system.

Malformed genitalia -- Congenital anomalies of the reproductive organs.

Renal agenesis--One or both kidneys are completely absent.

Other urogenital anomalies--Other specified congenital anomalies of the organs concerned in the production and excretion of urine, together with organs of reproduction.

Cleft lip/palate--Cleft lip is a fissure of elongated opening of the lip; cleft palate is a fissure in the roof of the mouth. These are failures of embryonic development.

Polydactyly/syndactyly/adactyly--Polydactyly is the presence of more than five digits on either hands and/or feet; syndactyly is having fused or webbed fingers and/or toes; adactyly is the absence of fingers and/or toes.

Club foot--Deformities of the foot, which is twisted out of shape or position.

Diaphragmatic hernia--Herniation of the abdominal contents through the diaphragm into the thoracic cavity usually resulting in respiratory distress.

Other musculoskeletal/integumental anomalies--Other specified congenital anomalies of the muscles, skeleton, or skin.

Down's syndrome--The most common chromosomal defect with most cases resulting from an extra chromosome (trisomy 21).

Other chromosomal anomalies -- All other chromosomal aberrations.

NTCONMJR: Major congenital anomalies of newborn recode

This variable combines several categories of anomalies because of small cell sizes and the need to prevent possible identification of individuals.

Anomalies that may have been combined in this category include: Anencephalus, Spina bifida/meningocele, Hydrocephalus, Microcephalus, Other central nervous system anomalies, Heart malformations, Tracheo-esophageal fistula/Esophageal atresia, Omphalocele/gastroschisis, Other gastrointestinal anomalies, Renal agenesis, Down's syndrome, and Other chromosomal anomalies

NTCONMNR: Minor congenital anomalies of newborn recode

This variable combines several categories of anomalies because of small cell sizes and the need to prevent possible identification of individuals.

Anomalies that may have been combined in this category include: Rectal atresia/stenosis, Malformed genitalia, Other urogenital anomalies, Cleft lip/palate, Polydactyly/syndactyly/adactyly, Club foot, Diaphragmatic hernia, Other musculoskeletal/integumental anomalies, and Other congenital anomalies

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