National Immunization Survey

A User's Guide for the 1999 Public-Use Data File

Centers for Disease Control and Prevention

National Immunization Program
and
National Center for Health Statistics

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1. Introduction

In 1992 the Childhood Immunization Initiative (CII) (CDC 1994) was established to 1) improve the delivery of vaccines to children; 2) reduce the cost of vaccines for parents; 3) enhance awareness, partnerships, and community participation; 4) improve vaccinations and their use; and 5) monitor vaccination coverage and occurrences of disease. Subsequently the Healthy People 2000 and 2010 objectives established the goal of having at least 90% of 2-year-old children fully vaccinated with the recommended schedule of vaccines. To fulfill the CII mandate of monitoring vaccination coverage and marking progress toward achieving those goals, the National Immunization Survey (NIS) has been implemented by the National Immunization Program and the National Center for Health Statistics, Centers for Disease Control and Prevention (CDC), and its contractor, Abt Associates Inc.

The target population for the NIS is children between the ages of 19 and 35 months living in the United States at the time of the interview. The official coverage estimates reported from the NIS are rates of being up-to-date with respect to the recommended numbers of doses of all recommended vaccines (CDC 2001). These vaccines and their recommended numbers of doses are: diphtheria and tetanus toxoids and pertussis vaccine (DTP), 4 doses; poliovirus vaccine (polio), 3 doses; measles-containing vaccine (MCV), 1 dose*; Haemophilus influenzae* type b vaccine (Hib), 3 doses; hepatitis B vaccine (Hep B), 3 doses; and varicella zoster vaccine, 1 dose. In addition to these vaccines, interest focuses on coverage rates for vaccine series, including the 4:3:1:3 series (4 DTP, 3 polio, 1 MCV, and 3 Hib). The NIS

collects data on each of these vaccines. All except for varicella have been included in the NIS from its start in 1994. Varicella vaccine was added in the third quarter of 1996.

The NIS uses a random-digit-dialing (RDD) telephone survey to identify households containing children in the target age range and interview an adult who is knowledgeable about the child's vaccinations. With the consent of the child's parent or guardian, the NIS also contacts (by mail) the child's health care providers to request information on vaccinations from the child's medical records.

Samples of telephone numbers are drawn independently, for each calendar quarter, within 78 Immunization Action Plan (IAP) areas. Of the 78 IAP areas, 28 (including the District of Columbia) are urban areas. The remaining 50 are either an entire state or a "rest of state" IAP area (where the state contains one or more urban IAP areas). This design makes it possible to produce annualized estimates of vaccination coverage levels within each of the 78 IAP areas with a specified degree of precision (a coefficient of variation of no more than 5%). Further, by using the same data collection methodology and survey instruments in all IAP areas, the NIS produces vaccination coverage levels that are comparable among IAP areas and over time.

For 1999 the RDD interviews of households began on January 20, 1999 and ended on February 24, 2000, and provider data collection extended from March 29, 1999 to April 21, 2000. A total sample of 2,533,608 telephone numbers yielded household interviews for 34,442 children, and 22,521 of those children had provider data that were adequate to

determine whether the child was up-to-date with respect to the recommended immunization schedule. The 1999 NIS public-use file (PUF) contains data for the 34,442 children with completed household interviews (and more extensive data for children with provider data). Published tables of estimates of vaccination coverage are available on the National Immunization Program (NIP) Web site, http://www.cdc.gov/nip/coverage/data.htm, and are discussed in an *MMWR* article (CDC 2000).

The accompanying code book (*National Immunization Survey 1999 Public-Use Data File Documentation, Code Book and Frequencies*) documents the actual public-use data file. For reference Appendix G reproduces the table of contents and the alphabetical index of variables from the code book.

Additional information on the NIS is available at:

www.cdc.gov/nip/coverage/default.htm
www.cdc.gov/nis/
www.nisabt.org

For additional information on the NIS data file, please contact the NCHS staff:

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2. Sample Design

The NIS uses two phases of data collection to obtain vaccination information for a large national probability sample of young children: a random-digit-dialing survey designed to identify households with children between 19 and 35 months of age, followed by the Provider Record Check study (PRC), which obtains provider-reported vaccination histories for these children. This section gives a summary of these two phases of data collection. Other descriptions of the sample design are given by Ezzati-Rice et al. (1995), Zell et al. (2000), Smith et al. (2001).

The NIS RDD Sample

The NIS RDD sampling phase uses independent quarterly samples of telephone numbers in the 78 IAP areas. Table H.1 (in Appendix H) lists the 78 IAP areas by state and shows the number of children living in each state and IAP area in 1999.

The NIS uses the list-assisted method of random-digit dialing (Lepkowski 1988). This method selects a random sample of telephone numbers from "banks" of 100 consecutive telephone numbers (e.g., 617-495-0000 to 617-495-0099) that contain one or more directory-listed residential telephone numbers. The sampling frame of telephone numbers is updated each quarter in order to include new telephone exchanges and area codes. Although the number of cellular telephone users in the U.S. has increased rapidly, most households continue to maintain land-line telephone service. Also, most cellular telephone users pay for

incoming calls. Therefore, the NIS sampling frame excluded cellular telephone changes in 1999.

The target sample size of completed telephone interviews in each IAP area is designed to achieve an approximately equal number of children with adequate provider-reported vaccination histories. The phrase "children with adequate provider data" refers to children for whom sufficient vaccination history information is obtained from their providers to determine whether they are up-to-date with respect to the recommended vaccination schedule.

The design and implementation of the NIS sample involve four procedures. First, statistical models predict the number of sample telephone numbers needed in each IAP area to meet a target number of interviews (Buckley et al. 1998). Second, the sample for an IAP area is divided into random subsamples called replicates. By administering the sample release on a replicate-by-replicate basis, it is possible to spread the interviews for each IAP area evenly across the entire calendar quarter. Third, an automated procedure eliminates a portion of the nonworking and nonresidential telephone numbers from the sample before the interviewers dial them (Battaglia et al. 1995b). Fourth, the sample telephone numbers are matched with a national database of directory-listed residential telephone numbers in order to obtain usable mailing addresses for as many sample households as possible. To promote participation in the NIS, an advance letter is sent to these addresses approximately two weeks prior to the RDD interview.

The NIS Provider Record Check Study

At the end of the NIS RDD interview, consent to contact the child's vaccination providers is requested from the parent/guardian. When verbal consent is obtained, those providers are mailed an immunization history questionnaire (IHQ). This mail survey portion of the NIS is the Provider Record Check study.

The IHQ is sent by mail to vaccination providers with instructions to mail or fax the questionnaire back upon completion. Two weeks later, a thank you/reminder postcard is sent to each provider. If no response has been received, another questionnaire packet is mailed five weeks after the initial mailing. Finally, seven weeks after the initial mailing, a telephone call is made to providers who have still not responded, to remind and encourage them to complete the form and either mail or fax the information back. In some instances, provider-reported vaccination histories are accepted over the phone. The data from the IHQs are entered, cleaned, edited, and merged with the household information from the RDD survey to produce a child-level record.

Summary of Data Collection

Table 1 presents selected operational results of NIS data collection for calendar year 1999. Children who were 19 to 35 months of age during 1999 were born from February 1996 to May 1998. The original sample (in replicates that were released for use) consisted of 2,533,608 telephone numbers. Of those, 483,903 numbers were eliminated by the automated

Table 1: Selected Operational Results of NIS Data Collection for 1999

ROW	KEY INDICATOR	NUMBER	PERCENT
	RDD Phase		
1	Total Selected Telephone Numbers in Released Replicates	2,533,608	--
2	Phone Numbers Resolved before CATI	483,903	19.1% (Row 2/Row 1)
3	Total Phone Numbers Called	2,049,705	--
4	Advance Letters Mailed	746,824	36.4% (Row 4/Row 3)
5	Resolved Phone Numbers* – *Resolution Rate*	2,243,904	88.6% (Row 5/Row 1)
6	Households Identified	1,009,543	45.0% (Row 6/Row 5)
7	Households Successfully Screened for Presence of Age-Eligible Children – *Screening Completion Rate*	979,606	97.0% (Row 7/Row 6)
8	Households with no NIS Age-Eligible Children	943,268	96.3% (Row 8/Row 7)
9	Households with NIS Age-Eligible Children – *Eligibility Rate*	36,338	3.7% (Row 9/Row 7)
10	Households with NIS Age-Eligible Children with Completed RDD Interviews– *Interview Completion Rate*	33,932	93.4% (Row 10/Row 9)
11	CASRO Response Rate**	NA	80.2% (Row 5*Row 7* Row 10)
12	Age-Eligible Children with Completed RDD Interviews	34,442	--
	PRC Phase		
13	Children with Consent Obtained to Contact Vaccination Providers	28,936	84.0% (Row 13/Row 12)
14	Immunization History Questionnaires Mailed to Providers	37,373	--
15	Immunization History Questionnaires Returned from Providers	35,517	95.0% (Row 15/Row14)
16	Children with Adequate Provider Data	22,521	65.4% (Row 16/Row 12)

*Includes phone numbers resolved before CATI (Row 2).
**CASRO, Council of American Survey Research Organizations.

procedure as nonworking or nonresidential numbers. The remaining 2,049,705 telephone numbers were called to identify 1,009,543 households, as shown in rows 3 and 6 of Table 1.

Among the identified households, 979,606 (97.0%) were successfully screened for age-eligible children. Of these, 943,268 did not contain age-eligible children, and 36,338 (3.7%) contained one or more age-eligible children. Among these households 33,932 (93.4%) completed the NIS household RDD interview.

A standard approach for measuring response rates for RDD surveys, known as the CASRO household response rate, has been defined by the Council of American Survey Research Organizations (Frankel 1983). In 1999 the CASRO household response rate (row 11) was 80.2%. The CASRO response rate equals the product of the resolution rate (88.6%, row 5) the screening completion rate (97.0%, row 7), and the interview completion rate among eligible households (93.4%, row 10). The resolution rate is the percentage of the total phone numbers called that were classifiable as nonworking, nonresidential, or residential. The screening completion rate is the percentage of known households that are successfully screened for the presence of age-eligible children. The interview completion rate is the percentage of households with one or more age-eligible children that complete the NIS RDD interview.

Row 12 of Table 1 shows that 34,442 age-eligible children had completed RDD interviews. Rows 13 through 16 of Table 1 give results for the PRC phase. Specifically, row 13 gives the rate of obtaining verbal consent from household respondents to contact their children's vaccination providers – 84.0% in 1999. The number of IHQs that were mailed to vaccination providers was 37,373. This number exceeds the number of completed child interviews in row

12 because some children have more than one vaccination provider. In 1999 the mean number of vaccination providers identified for a child was 1.37.

Among vaccination providers who were mailed an IHQ, 95.0% returned the questionnaire or other information pertaining to the child's vaccination history. Among the children with completed household RDD interviews 22,521 (65.4%) had adequate vaccination histories returned by their vaccination provider(s). The other 35% of children lack adequate provider data for a variety of reasons, such as the parent did not give consent to contact providers, or the providers did not have medical records for the child.

For each IAP area and each state Table H.1 shows the number of children with completed RDD interviews and the number of children with adequate provider data.

Informed Consent, Security, and Confidentiality of Information

The Screener Introduction, the Advance Letter, and the Oral Consent assure the respondent of the confidentiality of his/her responses and the voluntary nature of the survey. Informed consent is obtained from the respondent (generally from the parent or guardian of the child) to participate in the household interview and also (at the end of the interview) to contact the child's vaccination providers.

Information in the NIS is collected and processed under high security. To ensure privacy of the respondents and confidentiality of sensitive information, NCHS has established standards

for release of data from all NCHS surveys. All CDC staff and contractor staff involved with the NIS sign the NCHS confidentiality agreement and follow instructions to prevent disclosure.

All information in the NIS is collected under strict confidentiality and can be used only for research purposes [Section 308(d) of the Public Health Service Act, 42 U.S. Code 242m(d), and the Privacy Act of 1974 (5 U.S. Code 552A)]. Prior to the public release, the contents of the PUF go through an extensive review by the NCHS Disclosure Review Board to protect confidentiality of the participants as well as the data.

3. Content of NIS Questionnaires

This section describes the questionnaires used in the 1999 NIS telephone interview of households and in the NIS PRC survey. The confidentiality of respondents and their data is required by Section 308(d) of the Public Health Service Act [42 U.S. Code 242m(d)].

Content of the NIS Household Questionnaire

The Computer-Assisted Telephone Interview (CATI) questionnaire used in the RDD phase of NIS data collection (Appendix B) consists of two parts: a screener to identify households with children in the age range 19-35 months and an interview portion. The questionnaire is modeled on the Immunization Supplement to the National Health Interview Survey (NHIS) (NCHS 1999). The NIS CATI questionnaire has been translated into Spanish, and the AT&T

Language Line is used for real-time translation into many other languages (Wall et al. 1995). Table 2 summarizes the content of each section of the 1999 NIS telephone interview.

Table 2: Content of the 1999 NIS Household Interview

Screener	Screening questions to determine eligibility, roster of eligible children, availability of shot records
Section MR	Most-knowledgeable-respondent callback questions
Section SR	Shot record callback questions
Section A	Vaccination history, asked if shot records are available
Section B	Vaccination history, asked if shot records are not available
Section C	Demographic and socioeconomic questions
Section D	Provider information and request for consent to contact the eligible child's vaccination providers

In the screener the purpose of the survey is explained to the respondent, and the household is screened to determine whether it contains any children between 19 and 35 months of age. If the household has an eligible child, the respondent is asked whether he/she is the most knowledgeable person (MKP) for the child's vaccination history. If the respondent indicates that another person in the household is more knowledgeable, the interviewer asks to speak to him or her at that time. If that person is unavailable to be interviewed, the interview proceeds to Section MR, the name of the MKP is recorded, and a "callback" is scheduled for a later date.

Also during the screener the person being interviewed is asked whether he/she has a written record (shot card) of the child's vaccination history, and whether it is easily accessible. If the shot card is available, the respondent is asked to provide information directly from it in

Section A. If the child does not have a shot card, the interview proceeds with Section B, which asks the respondent to recall from memory information about the child's vaccinations. If the child has a shot card but it is not easily accessible, the interview proceeds to Section SR. In this section the interviewer makes an appointment to call at a later date, when the shot card will be available, and also gathers general information about the child's immunization history.

Section C obtains information that includes the relationship of the respondent to the child, the race of the child, the race of the mother, household income and educational attainment of the mother of the child, and other information on the socioeconomic characteristics of the household and its eligible children. This section is asked of all respondents upon completion of Section A, B, or SR.

At the conclusion of the NIS household interview, consent is requested to contact the child's vaccination providers (Section D). If verbal consent is obtained, identifying information (name, address, and telephone number) on the vaccination provider(s) is requested, as well as the full names of the child and the respondent, so that NIS personnel can contact the providers and identify the child whose immunization information the NIS is requesting. When verbal consent and sufficient identifying information are obtained, the IHQ is mailed to the child's vaccination provider(s).

Two sets of changes were made to the NIS CATI questionnaire in 1999. First, questions were added in Q3/1999 regarding a child's immunization for the newly recommended

rotavirus vaccine. Second, the wording of the questions and the response categories for the race and Hispanic ethnicity of the child and the mother were changed in Q3/1999 to follow the latest OMB guidelines. Appendix B describes these changes in more detail. They do not affect the 1999 public-use file, because it does not contain the household variables for rotavirus (which are not available for Q1/1999 or Q2/1999) and the race of the child and the mother is still compiled into the same categories.

Content of the Immunization History Questionnaire

The IHQ (Appendix C) is designed to be simple and brief, to minimize burden on the providers and to encourage participation in the survey. It consists of two pages. Page 1 includes space for a label that gives the child's name and birth date and the full name of the parent or guardian. Page 1 also includes a grid for recording dates of vaccinations. The columns of the grid correspond to recommended vaccines, and an additional column is available for recording other vaccines. Page 2 of the IHQ contains several questions about the facility and vaccination provider (for example, whether the facility is public or private, and the clinical specialty of the provider).

For Q2/1999 the IHQ was redesigned, by adding two vaccines (rotavirus and the hepatitis B-Hib combination) to the shot grid, removing two questions, and adding two new questions. Appendix C describes these changes in detail. The 1999 public-use file does not include those four questions, but it does include provider variables for rotavirus and Hep B-Hib. For

Q1/1999 rotavirus shots and Hep B-Hib shots listed in the "other shot" section of the shot grid were "back-coded" (as discussed below under Editing of Provider Data).

4. Data Preparation and Processing Procedures

The household data collection and provider data collection in the NIS incorporate extensive data preparation and processing procedures. During the household interview the CATI system makes many edits as the interviewer enters the data. After the completion of interviewing for a quarter, post-CATI editing and data cleaning produce a final interview data file. The editing of the provider data begins with a manual review of returned IHQs, data entry of the IHQs, and cleaning of the provider data file. After the provider data are merged with the household interview data, and responses from multiple providers for a child are consolidated into a child-level data record, the editing continues. At this point a check ensures that the IHQ was filled out for the correct child and that the child is actually 19 to 35 months of age (from all the date-of-birth information). Then editing of the provider-reported vaccination dates attempts to resolve specific types of discrepancies in the provider data. The end product is an analytic file containing household and provider data for use in estimating vaccination coverage.

Data Preparation

The editing and cleaning of NIS data involve several steps. First, the CATI system incorporates an automatic editing process. Further cleaning and editing take place in a post-

CATI clean-up stage, involving an extensive review of data values, crosschecks, and the recoding of verbatim responses for race, ethnicity, and vaccinations. The next step involves the creation of numerous composite variables. Finally, provider data are cleaned in a separate step. After these steps have been completed, imputations are performed for item nonresponse on selected variables, and weights are calculated. The procedures and rules of the National Health Interview Survey serve as the standard in all stages of data editing and cleaning.

Editing in the CATI System

The CATI software checks consistency across data elements and does not allow interviewers to enter invalid values. Catching potential errors early increases the efficiency of post-survey data cleaning and processing.

The CATI system makes a number of edits as an interviewer enters data. These edits correct data entry errors that can be reconciled while the respondent is on the telephone; they focus, in particular, on items critical to the conduct of the study, such as those that determine a child's eligibility (e.g., date of birth). To the extent possible without making the CATI system overly complicated, out-of-range and inconsistent responses produce a warning screen, allowing the interviewer to correct errors as they occur.

A CATI system cannot simultaneously incorporate every possible type of error check and maximize system performance. To reconcile this trade-off, post-CATI edits are used to

resolve problems that do not require access to the respondent, as well as unanticipated logic problems that appear in the data.

Post-CATI Edits

The post-CATI editing process produces final, cleaned data files for each quarter. The steps in this process, implemented after all data collection activities for a quarter are completed, are described below.

Initial Post-CATI Edits and File Creation

After the completion of interviewing each quarter, the raw data are extracted from the CATI data system and used to create two files: the Sample File and the Interview File. The Sample File contains one record for each sample telephone number. It contains summary information for telephone numbers and households. The Interview File contains one record for each eligible sample child. It contains all vaccination data that the household reported for the child.

Following the creation of these files, a preliminary analysis of each file identifies out-of-range values and extraneous codes. The first check verifies the eligibility status of children, based on date of birth and date of interview. Once the required corrections are verified, the invalid values are replaced with either an appropriate data value or a missing-value code.

Frequency Review

After the pre-programmed edits are run, frequency distributions of all variables in each file are produced and reviewed. Each variable's range of permissible values is examined for any invalid values or unusual distributions. If blank values exist for a variable, they are checked to see whether they are allowable and whether they occur in excessive numbers. Any problems are investigated and corrected as appropriate.

File Crosschecks

Crosscheck programs make sure that cases exist across files in a consistent manner. Specifically, checks ensure that each case in the Interview File is also present in the Sample File and that each case in the Sample File was released to the CATI center. Checks also ensure that no duplicate households exist in the Sample File and no duplicate children exist in the Interview File.

When all of these checks have been performed, the final quarterly Interview File is created. Programmers and statisticians then create composite variables for each child. Weights (described in Section 6) are added to each record.

Editing of Provider Data

Six to eight weeks after the close of household data collection for a quarter, the collection of Immunization History Questionnaires from providers ends. The data from the hard-copy

questionnaires are entered and independently re-entered to provide 100% verification. The Provider Data File is cleaned, in a similar fashion to the household data, for out-of-range values and consistency. A computer program back-codes all "other shot" verbatim responses into the proper vaccine category (e.g., Energix B counts as Hep B, and Tetramune counts as DTP and Hib). These translations come from a file that contains all such verbatim responses ever encountered in the NIS. The back-coding for Q1/1999 included rotavirus and Hep B-Hib shots. Also, the Provider File is checked for duplicate records, and exact duplicates are removed from the file. When a child has data from more than one IHQ, decision rules are applied to produce the most complete picture of the child's immunization history.

Once these data have been cleaned, they are combined with the household interview data. Information from up to five providers can be added to a child's record.

Many variables in the household data are checked against or verified with the provider data. For example, a child's birth date as recorded by the provider is checked against the birth date as given by the household, to verify that the provider was reporting for that specific child. Shot dates are also compared, and any discrepancies are examined by hand. In most instances the provider data are used if dates do not agree between the provider(s) and the household.

Limitations of Data Editing Procedures

Although extensive data editing procedures were used for the 1999 NIS, the data user should be aware that some inconsistent data may remain in the public-use file. The variables that indicate whether a child is up-to-date on each vaccine or series (on which the estimates of vaccination coverage are based) are derived from provider-reported data. Hence the household-reported vaccination dates (from interviews conducted with a shot card) are not edited for discrepancies beyond the built-in checks in the CATI system.

Although the provider-reported data are edited for specific discrepancies, a small number of children will have provider-reported vaccination dates that contain potential discrepancies that could not be resolved after examination of the data available. The NIS does not recontact households or providers to attempt to reconcile such discrepancies. Furthermore, some provider-data edits that were added after 1999 are not reflected in the 1999 public-use file. One of these edits is an examination of vaccinations, other than hepatitis B, given in the first 37 days of life, because these vaccinations are not recommended for administration before this age. The section on Subsets of the Data (below) includes information related to the first dose of hepatitis B vaccine, which for the 1999 NIS was often given early in life. Overall, even with these limitations, the NIS is a rich source of data for assessment of up-to-date status and age-appropriate immunization.

Variable-Naming Conventions

To facilitate access to the contents of the PUF, the names of variables adhere to the SAS (Version 6.12) convention of having no more than 8 characters, and they follow a systematic pattern as much as possible. The code book for the PUF groups the variables into nine broad categories according to the source of the data (household or providers) and the content of the variable (see Appendix G).

The household report of vaccinations received by the child is used to create household up-to-date indicator variables. The names of these variables begin with FULL. For example, FULL_HEP indicates whether the child has received three or more hepatitis B vaccinations. Additional household up-to-date variables combine each vaccine with use of a shot card. The names of these variables begin with C_. For example, C_HEP has five values, corresponding to up-to-date on hepatitis B from a shot card, not up-to-date on hepatitis B from a shot card, up-to-date on hepatitis B not from a shot card, not up-to-date on hepatitis B not from a shot card, and vaccination status on hepatitis B indeterminate.

The provider data from the IHQs are used to create numerous child-level composite variables, as described below. The names of the variables giving the number of doses received for each vaccine begin with P_NUM. For example, P_NUMHEP gives the number of doses of hepatitis B vaccine according to the provider data. An up-to-date indicator variable also exists for each vaccine, and these variables begin with P_UTD. For example, P_UTDHEP indicates whether the child received 3 or more doses of hepatitis B vaccine.

The provider data are also used to form variables for age in days and age in months at time of vaccination. For age in days and age in months, either 4 or 8 variables are created, depending on the vaccine. The variables for age in months end with n_AGE, where n is the dose number. For example, HEP1_AGE to HEP8_AGE give age in months for 8 possible doses of hepatitis B vaccine. Similarly, for age in days at vaccination, the variables start with D and end with the dose number. For example, DHEPB1 to DHEPB8 give age in days for 8 possible doses of hepatitis B vaccine.

Missing-Value Codes

The missing-value codes for household variables are 6 and 96 for DON'T KNOW and 7 and 97 for REFUSED. Some household variables may also contain blanks if the question was not asked. The variables developed from the IHQ generally do not have specific missing-value codes. For example, if a provider failed to answer the question on types of care provided, the response category variables for that question would be blank.

Imputation for Item Nonresponse

The NIS uses imputation primarily to replace missing values on selected socioeconomic and demographic variables collected in the household survey. A sequential hot-deck method is used to assign imputed values (Cox 1980). Each imputation cell had at least four donors. The Notes section of the code book identifies variables containing imputed values. These

variables include WIC participation, maternal education, first-born status of the child, Hispanic origin, race, race/ethnicity, maternal marital status, maternal age group, and whether the child ever had chicken pox.

Vaccine-Specific Recoding of Verbatim Responses

During the household interview, respondents are given the option to report vaccinations in addition to, or instead of, the categories specifically read to them. These verbatim responses are entered into the CATI system by the interviewer and stored in the Interview File. They are reviewed in the post-CATI editing process in order to reclassify the responses into the listed categories, where possible. NIP personnel manually review the verbatim responses and determine to which category or categories (for combination shots), if any, each should be recoded. Once the recoding has been completed, a quality control review ensures that the responses were correctly recoded and are consistent with one another.

Composite Variables

A number of composite variables (constructed from basic variables) are created and included in the NIS PUF. Composite variables assist users and data analysts by eliminating duplication of effort and making NIS data easier to use.

Since the initial years of NIS data collection, the household composite variables have included up-to-date status on individual vaccinations, race of child and mother, household

income, and up-to-date status on several vaccination series. As the questionnaire was modified over time, new composite variables were created. Examples include WIC participation variables and an indicator of whether the child is first-born. Many of these composite household variables are included in the NIS PUF. Table 3 lists some of the key demographic variables and their categories.

Table 3: Key Demographic Composite Variables

AGEGRP – age category of child	19-23 months 24-29 months 30-35 months
RACEKIDR – race/ethnicity of child	Hispanic White, nonHispanic Black, nonHispanic All other, nonHispanic
SEX – gender of child	Male Female
EDUC1 – education of the mother	<12 years 12 years >12 years, not a college graduate College graduate
MARITAL – marital status of mother	Widowed, divorced or separated Never married Currently married Deceased
M_AGEGRP – age group of mother	Under 20 years 20-29 years 30 years or older
INCPOV1R – poverty status	At or above poverty level Below poverty level Not determined

In Q3/1999 the NIS race questions were expanded to include Alaska Native, Native Hawaiian and Pacific Islander, implementing the revised Office of Management and Budget (OMB) standards for the classification of race and ethnicity. The composite race variables in the 1999 PUF, however, contain only three categories: white, black and all other races (for

compatibility with the variables in Q1 and Q2/1999). The all other races category includes American Indian, Asian, Alaska Native, Native Hawaiian, Pacific Islander, and other races. If more than one race was selected during the administration of the race questions, the respondent was asked to select the race that best characterizes the child/mother. The 1999 PUF uses these questions to assign each child and mother to a single race category. For the four-quarter time period Q4/1999-Q3/2000, the weighted percentage of children in various multiple-race categories was 2.9%. The largest multiple-race group was white/black, which accounted for 1.36% of children age 19-35 months. The NIS PUF for 2000 will follow the revised OMB standards.

The provider data from the immunization history questionnaires are used to create numerous child-level composite variables. The most important variables give the number of doses received for each type of vaccine. Up-to-date indicator variables are created for each individual vaccine and for several vaccine series. Another set of variables gives age in days at time of vaccination. For each dose of a vaccine, the age in days is constructed from the date of birth of the child and the date of the shot. Corresponding variables give exact age in months at time of vaccination.

The IHQs also contain information on provider characteristics. This information is used to create composite variables related to provider facility type (PROV_FAC), types of care offered by the provider (NCARER1 to NCARER6), participation in the Vaccines for Children program (VFC_PRO), and participation in state or community immunization registries (REGISTRY).

Subsets of the Data

The NIS PUF contains data for all children age 19-35 months who have a completed household (RDD) interview. An interview is considered complete if the respondent answered either Section A or Section B of the questionnaire. As explained in Section 6, each child with a completed household interview is assigned a weight (HY_WGT) for use in estimation.

The NIS uses the provider-reported vaccination histories to form the estimates of vaccination coverage rates, because the provider data are considered much more accurate. Thus, the most important subset of the data consists of children with adequate provider data. For these children one or more providers returned the IHQ, and the vaccination information reported by those providers is sufficient to determine whether the child is up-to-date on the recommended vaccinations. As discussed in Section 7, the PDAT variable identifies the children with adequate provider data (PDAT=1). These children have a separate weight (W0) that should be used to form estimates of vaccination coverage rates.

Confidentiality and Disclosure Avoidance

To prevent identification of participants in the NIS and the resulting disclosure of information, certain items from the questionnaires are not included in the PUF. In addition, some of the released variables are top- or bottom-coded, or their categories are collapsed.

5. Quality Control and Quality Assurance Procedures

A major contributor to the quality of the NIS data is its sample management system, which manages 312 RDD samples annually (78 IAP areas times 4 quarters) and uses 20 performance measures to track their progress toward completion. Important aspects of the quality assurance program for the RDD component of the NIS include on-line interviewer monitoring; on-line look-ups in topic-oriented databases integrated with the CATI system, including names, addresses and telephone numbers of vaccination providers; and automated range-edits and consistency checks. These and other quality assurance procedures contribute to a reduction in the total cost of the data collection, by minimizing interviewer labor and overall burden to respondents. Khare et al. (2000), Khare et al. (2001), and the *Guide to Quality Control Procedures in the National Immunization Survey* discuss the procedures in more detail.

The quality assurance procedures of the PRC component follow a proven methodology documented by Dillman (1978). The most critical quality assurance activities occur during post-processing of the returned questionnaires or vaccination records. All returned IHQs are examined to identify and correct any obvious errors prior to data entry and then data-entered with 100% verification. The National Immunization Program additionally has conducted a manual quality assurance review of 10% of forms returned by providers. Resulting error rates for the edit process are estimated to be less than 1%.

The data user should be aware of some special conditions that apply to the first dose of hepatitis B, which is typically given at 0 to 7 days. The count of vaccinations for a specific

vaccine is based on the number of unique vaccination dates reported by the child's provider(s). For a small percentage of children a provider indicates that the child received hepatitis B at birth by checking a box on the IHQ but does not record a vaccination date. Because no date is given, this dose is not included in the count of hepatitis B vaccinations. The PUF contains a variable (HEP_BRTH) to indicate whether at least one provider checked the given-at-birth box. The data user has the option of determining whether the first dose of hepatitis B was not given at 0 to 7 days by using the DHEPB1 variable. If the date of the birth dose is not present but the HEP_BRTH variable indicates that the birth dose was given, the data user has the option of imputing a date for the birth dose by using the 1999 distribution (Table 4).

Table 4: Distribution of Age (in days) at the Birth Dose of Hepatitis B Vaccine, 1999

Age in Days at Birth Dose	Unweighted Percentage of Birth Doses
0	42.8
1	34.3
2	12.6
3	3.8
4	2.2
5	1.5
6	1.2
7	1.6

6. Sampling Weights

Each of the two stages of data collection results in a sampling weight for the children who have data at that stage. The RDD sampling weights (HY_WGT) permit analyses of data from children with completed household interviews. Each child with adequate provider data

(the subset on which official estimates of vaccination coverage are based) has a "partial-nonresponse-adjusted sampling weight" (W0).

A sampling weight may be interpreted as the number of children in the target population that the child in the sample represents. Thus, for example, the sum of the sampling weights of children who are up-to-date (on a particular vaccine or series of vaccines) yields an estimate of the total number of children in the target population who are up to date. Dividing this sum by the total of the sampling weights for all children gives an estimate of the corresponding vaccination coverage rate.

This section describes how these weights are developed and adjusted so as to achieve an accurate representation of the target population. The weights reflect each child's probability of being selected into the sample; and the adjustments take into account the number of telephone lines in the household, nonresponse to the household interview, noncoverage of households that do not have telephones, and nonresponse by providers.

Adjusted Base Sampling Weight

In each quarterly NIS sample, each child with a completed RDD interview receives a base sampling weight. This weight is equal to the total number of telephone numbers in the sampling frame for the IAP area divided by the total number of telephone numbers that were randomly sampled from that sampling frame during that quarter. Because households with multiple telephone lines have a greater chance of being sampled, each child's base sampling

weight is adjusted by dividing it by the total number of residential telephone lines reported in the household (up to a maximum of 3).

Adjustment for Interview Nonresponse

Nonresponse occurs in population-based surveys when respondents refuse to participate or are not available at the time of the interview. Thus, the sum of the adjusted base sampling weights of children with completed RDD interviews will underestimate the size of the target population in the IAP area, because some sampled households containing age-eligible children do not complete the RDD interview. As a result, the adjusted base sampling weights must be adjusted so that they more accurately reflect the number of children in the target population that each sampled child with a completed RDD interview represents.

Some sampled households with age-eligible children fail to complete the RDD interview because of unit nonresponse: some telephone numbers are never determined to be residential despite multiple call attempts, some households cannot be determined to have age-eligible children, and some households with age-eligible children do not complete the RDD interview. To compensate for these three types of unit nonresponse, the sampling weights of children with a completed RDD interview are adjusted to account for the estimated number of age-eligible children in households whose telephone numbers are never determined to be residential, the estimated number of age-eligible children in households that fail to complete the screening interview, and the number of identified age-eligible children for whom the RDD interview is not completed. Each of these adjustments is carried out within IAP areas

by forming weighting cells based on the residential directory-listed status of the sample telephone number and socioeconomic and demographic characteristics of the IAP area's telephone exchanges (e.g., 4 weighting cells formed from directory-listed versus non-directory-listed telephone number by telephone exchanges with 75% or higher white population versus telephone exchanges with less than 75% white population).

Because the quarterly interview-nonresponse-adjusted base sampling weights pertain to the entire target population and because annualized vaccination coverage estimates are obtained from data for four consecutive quarters, the adjusted base sampling weights are divided by 4 when the data from the four quarters are combined.

Adjustment for Households That Do Not Have Telephones

The NIS sampling frame includes only households that have telephones. Because the target population consists of all children between 19 and 35 months of age living in households regardless of whether they have telephones, the interview-nonresponse-adjusted base sampling weights need to be adjusted to compensate for the noncoverage of children living in households without telephones. Although national telephone coverage for age-eligible children is estimated to be 90%, telephone coverage is known to be as low as 76% in some IAP areas. Further, data from the NHIS, which samples both "telephone" and "nontelephone" households, indicate that children living in households without telephones have significantly lower vaccination coverage. Thus, the adjustment to the sampling weights to compensate for

the noncoverage of nontelephone households may be particularly important in IAP areas in which the percentage of households that have telephones is relatively low.

In order to reduce the impact of this potential bias, two separate adjustments to sampling weights are made. In the first adjustment, the weighted distributions of "poststratification" variables, which are known to be strongly associated with variation in vaccination coverage rates, are adjusted to agree with those obtained from Vital Statistics (NCHS 1993) compiled by the National Center for Health Statistics (NCHS). The poststratification variables are race/ethnicity of the child's mother, the level of educational attainment of the child's mother, and the age of the child. Because the Vital Statistics data give the counts of all live births in the U.S., regardless of whether the household has telephone service, this adjustment corrects in part for under-representation of children who belong to households that are less likely to have telephones (typified by racial/ethnic minorities or mothers with low educational attainment).

The second adjustment for nontelephone households depends on whether a sample child is up-to-date on the 4:3:1:3 vaccination series and also on two other factors: the IAP-area-specific proportion of children that live in households that do not have telephones, as estimated from the Current Population Survey (Bureau of Labor Statistics 2000) for each combination of levels of the poststratification variables described above, and the ratio of the national 4:3:1:3 vaccination coverage rate among children living in nontelephone households to the national 4:3:1:3 vaccination coverage rate among children living in telephone households, as estimated using data for major race/ethnicity groups from the NHIS.

For children belonging to a specific race/ethnicity group, the adjustment to the sampling weight is larger for children who are not 4:3:1:3 up-to-date than for children who are 4:3:1:3 up-to-date when: the percentage of children living in nontelephone households in the IAP area is large and the estimated national 4:3:1:3 vaccination coverage rate among children living in nontelephone households is less than the estimated national 4:3:1:3 vaccination coverage rate among children living in telephone households. In this situation the adjustment for households that do not have telephones tends to reduce estimated vaccination coverage rates slightly. A further description is given by Battaglia et al. (1995a).

The base sampling weights after adjustment for multiple residential telephones, unit nonresponse, and nontelephone coverage constitute the "RDD sampling weights."

Adjustment for Provider Nonresponse

Among the 34,442 children with a completed RDD interview, 22,521 (65.4%) had adequate provider data. Failure to obtain adequate provider data for the remaining 34.6% was attributable to:

- the parent or guardian not giving consent to contact the child's vaccination providers (16.0%),
- provider name and address information given by the parent or guardian being inadequate for mail contact with the child's providers (2.5%),
- failure of the child's providers to respond to the IHQ (5.2%),

- failure of the responding providers to report any information about a child's vaccination history (9.3%), and
- children with two or more identified providers but not all of the providers responded and the responding providers did not report sufficient information to determine the child's vaccination status (1.6%).

The 11,921 children for whom an RDD interview was completed but adequate provider data were not obtained are "partial nonresponders" because they provide a partial response to the NIS as a whole.

Empirical results suggest that children with adequate provider data have characteristics that are believed to be associated with a greater likelihood of being up-to-date, compared to partial nonresponders. Specifically, children with adequate provider response are more likely to live in households that have higher total family income, to have a white mother, and to live outside a central city of a Metropolitan Statistical Area. Also, a partial nonresponder is less likely to live in the state where the mother resided when the child was born and less likely to have a parent/guardian who could locate a shot card. Both of these factors indicate a potential lack of continuity of health care, and are associated with lower vaccination rates (Coronado et al. 2000). If no adjustment is made to the RDD sampling weights to account for these differences, estimated vaccination coverage rates may be biased.

To reduce potential bias in estimated vaccination coverage estimates attributable to partial nonresponse, a "weighting-class adjustment" is used in each IAP area (Brick and Kalton 1996). This adjustment involves two steps. In the first step, sampled children are classified

according to the quintile of their estimated probabilities of having adequate provider data. In the statistical literature these probabilities are called response propensities (Rosenbaum and Rubin 1983, 1984; Rosenbaum 1987). Children who have similar response propensities will also be similar with respect to variables that are strongly associated with the probability of having adequate provider data. In this important respect, children in each class are comparable. Because of this comparability, any subsample of children in a class may represent all of the children in the class. Therefore, the weighting-class adjustment uses the children with adequate provider data to represent all of the children in the class.

In the second step of the weighting-class adjustment, within each class, an adjustment factor redistributes the RDD sample weights of the partial nonresponders among the children who have adequate provider data. These revised RDD sampling weights of children with adequate provider data are "partial-nonresponse-adjusted RDD sampling weights" (W0). Because of the comparability of children within each weighting class, any estimate that uses data only from the children with adequate provider data, along with their partial-nonresponse-adjusted RDD sampling weights, will have less bias attributable to differences between children with adequate provider data and partial nonresponders.

Appendix D summarizes the distribution of the sampling weights (HY_WGT and W0) in each IAP area.

7. Analytic and Reporting Guidelines

The NIS PUF can be used to produce national, state and IAP area estimates of vaccination coverage rates. Information in the data file can be used to calculate standard errors of the vaccination coverage rates that reflect the complex sample design of the NIS. The file includes IAP area and state identifiers (ITRUEIAP and STATE). The sample is stratified by the 78 IAP areas, and the IAP area identifier and the coded household identifier (SEQNUMHH) are key variables for obtaining standard errors for IAP area, state and national estimates of vaccination coverage rates. Demographic and socioeconomic variables in the file can be used to obtain national vaccination coverage rates for subgroups of the population. Data users should, however, be aware that estimates for such subgroups at the state or IAP area level will generally have large standard errors because of the small sample sizes. The NCHS standard for precision of subgroup estimates is that the ratio of the standard error to the estimate should be less than or equal to 30%, and each analytic cell should contain at least 30 respondents.

Key Variables

The variables in the NIS PUF fall into two major categories: 1) variables that apply to all children with completed household interviews and 2) variables that apply only to children with adequate provider data (i.e., PDAT=1). Variables in the first group include the household report of vaccinations received by the child, chicken pox disease history, and various demographic and socioeconomic characteristics of the child, the mother and the

household. Because of reporting and recall errors, the household report of vaccinations is not used to produce vaccination coverage rates. As discussed below, the provider report of vaccinations received by the child is used to produce vaccination coverage rates.

Table 5 lists variables that are commonly used in analyses or for published estimates of vaccination coverage.

The SEQNUMC variable is the unique child identifier. Key geographic variables include IAP area (ITRUEIAP), state (STATE), and Census Region (REGION).

Key demographic variables include race/ethnicity category of the child (RACEKIDR), age category of the child (AGEGRP), age category of the mother (M_AGEGRP), marital status category of the mother (MARITAL), and first-born status of the child (FRSTBRN). Key socioeconomic variables include education category of mother (EDUC1), poverty status (INCPOV1R), income-to-poverty ratio (INCPORAT), and WIC participation variables (I_CWIC01, I_CWIC03).

Selecting children with PDAT equal to 1 identifies children with adequate provider data (DISPCODE = 1 to 6 or 8 to 11). Children who do not have provider data (DISPCODE = MISSING) or have provider data that are not adequate to determine the up-to-date vaccination status of the child (DISPCODE = 7) have PDAT equal to 2. (Appendix E gives the definition of the values of DISPCODE.) The NIS PUF contains many variables

Table 5: NIS Variables That Are Commonly Used in Analyses or for Published Estimates

ID variable	
SEQNUMC – unique child ID variable	
Geographic variables	
ITRUEIAP – IAP area	
STATE – state FIPS code	
REGION – Census Region	Northeast Midwest South West
Child demographic variables	
AGEGRP – age category of child	19-24 months 25-29 months 30-35 months
RACEKIDR – race/ethnicity of child	Hispanic White, nonHispanic Black, nonHispanic All other, nonHispanic
SEX – gender of child	Male Female
FRSTBRN – first born status of child	No Yes
Mother demographic variables	
EDUC1 – education of the mother	<12 years 12 years >12 years, not a college graduate College graduate
MARITAL – marital status of mother	Widowed, divorced or separated Never married Currently married Deceased
M_AGEGRP – age group of mother	Under 20 years 20-29 years 30 years or older
RACEMOMR – race/ethnicity of mother	Hispanic White, nonHispanic Black, nonHispanic All other, nonHispanic
Income and poverty variables	
INCPOV1R – poverty status	At or above poverty level Below poverty level Not determined
INCPORAT – income to poverty ratio	

WIC participation variables	
I_CWIC01 – child ever received WIC benefits	Yes No Don't know about the program
I_CWIC03 – child currently receiving WIC benefits	Yes No
Presence of provider data variable	
PDAT – adequate provider data indicator	Yes No
Number of provider-reported doses of vaccine	
P_NUMDTP – total number of DT/DTP/DTaP doses	
P_NUMPOL – total number of IPV/OPV doses	
P_NUMMMR – total number of MCV doses	
P_NUMHIB – total number of Hib doses	
P_NUMHEP – total number of Hep B doses	
P_NUMVRC – total number of varicella doses	
Provider characteristics	
PROV_FAC – provider facility type	All public facilities All hospital facilities All private facilities All military/other facilities Mixed types Unknown
VFC_PRO – participation of child's provider(s) in VFC program	All providers Some but not all providers No providers Unknown
REGISTRY – child's vaccinations reported by provider(s) to state or community immunization registry	All providers Some but not all providers No providers Unknown
NCARER1 to NCARER6 – types of services offered by child's provider(s)	All providers Some but not all providers No providers/unknown

constructed from the provider data. One set of variables indicates the number of doses the child received for each of the vaccines. For example, P_NUMDTP indicates the number of doses of DTP. It counts all DTP-containing vaccines, including DTP, DTaP, DT, DTP-Hib and DTaP-Hib. Both the individual vaccines and the vaccine series have up-to-date indicator variables. For example, PUTD4313 is an indicator variable for whether the child has 4 or more DTP vaccinations, three or more polio vaccinations, one or more measles-containing vaccinations (MCV), and three or more Hib vaccinations. Section 4 discusses the naming conventions for these variables.

The NIS PUF includes a set of variables for age in days at each vaccination. These variables can be used to examine age at vaccination, vaccination spacing intervals, and age-appropriate immunization. Another set of variables gives age in months at time of vaccination. These variables can be used to determine, for example, whether a child received at least four DTP vaccinations by the age of 19 months. Section 4 discusses the naming conventions for these variables.

The final key set of provider variables relates to characteristics of the provider: provider facility type (PROV_FAC), type of care offered by the provider (NCARER1 to NCARER6), participation in the Vaccines for Children (VFC) program (VFC_PRO), and an indicator of whether the child's vaccinations are reported to a community or state immunization registry (REGISTRY).

Use of the NIS Sampling Weights

The NIS PUF contains two child-level weights. The HY_WGT variable gives the household weight for each child. It should be used to form estimates from the children with completed household interviews. This weight reflects the stratified sample design and also adjusts for unit nonresponse, for poststratification to population control totals, and for the exclusion of nontelephone children from the NIS. The weight variable that applies to children with adequate provider data is W0. This weight should be used to form estimates of vaccination coverage rates. Each child with adequate provider data (PDAT = 1) has a value of W0.

The NIS PUF does not contain any provider-level weights. The NIS does not sample providers directly; rather, they are included in the survey through the children they vaccinate. A user of the NIS PUF should not attempt provider-level analyses (e.g., estimate the percentage of providers in the U.S. that participate in the Vaccines for Children program), because the NIS sample was not designed for that purpose.

Estimation and Analysis

Estimating Vaccination Coverage Rates

Vaccination coverage rates are ratio estimates, as described by the statistical literature on methods for complex sample surveys. Because of the adjustment to the sampling weights for partial nonresponse, statistical analyses require only data from children with adequate provider data (PDAT = 1), along with their partial-nonresponse-adjusted sampling weights

(W0). To summarize the statistical methodology by which vaccination coverage rates and their standard errors are obtained from these data, let Y_{hij} be an indicator, for the jth child with adequate provider data in the ith sampled household in the hth stratum (IAP area) of the NIS sampling design, that is equal to 1 if the child is up-to-date according the provider data and 0 otherwise. Also, let W_{hij} denote the value of W0 for this child. Then, letting $\hat{Y}_h = \sum_{i=1}^{n_h} \sum_{j=1}^{m_{hi}} W_{hij} Y_{hij}$ and $\hat{T}_h = \sum_{i=1}^{n_h} \sum_{j=1}^{m_{hi}} W_{hij}$, the national estimator of the vaccination coverage rate may be expressed as

$$\hat{q} = \frac{\sum_{h=1}^{L} \hat{Y}_h}{\sum_{h=1}^{L} \hat{T}_h}$$

where L denotes the number of strata (the 78 IAP areas), n_h denotes the number of sampled households containing children with adequate provider data in the hth IAP area, and m_{hi} denotes the number of age-eligible children with adequate provider data in the ith household in the hth IAP area.

Letting L denote the number of IAP areas in a state, the above formula can also be used to calculate vaccination coverage rates for states containing two or more IAP areas and for states containing only one IAP area.

Estimating Standard Errors of Vaccination Coverage Rates

The Taylor-series method can be used to estimate the sampling variance of vaccination coverage rates for the U.S., the states, and IAP areas. Letting $Z_{hij} = \frac{W_{hij}(Y_{hij} - \hat{q})}{\hat{T}_h}$, $Z_{hi} = \sum_{j=1}^{m_{hi}} Z_{hij}$, and $\bar{Z}_h = \frac{\sum_{i=1}^{n_h} Z_{hi}}{n_h}$, an estimator of the variance of the vaccination coverage rate, $\hat{q}$, is

$$\hat{V}(\hat{q}) = \sum_{h=1}^{L} \frac{n_h}{n_h - 1} \sum_{i=1}^{n_h} (Z_{hi} - \bar{Z}_h)^2 .$$

The calculation of standard errors for estimates of vaccination coverage rates in the NIS can be implemented in statistical software such as SUDAAN (Shah et al. 1997), SAS (SAS Institute Inc. 1999) and Stata (Stata Corporation 2001). Appendix F gives examples of the use of SUDAAN to estimate vaccination coverage rates and their standard errors for IAP areas and states. For PROC CROSSTAB, the DESIGN = WR (with-replacement sampling of Primary Sampling Units within stratum) option is used, because the sampling fractions for households within an IAP area are all quite small. In these applications the IAP area (ITRUEIAP) is used as the stratum variable, and the household identifier (SEQNUMHH) is used as the Primary Sampling Unit identifier. The data file should first be sorted on ITRUEIAP and then sorted on SEQNUMHH within ITRUEIAP before running SUDAAN. As indicated above, W0 is used as the weight variable.

8. Summary Tables

Appendix H contains seven tables. As mentioned in Section 2, Table H.1 lists the 78 IAP areas by state. For the U.S. and for each state and IAP area, it gives the estimated population total of children 19 to 35 months of age in 1999 and (from 1999 NIS data collection) the number of children with completed household interviews and the number of children with adequate provider data.

Tables H.2 through H.5 summarize pairs of variables: age group of child by WIC participation (Table H.2), age group by family income (Table H.3), age group by race/ethnicity (Table H.4), and age group by gender (Table H.5). Each of these tables gives the unweighted and weighted counts of children who have completed household interviews and the unweighted and weighted counts of children with adequate provider data.

Table H.6 gives unweighted counts of children for shot card use by the presence of adequate provider data.

Table H.7 presents estimates of vaccination coverage and 95-percent confidence-interval half-widths obtained from SUDAAN. The data user should obtain the same estimates from the public-use file.

9. Citations for NIS Data

In publications please acknowledge CDC (NCHS and NIP) as the original data source. The reference for the 1999 NIS Public-Use File is:

U.S. Department of Health and Human Services (DHHS). National Center for Health Statistics. The 1999 National Immunization Survey, CD-ROM No. 1. Hyattsville, MD: Centers for Disease Control and Prevention, 2001.

Please place the acronym "NIS" in the titles, keywords, or abstracts of journal articles and other publications in order to facilitate the retrieval of such materials in bibliographic searches.

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Appendix A

Glossary of Abbreviations and Terms

Glossary of Commonly-Used Abbreviations and Terms

4:3:1	The series of 4 or more DTP vaccinations, 3 or more polio immunizations, and 1 or more MMR vaccinations
4:3:1:3	The series of 4 or more DTP vaccinations, 3 or more polio immunizations, 1 or more MMR vaccinations, and 3 or more Hib vaccinations
4:3:1:3:3	The series of 4 or more DTP vaccinations, 3 or more polio immunizations, 1 or more MMR vaccinations, 3 or more Hib vaccinations, and 3 or more hepatitis B vaccinations
CATI	Computer-Assisted Telephone Interviewing
CDC	Centers for Disease Control and Prevention
DOB	Date of birth
DTaP	Diphtheria and tetanus toxoids and acellular pertussis vaccine
DTP	Diphtheria and tetanus toxoids and pertussis vaccine
DT	Diphtheria and tetanus toxoids
Hep B	Hepatitis B
Hib	*Haemophilus influenzae* type b
IHQ	Immunization history questionnaire
IPV	Inactivated poliovirus vaccine
MCV	Measles-containing vaccine
MMR	Measles, mumps, and rubella
NCHS	National Center for Health Statistics
NHIS	National Health Interview Survey
NIP	National Immunization Program
NSC	Non-shot-card
OPV	Oral poliovirus vaccine
RDD	Random-digit dialing
SC	Shot card
UTD	Up-to-date
VFC	Vaccinations for Children program
VRC	Varicella
WIC	Special Supplemental Nutrition Program for Women, Infants and Children

Appendix B

NIS Household Questionnaire

Major changes to the NIS Telephone Interview

On July 14, 1999, two major changes were made to the NIS telephone interview. First, questions regarding a child's immunization for rotavirus were added. These questions were added to the following sections:

Section SR - Shot Record Callback

SRV. How many rotavirus shots did [FILL CHILD'S NAME] ever receive?

Section A - Available Shot Records

AN7. (Looking at the shot record) Please tell me how many times [FILL CHILD'S NAME] has received a rotavirus shot.

AD7. What is the date (on the record) for the [FILL NUMBER] (rotavirus) shot?

A12_R. Has [FILL CHILD'S NAME] ever received an additional rotavirus shot?

A12_S. How many additional rotavirus shots did [FILL CHILD'S NAME] ever receive?

Section B- NO Shot Records.

B6_R. Has [FILL CHILD'S NAME] ever received a rotavirus shot?

B6_V. How many rotavirus shots did [FILL CHILD'S NAME] ever receive?

Second, the wording of questions asking about the child's and mother's race and Hispanic ethnicity and the wording of the response categories were changed to follow the latest OMB guidelines. The following questions note the changes in wording that were made. (Words in italics were added, struck through items were removed.)

C2/C8. Is [FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5] of Spanish, Hispanic, *or Latino* descent, that is, Mexican, Mexican-American, *Central American, South American*, Chicano, Puerto Rican, or Cuban? [CHECK ALL THAT APPLY]

1 NO, NOT SPANISH/HISPANIC
2 YES, MEXICAN/*MEXICANO*
3 YES, MEXICAN-AMERICAN
4 *YES, CENTRAL AMERICAN*
5 *YES, SOUTH AMERICAN*
6 *YES, CHICANO*
7 *YES, PUERTO RICAN*
8 YES, CUBAN/*CUBAN AMERICAN*
9 YES, OTHER SPANISH-CARRIBEAN
10 OTHER SPANISH/*HISPANIC* (SPECIFY)

C3/C9. Is [FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5] White, Black *or African American,* ~~Indian~~/ *Native American, Alaska Native*, Asian, *Native Hawaiian or other Pacific Islander*, or another race? [CHECK ALL THAT APPLY]

1 WHITE
2 BLACK/*AFRICAN AMERICAN,*
3 *NATIVE* AMERICAN ~~INDIAN~~
4 *ALASKA NATIVE*
5 ASIAN
6 *NATIVE HAWAIIAN*
7 *PACIFIC ISLANDER*

As noted above these changes were made during July 1999, and do not affect the 1999 Public-Use File

because the variables for rotavirus are not released in the file and race of child and mother is still compiled into the same categories, even though it is collected differently.

NIS Hard Copy Questionnaire

SCREENER

July 31, 1997

Confidential Information

Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence by Abt Associates and CDC, will be used only for purposes stated in this study, and will not be disclosed or released to anyone other than authorized staff of CDC without the consent of the individual or establishment in accordance with Section 308(d) of the Public Health Service Act (42 U.S.C. 242m).

CASE ID_____ DATE _____

INTERVIEWER ID_____

TELEPHONE NUMBER _____

DATA ENTRY: DATE_____ ENTERED BY _____ (INTERVIEWER ID)

		ALT KEYS	CHECK	DISP
#1.	IF AT ANY POINT DURING THE INTRO OR S1, THE RESPONDENT STATES THAT THE PHONE NUMBER IS FOR A BUSINESS AND HANGS UP, USE **<ALT><B>** KEYS. THEN GO TO RECORD OF CALLS, AND ENTER COMMENTS DESCRIBING CALL.			409
#2.	IF THE TELEPHONE IS INITIALLY ANSWERED IN A WAY THAT INDICATES THE PHONE NUMBER IS FOR BUSINESS USE ONLY (E.G., "CLEVELAND CHAMBER OF COMMERCE") USE **<ALT>** **<Z>** AT INTRO TO PROBE "Is this telephone number for business use only". IF THE ANSWER IS "YES", GO TO RECORD OF CALLS, AND ENTER COMMENTS DESCRIBING CALL. IF THE ANSWER IS "NO", SELECT RESPONSE AND YOU WILL GO BACK TO THE INTRODUCTION AND COMPLETE INTERVIEW.			409
#3.	IF AT ANY POINT DURING THE INTRO OR S1, THE RESPONDENT STATES THAT THERE ARE NO CHILDREN AND HANGS UP, USE **<ALT><K>** KEYS TO CODE AS HAVING NO CHILDREN, GO TO RECORD OF CALLS, AND ENTER COMMENTS DESCRIBING CALL.			429
#4.	USE **<F9>** KEY PROBE IF R VOLUNTEERS "NO CHILDREN" AT INTRO, S1, S2, OR S3 BUT DOES NOT HANG UP: "Just to make sure I have this correct, are there any children between the ages of 12 months and 3 years old living or staying in your household?" YES 1 CONTINUE AT BEGINNING OF QUESTION WHERE INTERRUPTION OCCURRED NO 2 GO TO ELIGIBILITY STATUS CHECKPOINT (S1=YES=1, S2=DK=6)			429

Intro_1 Hello, my name is _____. I'm calling on behalf of the Centers for Disease Control and Prevention. We're conducting a nationwide immunization study to find out how many children under 4 (years of age) are receiving all of the recommended vaccinations for childhood diseases. Your telephone number has been selected at random to be included in the study. The questions I have will take only a few minutes.

CONTINUE WITH INTERVIEW 1
HUDI - During 1st/2nd Sentence 2
HUDI - After end 2nd sentence 3
HUDI - After end 3rd sentence 4
HUDI - After end last sentence 5

S1. Am I speaking to someone who lives in this household who is over 17 years old? (Verify age if necessary through interviewer instructions.)

I AM THAT PERSON	1	GO TO S_NUMB
THIS IS A BUSINESS	2	We are interviewing only in private residences. Thank you very much. [**TERMINATE INTERVIEW**]
NEW PERSON COMES TO PHONE	3	REPEAT INTRO_1 HERE, VERIFY PERSON'S AGE AND GO TO S_NUMB
REFUSED	7	GO TO REFUSAL CONVERSION
DOES NOT LIVE IN HOUSEHOLD	8	CALLBACK
NO PERSON AT HOME WHO IS AT LEAST 17	9	GO TO S2_B

S2_B Does anyone live in your household who is over 17 years old?

YES	1	When would be a good time for me to call back and talk to that person?[SCHEDULE APPOINTMENT]
NO	2	GO TO S_NUMB

S_NUMB How many children between the ages of 12 months and 3 years old are living or staying in your household?

IF ONE OR MORE, ENTER # OF CHILDREN . . . . . _____		(01 TO 09)
NO CHILDREN	00	These are all the questions I have. This survey is collecting information about the health of children between 12 months and 3 years old only. I'd like to thank you on behalf of the Centers for Disease Control and Prevention for the time you spent answering these questions. [**TERMINATE INTERVIEW**]

S3_LTR A letter describing this study may have been sent to your home recently. Do you remember seeing the letter?

YES	1
NO	2
DON'T KNOW	6
REFUSED	7

S3_INTRO As the letter explained, this study is voluntary and is authorized by the U.S. Public Health Service Act. The information you give will be kept in strict confidence and will be summarized for research purposes only. It's all right to skip any questions you don't want to answer.

S3_EVAL In order to evaluate my performance, my supervisor may record and listen as I ask the questions. I READ THESE STATEMENTS TO THE RESPONDENT.

YES 1

☐ 1. IF S_NUMB = 1 (ONLY 1 CHILD)

☐ 2. IF S_NUMB ≥ 2 (MORE THAN 1 CHILD)))))))))) GO TO S3.MKIDS

S3.1KID. So I'll know which vaccination questions to ask, please tell me the month, day and year of birth of the [child] in your household who [is] between 12 months and 3 years old.

HAS A CHILD UNDER 4 1	GO TO S3.3.
NO CHILD UNDER 4 0	**YES**: REPEAT S3.1KID. **NO**: These are all the questions I have. This survey is collecting information about the health of children between 12 months and 3 years old only. I'd like to thank you on behalf of the Centers for Disease Control and Prevention for the time you spent answering these questions. [**TERMINATE INTERVIEW**]
DON'T KNOW 6	GO TO S_NODAY
REFUSED NAMES OR INITIALS 7	GO TO S_NODAY

S3.MKIDS. So I'll know which vaccination questions to ask, please tell me the month, day and year of birth of the [# from S_NUMB] children in your household who are between 12 months and 3 years old.

HAS CHILDREN UNDER 4	1	GO TO S3.3.
NO CHILDREN UNDER 4	0	**YES**: REPEAT S3.MKIDS. **NO**: These are all the questions I have. This survey is collecting information about the health of children between 12 months and 3 years old only. I'd like to thank you on behalf of the Centers for Disease Control and Prevention for the time you spent answering these questions. [**TERMINATE INTERVIEW**]
DON'T KNOW	6	GO TO S_NODAY
REFUSED NAMES OR INITIALS	7	GO TO S_NODAY

S_NODAY I would like to assure you that ALL information will be kept in strict confidence and will be summarized for research purposes only. Our questions are about the vaccinations of children in a specific age range. We only ask for children's birth dates in order to determine what age range they fall with in and to help us research the numbers and types of vaccinations that children of various ages have received. [IF NECESSARY: If you could at least tell me the month and year of your child's birth that would be extremely helpful and we could proceed with that information.]

IF RESPONDENT STILL REFUSES TO PROVIDE THE BIRTH DATE, SKIP TO S_DAY_Q; ELSE GO TO S3.3 TO CORRECT DATES.

S_DAY_Q I understand your concerns but without your child(ren)'s birth date(s) we cannot proceed any further with our survey. These are all the questions I have. I would like to thank you on behalf of the Centers for Disease Control and Prevention for the time and effort you have spent answering these questions. [**TERMINATE INTERVIEW**]

[ASK S3.3, S3_CONF, S3.4, AND S3.5 FOR EACH RESPONSE IN S3.1KID OR S3.MKIDS; RECORD ON ELIGIBILITY GRID]

S3.3 ENTER BIRTH DATES (mm/dd/yyyy)
FROM S3.1KID OR S3.MKIDS IN ELIGIBILITY GRID ON PAGE 7.

S3_CONF. Based on the birth dates you provided me earlier, that would make the [ordinal # of kid derived from S_NUMB] child [age of child in months] months old; is that correct?

DON'T KNOW 6
REFUSED 7

S3.4. Is the child born in [insert month and year of birth] male or female?

DON'T KNOW 6
REFUSED 7

S3.5. So I'll know how to refer to [him/her] during the interview, please tell me [his/her] first name or initials.

DON'T KNOW 6
REFUSED 7

S3_C. I have listed [NAMES FROM S3.5]. Have I missed any babies or small children between 12 months and 3 years old?

YES	1	CONFIRM # AT S_NUMB, CHANGE AS NECESSARY AND REPEAT S3.3, S3_CONF, S3.4, S3.5 for missed children
NO	2	GO TO ELIG.CHECKPOINT

ELIGIBILITY GRID

LISTING TABLE OF CHILDREN BETWEEN THE AGES OF 12 MONTHS AND 3 YEARS OLD

CHECK BELOW, WHERE APPLICABLE

					COL. 1	**COL. 2**	**COL. 3**
	S3.3 Date of Birth	**S3_CONF Age Confirm**	**S3.4 Sex**	**S3.5 First Name/ Initials**	**Primary Eligible 19 to 35 months**	**Secondary Eligible 12 to 18 months**	**Secondary Eligible 36 to 47 months**
					___/___/_____ to ___/___/_____	___/___/_____ to ___/___/_____	___/___/__ to ___/___/__
Child 1	___/___/____	Y N	M F				
Child 2	___/___/____	Y N	M F				
Child 3	___/___/____	Y N	M F				
Child 4	___/___/____	Y N	M F				
Child 5	___/___/____	Y N	M F				
Child 6	___/___/____	Y N	M F				
Child 7	___/___/____	Y N	M F				
Child 8	___/___/____	Y N	M F				
Child 9	___/___/____	Y N	M F				

ELIGIBILITY STATUS CHECKPOINT

☐ 1. ANY Checks in Column 1))))))))))))))))))Q — GO TO S4

☐ 2. NO Checks in Column 1

☐ 1. ANY Checks in Column 2 or 3

☐ 2. NO Checks in Column 2 or 3))))))))))))))Q — GO TO S3_TERM

[ASK S3.SEC.A THROUGH S3.SEC.D FOR EACH RESPONSE IN S3.1KID OR S3.MKIDS; RECORD ON GRID BELOW]

	S3.5 First Name	**S3_SEC_A. Do you have <u>any</u> shot records for [NAME of FIRST CHILD from S3.5]?**	**S3_SEC_B. Are the shot records for [NAME of FIRST CHILD from S3.5] accessible?**	**S3_SEC_C Are you the person who took [NAME of FIRST CHILD from S3.5] for most of [(his/her) from S3.4] shots? (Most means at least one-half of the shots)**	**S3_SEC_D In your opinion, has [NAME of FIRST CHILD from S3.5] received all of the recommended shots for [(his/her) from S3.4.]'s age?**
Child 1		YES NO DK REF _____\/_____/ GO TO S3_SEC_C	YES NO DK REF	YES NO	YES NO __\/__/ Next child or S3_TERM
Child 2		YES NO DK REF _____\/_____/ GO TO S3_SEC_C	YES NO DK REF	YES NO	YES NO __\/__/ Next child or S3_TERM
Child 3		YES NO DK REF _____\/_____/ GO TO S3_SEC_C	YES NO DK REF	YES NO	YES NO __\/__/ Next child or S3_TERM
Child 4		YES NO DK REF _____\/_____/ GO TO S3.SEC.C	YES NO DK REF	YES NO	YES NO __\/__/ Next child or S3_TERM

S3_TERM Those are all the questions I have. (I'd like to thank you on behalf of the Centers for Disease Control and Prevention for the time and effort you spent answering these questions.) [**TERMINATE INTERVIEW**]

S4. Since this survey asks about immunizations children may have received, I need to speak to the person living in your household who knows the most about the immunizations or shots that [FIRST NAMES/INITIALS from S3.5] (has/have) received. Are you this person?

YES	1	GO TO S6_INTRO
NO	2	

S5. May I speak with this person now?

YES	1	GO TO S5_BOX
NO, NOT AT HOME	2	GO TO MR1

S5_BOX READ WHEN NEW PERSON COMES TO THE PHONE
OR
FOR Most Knowledgeable Respondent CALLBACK INTRODUCTION

Hello, my name is _____. I'm calling on behalf of the Centers for Disease Control and Prevention. We're conducting a national study about the vaccinations of children between the ages of 12 months and 3 years old. I'd like you to know that this study is voluntary and is authorized by the U.S. Public Health Service Act. The information you give will be kept in strict confidence and will be summarized for research purposes only. It's all right to skip any questions you don't want to answer.

S6_INTRO The following questions ask about immunizations or shots for [FIRST NAMES OF ALL ELIGIBLE CHILDREN, FROM S3.5]. Because the Centers for Disease Control and Prevention needs accurate information on immunizations children receive, we would like you to refer to shot records.

THIS PAGE

SHOULD

BE BLANK

[ASK S6_X. THROUGH S7.B_X. FOR EACH RESPONSE IN S3.1KID OR S3.MKIDS; RECORD ON GRID BELOW]

	S3.5 First Name	**S6_X Do you have <u>any</u> shot records for [NAME OF FIRST CHILD]?**	**S7_X Are the shot records for [NAME OF FIRST CHILD] handy?**	**S7.A. Can you please go get the shot records for [FIRST NAMES OF CHILD(REN) WITH SHOT RECORDS -- S7_X.=YES] while I wait on the phone?**	**S7.B_X Am I correct that you have the shot records for [NAMES OF ALL CHILDREN WITH SHOT RECORDS]?**
CHILD 1		YES NO DK REF _____\/_____/ Repeat S6_X for next child or Go To S8	YES Repeat S6_X for next child or Go To S7.A NO Repeat S6_X for next child or Go to S8	YES NO	YES NO Go To S8.A. Go To S8.B.
CHILD 2		YES NO DK REF _____\/_____/ Repeat S6_X for next child or Go To S8	YES Repeat S6_X for next child or Go To S7.A NO Repeat S6_X for next child or go to S7.A OR S8	YES NO	YES NO Go To S8.A. Go To S8.B.
CHILD 3		YES NO DK REF _____\/_____/ Repeat S6_X for next child or Go To S8	YES Repeat S6_X for next child or Go To S7.A NO Repeat S6_X for next child or go to S7.A OR S8	YES NO	YES NO Go To S8.A. Go To S8.B.
CHILD 4		YES NO DK REF _____\/_____/ Repeat S6_X for next child or Go To S8	YES Repeat S6_X for next child or Go To S7.A NO Repeat S6_X for next child or go to S7.A OR S8	YES NO	YES NO Go To S8.A. Go To S8.B.
CHILD 5		YES NO DK REF _____\/_____/ Repeat S6_X for next child or Go To S8	YES Repeat S6_X for next child or Go To S7.A NO Repeat S6_X for next child or go to S7.A OR S8	YES NO	YES NO Go To S8.A. Go To S8.B.

DK = DON'T KNOW REF = REFUSAL

S8. EXISTENCE OF SHOT RECORDS CHECKPOINT

ALL S6_X ANSWERS ARE "YES". 1	GO TO S8.A.
ALL S6_X ANSWERS ARE "NO". 2	GO TO B1 AND ASK FOR EACH CHILD IN HOUSEHOLD
ALL OTHERS 3	GO TO S8.B.

S8.A. CHECKPOINT FOR HOUSEHOLDS WHERE ALL CHILDREN HAVE SHOT RECORDS

ALL S7.A. AND S7.B_X ANSWERS ARE "YES". .. .1	GO TO SECTION A SHOT RECORD (*NO CALLBACK NEEDED*)
ALL S7.A AND S7.B_X ANSWERS ARE "NO" . . . 2	GO TO SR1 (***CALLBACK NEEDED***)
ALL OTHERS 3	ASK SECTION A FOR CHILDREN WITH SHOT RECORDS AND SECTION B FOR CHILDREN WITHOUT SHOT RECORDS (*NO CALLBACK NEEDED*)

S8.B. CHECKPOINT FOR HOUSEHOLDS WHERE SOME CHILDREN HAVE SHOT RECORDS AND SOME CHILDREN DO NOT HAVE SHOT RECORDS

ALL S7.A AND S7.B_X ANSWERS ARE "YES" 1	ASK SECTION A FOR CHILDREN WITH SHOT RECORDS AND SECTION B FOR CHILDREN WITHOUT SHOT RECORDS (*NO CALLBACK NEEDED*)
ALL S7.A AND S7.B_X ANSWERS ARE "NO" 2	GO TO B1 AND ASK FOR EACH CHILD IN HOUSEHOLD
ALL OTHERS 3	(*NO CALLBACK NEEDED*)
	ASK SECTION A FOR CHILDREN WITH SHOT RECORDS AND SECTION B FOR CHILDREN WITHOUT SHOT RECORDS (*NO CALLBACK NEEDED*)

CASE ID _____

TELEPHONE NUMBER _____

INTERVIEW DATE _____

INTERVIEWER ID _____

DATA ENTRY: DATE_____ BY _____(INTERVIEWER ID)

NIS Hard Copy Questionnaire

PART 2

October 7, 1998

SECTION MR - *Most Knowledgeable Respondent Callback*

SECTION SR - *Shot Record Callback*

SECTION A - *Available Shot Records*

SECTION B - *NO Shot Records*

SECTION C - *Demographics*

SECTION D - *Provider*

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SECTION MR

Most Knowledgeable Respondent Callback Questions

MR1. Before we hang up, please tell me the first name of the person who knows the most about (this child's/these children's) immunizations.

FIRST NAME _____

REFUSED 7

MR2. When would be a good time to call back to speak with [FILL VAR: this person/NAME FROM MR1]?

MR2 DATE_____

MR2_2 TIME_____

MR3. Would I call the same telephone number where I reached you?

YES . . . . . 1 GO TO MR_TERM

NO 2

MR4. What number should I call?

AREA CODE: _____

NUMBER: _____

MR_TERM.

Those are all the questions I have. (I'd like to thank you on behalf of the Centers for Disease Control and Prevention for the time and effort you spent answering these questions.) [**TERMINATE INTERVIEW**]

SECTION SR

Shot Record Callback Questions

I would like to ask you a few questions now, and we can complete the rest of the questions when I call back.

SR1. If I called you back (in a few minutes/later), would you be able to have shot records available for [FILL VAR: FIRST NAMES OF ALL ELIGIBLE CHILDREN FROM S3.5]?

YES	1	
NO	2	GO TO B1
DON'T KNOW	6	GO TO B1
REFUSED	7	GO TO B1

SR2. When is a good time to call you back?

SR2 DATE_____

SR2_2 TIME_____

SR3. And what is your first name, so that I know who to ask for?

_____
(FIRST NAME)

REFUSED 7

SR4. Has [FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5] ever received an immunization, that is a shot or drops?

YES	1	
NO	2	GO TO C1
DON'T KNOW	6	GO TO C1
REFUSED	7	GO TO C1

SR5. How many D-T-P or D-T shots (sometimes called a D-P-T shot, diphtheria-tetanus-pertussis shot, baby shot, three-in-one shot) did [FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5] ever receive?

NUMBER OF SHOTS	☐
ALL	50
DON'T KNOW	96
REFUSED	97

SR6. How many polio vaccines by mouth, pink drops, sometimes called O-P-V, or by a polio shot, sometimes called I-P-V did [FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5] ever receive?

NUMBER OF VACCINES . . . . . ☐
ALL 50
DON'T KNOW 96
REFUSED 97

SR7. How many measles or M-M-R (Measles-Mumps-Rubella) shots did [FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5] ever receive?

NUMBER OF SHOTS . . . . . ☐
ALL 50
DON'T KNOW 96
REFUSED 97

SR8. How many H-I-B shots (this is for Meningitis and is called Haemophilus Influenzae {HA-MA-FI-LUS IN-FLU-EN-ZI}, H-I-B vaccine, or H flu vaccine) did [FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5] ever receive?

NUMBER OF SHOTS . . . . . ☐
ALL 50
DON'T KNOW 96
REFUSED 97

SR9. How many Hepatitis B shots did [FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5] ever receive?

NUMBER OF SHOTS . . . . . ☐
ALL 50
DON'T KNOW 96
REFUSED 97

SR0. How many chicken pox (or Varicella) shots did [FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5] ever receive?

NUMBER OF SHOTS . . . . . ☐
ALL 50
DON'T KNOW 96
REFUSED 97

SR.A I've been asking about shots received by [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5]. Now I would like to ask, has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] EVER been ill with chicken pox (or Varicella)?

YES	1	GO TO SR.B
NO	2	GO TO SECTION C
DON'T KNOW	6	GO TO SECTION C
REFUSED	7	GO TO SECTION C

SR.B About how old was ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]), in months, when (he/she) had chicken pox?

AGE CHILD HAD
CHICKEN POX . . . . . __|__ MONTHS
REFUSED 97

IF UNABLE TO GIVE EXACT MONTHS
SR.C Was ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5])...

...one to six months old?	01
...seven to twelve months old?	02
...13 to 18 months old?	03
...19 to 24 months old?	04
...25 to 30 months old?	05
...31 to 35 months old?	06
DON'T KNOW	96
REFUSAL	97

GO TO C1: DEMOGRAPHICS

SECTION A

Available Shot Records

NOTE: SECTION A IS ASKED ONLY FOR CHILDREN WITH SHOT RECORDS AVAILABLE (FROM S6 AND S7)

NOTE: EACH SECTION (A, C AND D) IS ASKED IN ITS ENTIRETY FOR EACH CHILD WITH SHOT RECORDS.
EACH SECTION (A, B AND D) IS ASKED IN ITS ENTIRETY FOR EACH CHILD WITHOUT SHOT RECORDS.

SHOT RECORD FOR DTP/DT SHOT

A1. Looking at the shot record, please tell me how many times **[FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5]** has received a D-T-P or D-T shot, sometimes called a D-P-T shot, diphtheria-tetanus-pertussis shot, baby shot, or three-in-one shot.

IF R MENTIONS A SHOT NOT LISTED ABOVE, RECORD IN "OTHER SHOTS"- QUESTION A6

Shots . . . . . ☐ RECORD DATES BELOW

NONE . . . . . 0 GO TO A2
DON'T KNOW . . . . . 6 GO TO A2
REFUSED . . . . . 7 GO TO A2

A1.A. What is the date (on the record) for the [FILL VAR: (First/Second/...Eighth)] (D-T-P or D-T) shot?

	___ / ___ / ____ (MO DAY YEAR)	DON'T KNOW . . 9996 GO TO A2 REFUSED . . . . . 9997 GO TO A2
1st Shot		
2nd Shot		
3rd Shot		
4th Shot		
5th Shot		
6th Shot		
7th Shot		
8th Shot	GO TO A2	

SHOT RECORD FOR POLIO (DROPS OR SHOTS)

A2. Looking at the shot record, please tell me how many times **[FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5]** has received a polio vaccine -- pink drops, sometimes called O-P-V -- or a polio shot, sometimes called I-P-V.

IF R MENTIONS A SHOT NOT LISTED ABOVE, RECORD IN "OTHER SHOTS"- QUESTION A6

Shots . . . . . ☐ RECORD DATES BELOW

NONE . . . . . 0 GO TO A3
DON'T KNOW . . . . . 6 GO TO A3
REFUSED . . . . . 7 GO TO A3

A2.A. What is the date (on the record) for the [FILL VAR: (First/Second/...Eighth)] polio vaccine?

	___ / ___ / ____ MO DAY YEAR	DON'T KNOW . . . 9996 GO TO A3 REFUSED . . . . . 9997 GO TO A3
1st Shot		
2nd Shot		
3rd Shot		
4th Shot		
5th Shot		
6th Shot		
7th Shot		
8th Shot	GO TO A3	

SHOT RECORD FOR MEASLES/MMR (SHOTS)

A3. Looking at the shot record, please tell me how many times **[FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5]** has received a measles or M-M-R, that is, a measles, mumps, and rubella, shot.

IF R MENTIONS A SHOT NOT LISTED ABOVE, RECORD IN "OTHER SHOTS"-QUESTION A6

Shots . . . . . ☐ RECORD DATES BELOW

NONE . . . . . 0 GO TO A4
DON'T KNOW . . . . . 6 GO TO A4
REFUSED . . . . . 7 GO TO A4

A3.A. What is the date (on the record) for the [FILL VAR: (First/Second/...Fourth)] (measles or M-M-R) shot?

A3.B. Was that shot measles only or M-M-R only?

1st Shot	___ / ___ / ____ MO DAY YEAR	DON'T KNOW . . . . . 9996 GO TO A4 REFUSED . . . . . 9997 GO TO A4
	MEASLES ONLY . . . . . 1 MMR ONLY . . . . . 2 DON'T KNOW . . . . . 6 REFUSED 7	
2nd Shot	___ / ___ / ____ MO DAY YEAR	DON'T KNOW . . . . . 9996 GO TO A4 REFUSED . . . . . 9997 GO TO A4
	MEASLES ONLY . . . . . 1 MMR ONLY . . . . . 2 DON'T KNOW . . . . . 6 REFUSED 7	
3rd Shot	___ / ___ / ____ MO DAY YEAR	DON'T KNOW . . . . . 9996 GO TO A4 REFUSED . . . . . 9997 GO TO A4
	MEASLES ONLY . . . . . 1 MMR ONLY . . . . . 2 DON'T KNOW . . . . . 6 REFUSED 7	
4th Shot	___ / ___ / ____ MO DAY YEAR	DON'T KNOW . . . . . 9996 GO TO A4 REFUSED . . . . . 9997 GO TO A4
	MEASLES ONLY . . . . . 1 MMR ONLY . . . . . 2 DON'T KNOW . . . . . 6 REFUSED 7	

GO TO A4

SHOT RECORD FOR HIB (SHOT)

A4. (Looking at the shot record) Please tell me how many times **[FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5]** has received an H-I-B shot. (This is for Meningitis and is called HA-MA-FI-LUS IN-FLU-EN-ZI , H-I-B vaccine, or H flu vaccine.)

IF R MENTIONS A SHOT NOT LISTED ABOVE, RECORD IN "OTHER SHOTS"- QUESTION A6

Shots . . . . . ☐ RECORD DATES BELOW

NONE . . . . . 0 GO TO A5
DON'T KNOW . . . . . 6 GO TO A5
REFUSED . . . . . 7 GO TO A5

A4.A. What is the date (on the record) for the [FILL VAR: (First/Second/...Eighth)] (H-I-B) shot?

	___ / ___ / ____ MO DAY YEAR	DON'T KNOW . . . 9996 GO TO A5 REFUSED . . . . . 9997 GO TO A5
1st Shot		
2nd Shot		
3rd Shot		
4th Shot		
5th Shot		
6th Shot		
7th Shot		
8th Shot	GO TO A5	

SHOT RECORD FOR HEPATITIS B

A5. (Looking at the shot record) Please tell me how many times **[FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5]** has received a Hepatitis B shot.

IF R MENTIONS A SHOT NOT LISTED ABOVE, RECORD IN "OTHER SHOTS"- QUESTION A6

Shots	☐ RECORD DATES BELOW
NONE 0	GO TO A5.b.
DON'T KNOW 6	GO TO A5.b.
REFUSED 7	GO TO A5.b.

A5.A. What is the date (on the record) for the [FILL VAR: (First/Second/...Eighth)] (Hepatitis B) shot?

1st Shot	___ / ___ / 19__ MO DAY YEAR	DON'T KNOW	9996	GO TO A5.b.
		REFUSED	9997	GO TO A5.b.
2nd Shot	___ / ___ / 19__ MO DAY YEAR	DON'T KNOW	9996	GO TO A5.b.
		REFUSED	9997	GO TO A5.b.
3rd Shot	___ / ___ / 19__ MO DAY YEAR	DON'T KNOW	9996	GO TO A5.b.
		REFUSED	9997	GO TO A5.b.
4th Shot	___ / ___ / 19__ MO DAY YEAR	DON'T KNOW	9996	GO TO A5.b.
		REFUSED	9997	GO TO A5.b.
5th Shot	___ / ___ / 19__ MO DAY YEAR	DON'T KNOW	9996	GO TO A5.b.
		REFUSED	9997	GO TO A5.b.
6th Shot	___ / ___ / 19__ MO DAY YEAR	DON'T KNOW	9996	GO TO A5.b.
		REFUSED	9997	GO TO A5.b.
7th Shot	___ / ___ / 19__ MO DAY YEAR	DON'T KNOW	9996	GO TO A5.b.
		REFUSED	9997	GO TO A5.b.
8th Shot	___ / ___ / 19__ MO DAY YEAR	DON'T KNOW	9996	GO TO A5.b.
		REFUSED	9997	GO TO A5.b.
		GO TO A5.b.		

SHOT RECORD FOR CHICKEN POX

A5.b. (Looking at the shot record) Please tell me how many times **[FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5]** has received a chicken pox (or Varicella) shot.

IF R MENTIONS A SHOT NOT LISTED ABOVE, RECORD IN "OTHER SHOTS"-QUESTION A6

Shots . . . . . ☐ RECORD DATES BELOW

NONE . . . . . 0 GO TO A5.d
DON'T KNOW . . . . . 6 GO TO A5.d
REFUSED . . . . . 7 GO TO A5.d

A5.c. What is the date (on the record) for the [FILL VAR: (First/Second/...Fourth)] (chicken pox) shot?

1st Shot	___ / ___ / 19__ MO DAY YEAR	DON'T KNOW . . . . . 9996 GO TO A5.d REFUSED . . . . . 9997 GO TO A5.d
2nd Shot	___ / ___ / 19__ MO DAY YEAR	DON'T KNOW . . . . . 9996 GO TO A5.d REFUSED . . . . . 9997 GO TO A5.d
3rd Shot	___ / ___ / 19__ MO DAY YEAR	DON'T KNOW . . . . . 9996 GO TO A5.d REFUSED . . . . . 9997 GO TO A5.d
4th Shot	___ / ___ / 19__ MO DAY YEAR	DON'T KNOW . . . . . 9996 GO TO A5.d REFUSED . . . . . 9997 GO TO A5.d

GO TO A5.d

A5.d I've been asking about shots received by [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5. Now I would like to ask, has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] EVER been ill with chicken pox (or Varicella)?

YES	1	GO TO A5.e
NO	2	GO TO A6 OR NEXT CHILD
DON'T KNOW	6	GO TO A6 OR NEXT CHILD
REFUSED	7	GO TO A6 OR NEXT CHILD

A5.e About how old was ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]), in months, when (he/she) had chicken pox?

AGE CHILD HAD CHICKEN POX	__|__ MONTHS	GO TO A6 OR NEXT CHILD
REFUSED	97	GO TO A6 OR NEXT CHILD

IF UNABLE TO GIVE EXACT MONTHS

A5.f Was ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5])...

...one to six months old?	01
...seven to twelve months old?	02
...13 to 18 months old?	03
...19 to 24 months old?	04
...25 to 30 months old?	05
...31 to 35 months old?	06
DON'T KNOW	96
REFUSAL	97

A6. Has **[FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5]** received any other immunizations that are listed on the shot records that I have not asked you about?

YES	1	
NO	2	GO TO A7
DON'T KNOW	6	GO TO A7
REFUSED	7	GO TO A7

A6.A. How many other shots are listed there (that I have not asked you about)?

NUMBER	☐	RECORD NAMES AND DATES BELOW
REFUSED	7	GO TO A7

A6.B. What is the name of the **FIRST** other shot listed on the record?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS)	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	06	
DTaP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY) _____	95	
DON'T KNOW	96	GO TO A7 OR SECOND SHOT
REFUSED	97	GO TO A7 OR SECOND SHOT

A6.C. What is the date (on the record) for this shot?

_____ /_____ / _____
MO DAY YEAR

DON'T KNOW	9996	GO TO A7 OR SECOND SHOT
REFUSED	9997	GO TO A7 OR SECOND SHOT

GO TO A7 OR SECOND SHOT (NEXT FRAME)

A6.B.2 What is the name of the **SECOND** other shot listed on the record?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS)	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	06	
DTaP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY) _____	95	
DON'T KNOW	96	GO TO A7 OR THIRD SHOT
REFUSED	97	GO TO A7 OR THIRD SHOT

A6.C.2 What is the date (on the record) for this shot?

_____ /_____ / _____ (MO DAY YEAR)

DON'T KNOW	9996	GO TO A7 OR THIRD SHOT
REFUSED	9997	GO TO A7 OR THIRD SHOT

GO TO A7 OR THIRD SHOT (NEXT FRAME)

A6.B.3 What is the name of the **THIRD** other shot listed on the record?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS)	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	06	
DTaP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY) _____	95	
DON'T KNOW	96	GO TO A7 OR FOURTH SHOT
REFUSED	97	GO TO A7 OR FOURTH SHOT

A6.C.3 What is the date (on the record) for this shot?

_____ /_____ / _____ (MO DAY YEAR)

DON'T KNOW	9996	GO TO A7 OR FOURTH SHOT
REFUSED	9997	GO TO A7 OR FOURTH SHOT

GO TO A7 OR FOURTH SHOT (NEXT FRAME)

A6.B.4 What is the name of the **FOURTH** other shot listed on the record?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS)	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	06	
DTaP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY) _____	95	
DON'T KNOW	96	GO TO A7 OR FIFTH SHOT
REFUSED	97	GO TO A7 OR FIFTH SHOT

A6.C.4 What is the date (on the record) for this shot?

_____ /_____ / _____ (MO DAY YEAR)

DON'T KNOW	9996	GO TO A7 OR FIFTH SHOT
REFUSED	9997	GO TO A7 OR FIFTH SHOT

GO TO A7 OR FIFTH SHOT (NEXT FRAME)

A6.B.5 What is the name of the **FIFTH** other shot listed on the record?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS)	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	06	
DTaP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY) _____	95	
DON'T KNOW	96	GO TO A7
REFUSED	97	GO TO A7

A6.C.5 What is the date (on the record) for this shot?

_____ /_____ / _____ (MO DAY YEAR)

DON'T KNOW	9996	GO TO A7
REFUSED	9997	GO TO A7

GO TO A7

A7. Are all the immunizations that [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever received included on this shot record?

YES	1	GO TO A14
NO	2	
DON'T KNOW	6	
REFUSED	7	

A8. Has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever received an additional D-T-P shot (sometimes called D-P-T shot, diphtheria-tetanus-pertussis shot, baby shot, or three-in-one shot?

YES	1	
NO	2	GO TO A9
DON'T KNOW	6	
REFUSED	7	

A8.A. How many additional D-T-P shots has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] received?

NUMBER OF SHOTS	☐
ALL	50
DON'T KNOW	96
REFUSED	97

A9. Has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever received an additional polio vaccine by mouth (pink drops) or by a polio shot?

YES	1	
NO	2	GO TO A10
DON'T KNOW	6	
REFUSED	7	

A9.A. How many additional polio vaccines has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] received?

NUMBER OF VACCINES	☐
ALL	50
DON'T KNOW	96
REFUSED	97

A10. Has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever received an additional measles or M-M-R, that is, measles - mumps - rubella shot?

YES	1	
NO	2	GO TO A11
DON'T KNOW	6	
REFUSED	7	

A10.A. How many additional measles or M-M-R shots has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] received?

NUMBER OF SHOTS	☐
ALL	50
DON'T KNOW	96
REFUSED	97

A11. Has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever received an additional H-I-B shot? (This shot is for Meningitis and is called Haemophilus Influenzae {HA-MA-FI-LUS IN-FLU-EN-ZI}, H-I-B vaccine or H flu vaccine.)

YES	1	
NO	2	GO TO A12
DON'T KNOW	6	
REFUSED	7	

A11.A. How many additional H-I-B shots has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] received?

NUMBER OF SHOTS	☐
ALL	50
DON'T KNOW	96
REFUSED	97

A12. Has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever received an additional Hepatitis B shot?

YES	1	
NO	2	GO TO A12B
DON'T KNOW	6	
REFUSED	7	

A12.A. How many additional Hepatitis B shots has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] received?

NUMBER OF SHOTS	☐
ALL	50
DON'T KNOW	96
REFUSED	97

A12.B. Has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever received an additional chicken pox (or Varicella) shot?

YES	1	
NO	2	GO TO A13
DON'T KNOW	6	GO TO A13
REFUSED	7	GO TO A13

A12.C. How many additional chicken pox shots has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] received?

NUMBER OF SHOTS	☐
ALL	50
DON'T KNOW	96
REFUSED	97

A13. Has **[FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5]** received any <u>other</u> additional immunizations that are <u>not</u> listed on the shot records that I have not asked you about?

YES	1	
NO	2	GO TO A14
DON'T KNOW	6	GO TO A14
REFUSED	7	GO TO A14

A13.A. How many <u>other</u> additional shots are there (that I have not asked you about)?

Number	☐	RECORD NAMES BELOW
REFUSED	7	GO TO A14

A13.B. What is the name of the **FIRST** additional <u>other</u> shot (not listed on the records)?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS)	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	06	
DTaP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY) _____	95	
DON'T KNOW	96	GO TO A14 OR SECOND SHOT
REFUSED	97	GO TO A14 OR SECOND SHOT

GO TO A14 OR SECOND SHOT (NEXT FRAME)

A13.B.2 What is the name of the **SECOND** additional <u>other</u> shot (not listed on the records)?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS)	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	06	
DTaP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY) _____	95	
DON'T KNOW	96	GO TO A14 OR THIRD SHOT
REFUSED	97	GO TO A14 OR THIRD SHOT

GO TO A14 OR THIRD SHOT (NEXT FRAME)

A13.B.3 What is the name of the **THIRD** additional <u>other</u> shot (not listed on the records)?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS)	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	06	
DTaP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY)	95	
DON'T KNOW	96	GO TO A14 OR FOURTH SHOT
REFUSED	97	GO TO A14 OR FOURTH SHOT

GO TO A14 OR FOURTH SHOT (NEXT FRAME)

A13.B.4 What is the name of the **FOURTH** additional <u>other</u> shot (not listed on the records)?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS)	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	06	
DTaP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY)	95	
DON'T KNOW	96	GO TO A14 OR FIFTH SHOT
REFUSED	97	GO TO A14 OR FIFTH SHOT

GO TO A14 OR FIFTH SHOT (NEXT FRAME)

A13.B.5 What is the name of the **FIFTH** additional <u>other</u> shot (not listed on the records)?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS)	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	06	
DTaP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY)	95	
DON'T KNOW	96	GO TO A14
REFUSED	97	GO TO A14

GO TO A14

A14. Are you the person who took [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] for most of [FILL VAR: (his/her) FROM S3.4] shots? (Most means at least one-half of the shots.)

YES	1
NO	2
DON'T KNOW	6
REFUSED	7

A15. In your opinion, has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] received all of the recommended shots for [FILL VAR: (his/her) FROM S3.4] age?

YES	1
NO	2
DON'T KNOW	6
REFUSED	7

A16. REPEAT A6 - A15 FOR EACH CHILD WITH AVAILABLE SHOT RECORDS ON ANOTHER HARDCOPY QUESTIONNAIRE.

A17. INTERVIEWER CHECKPOINT.

CALLBACK INTERVIEW (SR OR MR COMPLETE)	**INITIAL INTERVIEW**
IF CHILDREN WITH NO AVAILABLE SHOT RECORDS, GO TO B1. ALL OTHERS, Those are all the questions I have. (I'd like to thank you on behalf of the Centers for Disease Control and Prevention for the time and effort you spent answering these questions.) [**TERMINATE INTERVIEW**]	IF CHILDREN WITH NO AVAILABLE SHOT RECORDS, GO TO B1. ALL OTHERS, GO TO C1

SECTION B

NO Shot Records

NOTE: SEE S6 - S8.B TO DETERMINE WHICH CHILDREN ARE ASKED SECTION B

B1. Has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever received an immunization, that is a shot or drops?

YES	1	
NO	2	GO TO B6.D
DON'T KNOW	6	
REFUSED	7	

B2. Has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever received a D-T-P shot (sometimes called a D-P-T shot, diphtheria-tetanus-pertussis shot, baby shot, or three-in-one shot)?

YES	1	
NO	2	GO TO B3
DON'T KNOW	6	
REFUSED	7	

B2.A. How many D-T-P shots did [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever receive?

NUMBER OF SHOTS	☐
ALL	50
DON'T KNOW	96
REFUSED	97

B3. Has [FILL VAR: NAME OF FIRST/SECOND... /SIXTH CHILD, FROM S3.5] ever received a polio vaccine by mouth, pink drops, simetimes called O-P-V, or by a polio shot, sometimes called I-P-V?

YES	1	
NO	2	GO TO B4
DON'T KNOW	6	
REFUSED	7	

B3.A. How many polio vaccine shots did [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever receive?

NUMBER OF VACCINES	☐
ALL	50
DON'T KNOW	96
REFUSED	97

B4. Has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever received a measles or M-M-R (Measles-Mumps-Rubella) shot?

YES	1	
NO	2	GO TO B5
DON'T KNOW	6	
REFUSED	7	

B4.A. How many measles or M-M-R shots did [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever receive?

NUMBER OF SHOTS	☐	IF = 1 GO TO B4.B IF = 2 OR MORE GO TO B5
ALL	50	
DON'T KNOW	96	
REFUSED	97	

B4.B. Was that shot measles only or M-M-R only?

MEASLES ONLY	1
M-M-R ONLY	2
DON'T KNOW	6
REFUSED	7

B5. Has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever received an H-I-B shot? (This is for Meningitis and is called Haemophilus Influenzae {HA-MA-FI-LUS IN-FLU-EN-ZI}, H-I-B vaccine, or H flu vaccine?)

YES	1	
NO	2	GO TO B6
DON'T KNOW	6	
REFUSED	7	

B5.A. How many H-I-B shots did [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever receive?

NUMBER OF SHOTS	☐
ALL	50
DON'T KNOW	96
REFUSED	97

B6. Has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever received a Hepatitis B shot?

YES	1	
NO	2	GO TO B6.B.
DON'T KNOW	6	
REFUSED	7	

B6.A. How many Hepatitis B shots did [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever receive?

NUMBER OF SHOTS	☐
ALL	50
DON'T KNOW	96
REFUSED	97

B6.B. Has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever received a chicken pox (or Varicella) shot?

YES	1	
NO	2	GO TO B7
DON'T KNOW	6	
REFUSED	7	

B6.C. How many chicken pox shots did [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] ever receive?

NUMBER OF SHOTS . . . . . ☐
ALL 50
DON'T KNOW 96
REFUSED 97

B6.D I've been asking about shots received by [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5]. Now I would like to ask, has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] EVER been ill with chicken pox (or Varicella)?

YES . . . . . 1 GO TO B6.E
NO 2
DON'T KNOW 6
REFUSED 7

IF B1 = 2 OR 6 OR 7, GO TO B10, OTHERWISE CONTINUE

B6.E About how old was ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]), in months, when (he/she) had chicken pox?

AGE CHILD HAD
CHICKEN POX . . . . . __|__ MONTHS
REFUSED 97

IF UNABLE TO GIVE EXACT MONTHS
B6.F Was ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5])...

...one to six months old? 01
...seven to twelve months old? 02
...13 to 18 months old? 03
...19 to 24 months old? 04
...25 to 30 months old? 05
...31 to 35 months old? 06
DON'T KNOW 96
REFUSAL 97

IF B1 = 2 OR 6 OR 7, GO TO B10, OTHERWISE CONTINUE

B7. Has **[FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5]** received any other immunizations that I have not asked you about?

YES	1	
NO	2	GO TO B8
DON'T KNOW	6	GO TO B8
REFUSED	7	GO TO B8

B7.A. How many other shots are there (that I have not asked you about)?

Number	☐	RECORD NAMES IN B7.B
DON'T KNOW	6	GO TO B7.B
REFUSED	7	GO TO B8

B7.B.1 What is the name of the first other shot(s)?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS), TB	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	05	
DTAP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY) _____	00	
DON'T KNOW	96	GO TO B8 OR NEXT SHOT
REFUSED	97	GO TO B8 OR NEXT SHOT

GO TO B8 OR NEXT SHOT

B7.B.2 What is the name of the second other shot(s)?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS), TB	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	05	
DTAP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY) _____	00	
DON'T KNOW	96	GO TO B8 OR NEXT SHOT
REFUSED	97	GO TO B8 OR NEXT SHOT

GO TO B8 OR NEXT SHOT

B7.B.3 What is the name of the third <u>other</u> shot(s)?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS), TB	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	05	
DTAP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY)	00	
DON'T KNOW	96	GO TO B8 OR NEXT SHOT
REFUSED	97	GO TO B8 OR NEXT SHOT

GO TO B8 OR NEXT SHOT

B7.B.4 What is the name of the fourth <u>other</u> shot(s)?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS), TB	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	05	
DTAP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY)	00	
DON'T KNOW	96	GO TO B8 OR NEXT SHOT
REFUSED	97	GO TO B8 OR NEXT SHOT

GO TO B8 OR NEXT SHOT

B7.B.5 What is the name of the fifth <u>other</u> shot(s)?

FOUR-IN-ONE	02	
BCG (TUBERCULOSIS), TB	03	
TYPHOID	04	
YELLOW FEVER	05	
MALARIA	05	
DTAP	07	
DTP/HiB	08	
DTP/HepB	09	
OTHER (SPECIFY)	00	
DON'T KNOW	96	GO TO B8
REFUSED	97	GO TO B8

GO TO B8

B8. Are you the person who took [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] for most of [FILL VAR: (his/her) FROM S3.4] shots? (Most means at least 1/2 of the shots.)

YES	1
NO	2
DON'T KNOW	6
REFUSED	7

B9. In your opinion, has [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5] received all of the recommended shots for [FILL VAR: (his/her) FROM S3.4] age?

YES	1
NO	2
DON'T KNOW	6
REFUSED	7

B10. REPEAT B1-B9 FOR EACH CHILD WITH NO AVAILABLE SHOT RECORDS.

B11. INTERVIEWER CHECKPOINT.

CALLBACK INTERVIEW (SR OR MR COMPLETE)	**INITIAL INTERVIEW**
Those are all the questions I have. (I'd like to thank you on behalf of the Centers for Disease Control and Prevention for the time and effort you spent answering these questions.) [**TERMINATE INTERVIEW**]	GO TO C1

SECTION C

Demographics

C1. Including the adults and all the children, how many people live in this household?

NUMBER OF PEOPLE . . . . . ☐

C1.A. How many of these are adults 18 years of age or older?

NUMBER OF ADULTS . . . . . ☐

C1.B. And that means that [FILL VAR: ANSWER TO C1 - ANSWER TO C1A] of these people are under 18 years of age?

YES	1	
NO	2	
REFUSED	7	SKIP TO C1.C

[IF ANSWER TO C1.B IS GREATER THAN OR EQUAL TO S_NUMB + 1, THEN ASK C1.C; OTHERWISE, SKIP TO C2]

C1.C How many children <u>less than 12 months old</u> live in this household?

NUMBER OF CHILDREN < 12 MONTHS . . . . . ☐

DON'T KNOW	96
REFUSED	97

C2. Is [FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5] of Spanish or Hispanic descent, that is, Mexican, Mexican-American, Chicano, Puerto Rican, or Cuban? [CHECK ALL THAT APPLY]

NO, NOT SPANISH/HISPANIC	01
YES, MEXICAN	02
YES, MEXICAN-AMERICAN	03
YES, CHICANO	04
YES, PUERTO RICAN	05
YES, CUBAN	06
YES, OTHER SPANISH (SPECIFY)	07

DON'T KNOW	96
REFUSED	97

C3. Is [FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5] White, Black, American Indian, Asian, or another race? [CHECK ALL THAT APPLY]

WHITE	1
BLACK	2
AMERICAN INDIAN	3
ASIAN	4
OTHER (SPECIFY) _____	5
DON'T KNOW	6
REFUSED	7

[IF MORE THAN ONE ANSWER AT C3, ASK C4]

C4. Which do you feel best describes [FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]'s race?

WHITE	1
BLACK	2
AMERICAN INDIAN	3
ASIAN	4
OTHER (SPECIFY) _____	5
DON'T KNOW	6
REFUSED	7

C5. What is your relationship to [FILL VAR: NAME OF FIRST/SECOND... /NINTH CHILD, FROM S3.5]?

MOTHER (STEP, FOSTER, ADOPTIVE) OR FEMALE GUARDIAN	01
FATHER (STEP, FOSTER, ADOPTIVE) OR MALE GUARDIAN	02
SISTER OR BROTHER (STEP/FOSTER/HALF/ADOPTIVE)	03
IN-LAW OF ANY TYPE	04
AUNT/UNCLE	05
GRANDPARENT	06
OTHER FAMILY MEMBER	07
FRIEND	08
DON'T KNOW	96
REFUSED	97

[RULES FOR ASKING C6 (EDUCATION), C7 (MARITAL STATUS), C8 - C10 (RACE-ETHNICITY) AND C11 (RESIDENCE AT CHILD'S BIRTH):

I. ONLY ONE CHILD IN HOUSEHOLD: ASK EACH QUESTION ONCE

II. TWO OR MORE CHILDREN IN HOUSEHOLD:
A. ASK FOR A CHILD ONLY IF THIS IS THE FIRST CHILD WHERE RESPONDENT IS MOTHER (C5 = 01)
B. ALWAYS ASK WHEN RESPONDENT IS NOT MOTHER (C5 01)]

C6. What is the highest grade or year of regular school (you have/[FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]'s mother has) ever completed?

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17+
NEVER ATTENDED/ KINDERGARTEN (41)	ELEMENTARY (51)								HIGH SCHOOL (61)				COLLEGE (71)				GRADUATE (81)

DON'T KNOW 96
REFUSED 97

C7. (Are you/is [FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]'s mother) now married, widowed, divorced, separated, or (have you/has she) never been married?

MARRIED	01	
WIDOWED	02	
DIVORCED	03	
SEPARATED	04	
NEVER MARRIED	05	
DECEASED	06	GO TO CWIC_I
DON'T KNOW	96	
REFUSED	97	

C8. (Are you/is [FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]'s mother) of Spanish or Hispanic descent, that is, Mexican, Mexican-American, Chicano, Puerto Rican, or Cuban? [CHECK ALL THAT APPLY]

NO, NOT SPANISH/HISPANIC 01

YES, MEXICAN 02
YES, MEXICAN-AMERICAN 03
YES, CHICANO 04
YES, PUERTO RICAN 05
YES, CUBAN 06
YES, OTHER SPANISH (SPECIFY) 07

_____

DON'T KNOW 96
REFUSED 97

C9. (Are you/is [FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]'s mother) White, Black, American Indian, Asian, or another race? [CHECK ALL THAT APPLY]

WHITE 1
BLACK 2
AMERICAN INDIAN 3
ASIAN 4
OTHER (SPECIFY) 5

_____

DON'T KNOW 6
REFUSED 7

[IF MORE THAN ONE ANSWER AT C9, ASK C10; OTHERWISE SKIP TO C10A.]

C10. Which do you feel best describes (your/[FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]'s mother's) race?

WHITE 1
BLACK 2
AMERICAN INDIAN 3
ASIAN 4
OTHER (SPECIFY) 5

_____

DON'T KNOW 6
REFUSED 7

C10A. What is (your/[FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]'s mother's) month, day, and year of birth?

____ / ____ / _____ (mm/dd/yyyy)

[IF MONTH=DK/REF OR YEAR=DK/REF, THEN SKIP TO C10B. OTHERWISE, SKIP TO C11.]

C10B. What is (your/[FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]'s mother's) current age?

AGE . . . . . ☐☐

DON'T KNOW 96
REFUSED 97

C11. (Do you/Does [FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]'s mother) live at the same address as (you/she) did when [FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5] was born?

YES	1	GO TO CWIC_I
NO	2	
DON'T KNOW	6	GO TO CWIC_I
REFUSED	7	GO TO CWIC_I

C11A. In what city, county, and state did (you/[FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]'s mother) live when [FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5] was born?

CITY _____

COUNTY _____

STATE _____

OR

COUNTRY _____ GO TO CWIC_I

REFUSED 7

C11.B. What was (your/[FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]'s mother's) zipcode at that time?

☐☐☐☐☐

DON'T KNOW 6
REFUSED 7

CWIC_I The following questions are about the WIC program, (FILL IF R IS MOTHER FROM C6: which you or your child may have been on during your pregnancy or in the last two years). WIC is a nutrition and health program for Women, Infants, and Children. WIC benefits include food, checks or vouchers for food, health care referrals, and nutrition education.

CWIC01 Has ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]) ever received WIC benefits?

YES	1	GOTO WIC02
NO	2	
DON'T KNOW	6	GOTO CFAMINC
REFUSAL	7	
DONT KNOW ABOUT THE PROGRAM	8	

CWIC02 In months, about how old was ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]) when (he/she) FIRST started receiving WIC benefits?

AGE CHILD FIRST RECEIVED		
WIC BENEFITS	__|__ MONTHS	GO TO WIC03
FROM BIRTH	00	GO TO WIC03

IF UNABLE TO GIVE EXACT MONTHS

CWIC02A. Was ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5])...

...one to six months old?	01
...seven to twelve months old?	02
...13 to 18 months old?	03
...19 to 24 months old?	04
...25 to 30 months old?	05
...31 to 35 months old?	06
DON'T KNOW	96
REFUSAL	97

CWIC03. Is ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]) currently receiving WIC benefits?

YES	1	GO TO WIC05
NO	2	
DON'T KNOW	6	GO TO CFAMINC
REFUSAL	7	GO TO CFAMINC

CWIC04. About how old in months was ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5]) when (he/she) LAST received WIC benefits?

AGE CHILD LAST RECEIVED

WIC BENEFITS	__|__ MONTHS	GO TO WIC05
STILL GETTING WIC BENEFITS	97	GO TO WIC03 & RECONCILE

IF UNABLE TO GIVE EXACT MONTHS

CWIC04A. Was ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5])...

...one to six months old?	01
...seven to twelve months old?	02
...13 to 18 months old?	03
...19 to 24 months old?	04
...25 to 30 months old?	05
...31 to 35 months old?	06
DON'T KNOW	96
REFUSAL	97

CWIC05. Was there a period when ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5])'s WIC benefits were interrupted for 6 months or more?

YES	1
NO	2

CWIC07. At ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5])'s last WIC certification visit, did anyone at the WIC site ask to see ([FILL VAR: NAME OF FIRST/SECOND.../NINTH CHILD, FROM S3.5])'s vaccination or shot record?

YES	1
NO	2
DON'T RECALL	3
REFUSED	7

CFAMINC Please think about your total combined FAMILY income during (LAST CALENDAR YEAR) for ALL members of the family. Include money from jobs, social security, retirement income, unemployment payments, public assistance, and so forth. Also, include income from interest, dividends, net income from business, farm, or rent, and any other money income received. Can you tell me that amount before taxes?

$☐☐☐,☐☐☐,☐☐☐

DON'T KNOW	6	GO TO C12 DON'TKNOW
REFUSED	7	GO TO C12 REFUSED

C12DON'TKNOW You may not be able to give us an exact figure for your total combined family income, but was your total family income during (LAST CALENDAR YEAR) more or less than $20,000?

MORE THAN $20,000	1	GO TO C16
$20,000	2	GO TO C19
LESS THAN $20,000	3	GO TO C13
DON'T KNOW	6	GO TO C19
REFUSED	7	GO TO C19

C12REFUSED Income is important in analyzing the immunization information we collect. For example, this information helps us to learn whether persons in one group use these medical services more or less than those in another group. Now you may not be able to give us an exact figure for your total combined family income, but was your total family income during (LAST CALENDAR YEAR) more or less than $20,000?

MORE THAN $20,000	1	GO TO C16
$20,000	2	GO TO C19
LESS THAN $20,000	3	GO TO C13
DON'T KNOW	6	GO TO C19
REFUSED	7	GO TO C19

C13. Was the total combined FAMILY income more or less than $10,000?

MORE THAN $10,000	1	GO TO C15
$10,000	2	GO TO C19
LESS THAN $10,000	3	GO TO C14.A
DON'T KNOW	6	GO TO C19
REFUSED	7	GO TO C19

C14.A Was it more than $7,500?

YES	1	
NO	2	
DON'T KNOW	6	GO TO C19
REFUSED	7	GO TO C19

C15. Was it more than $15,000?

YES	1	GO TO C15.A
NO	2	GO TO C15.B
DON'T KNOW	6	GO TO C19
REFUSED	7	GO TO C19

C15.A Was it more than $17,500?

YES	1	
NO	2	
DON'T KNOW	6	GO TO C19
REFUSED	7	GO TO C19

C15.B Was it more than $12,500?

YES	1	
NO	2	
DON'T KNOW	6	GO TO C19
REFUSED	7	GO TO C19

C16. Was the total combined FAMILY income more or less than $40,000?

MORE THAN $40,000	1	GO TO C16.A
$40,000	2	GO TO C19
LESS THAN $40,000	3	GO TO C17
DONT KNOW	6	GO TO C19
REFUSED	7	GO TO C19

C16.A Was the total combined FAMILY income more or less than $60,000?

MORE THAN $60,000	1	GO TO C18
$60,000	2	GO TO C19
LESS THAN $60,000	3	GO TO C16.B
DONT KNOW	6	GO TO C19
REFUSED	7	GO TO C19

C16.B Was the total combined FAMILY income more or less than $50,000?

MORE THAN $50,000	1	GO TO C19
$50,000	2	GO TO C19
LESS THAN $50,000	3	GO TO C16.C
DONT KNOW	6	GO TO C19
REFUSED	7	GO TO C19

C16.C Was the total combined FAMILY income more or less than $45,000?

MORE THAN $45,000	1	
LESS THAN $45,000	2	
DONT KNOW	6	GO TO C19
REFUSED	7	GO TO C19

C17. Was the total combined FAMILY income more or less than $30,000?

MORE THAN $30,000	1	GO TO C17.A
$30,000	2	GO TO C19
LESS THAN $30,000	3	GO TO C17.B
DONT KNOW	6	GO TO C19
REFUSED	7	GO TO C19

C17.A Was the total combined FAMILY income more or less than $35,000?

MORE THAN $35,000	1	
LESS THAN $35,000	2	
DONT KNOW	6	GO TO C19
REFUSED	7	GO TO C19

C17.B Was the total combined FAMILY income more or less than $25,000?

MORE THAN $25,000 1
LESS THAN $25,000 2
DONT KNOW . . . . . 6 GO TO C19
REFUSED . . . . . 7 GO TO C19

C18. Was the total combined FAMILY income more or less than $75,000?

MORE THAN $75,000 1
LESS THAN $75,000 2
DONT KNOW . . . . . 6 GO TO C19
REFUSED . . . . . 7 GO TO C19

C19. In what city, county and state do you live?

CITY_____

COUNTY _____

STATE _____

REFUSED 7

C19.A. What is your zip code?

☐☐☐☐☐

DON'T KNOW 6
REFUSED 7

C19.B Do you live within the city limits?

YES 1
NO 2
REFUSED 7

C20. The next questions are about the telephone numbers in your household. Do you have any other home phone numbers in addition to [FILL VAR: AREA CODE/TELEPHONE NUMBER FROM SAMPLE TELEPHONE NUMBER].

YES	1	
NO	2	GO TO CNOSERV
REFUSED	7	GO TO CNOSERV

C21. Is this second number for home use only, for business use only, or for both home and business use?

HOME ONLY	1	
BUSINESS ONLY	2	GO TO C22
BOTH HOME AND BUSINESS	3	
REFUSED	7	GO TO CNOSERV

C21.A. Is this second number used only for computer or fax communication?

YES	1	
NO	2	
DON'T KNOW	6	
REFUSED	7	GO TO CNOSERV

C22. Do you have a third home phone number in addition to the two you have already told me about?

YES	1	
NO	2	GO TO CNOSERV
REFUSED	7	GO TO CNOSERV

C23. Is this third number for home use only, for business use only, or for both home and business use?

HOME ONLY	1	
BUSINESS ONLY	2	GO TO CNOSERV
BOTH HOME AND BUSINESS	3	
REFUSED	7	GO TO CNOSERV

C23.A. Is this third number used only for computer or fax communication?

YES	1
NO	2
DON'T KNOW	6
REFUSED	7

CNOSERV

During the past 12 months, has your household been without telephone service for 1 week or more?

YES	1	
NO	2	GO TO D5
DON'T KNOW	6	GO TO D5
REFUSED	7	GO TO D5

CHOWLONG1

For how long was your household without telephone service in the past 12 months?

IF ONE WEEK OR LESS, ENTER 0 FOR THE NUMBER.
ENTER NUMBER, PRESS RETURN.

NUMBER _____

CHOWLONG2

ENTER PERIOD _____

DAY(S)	1
WEEK(S)	2
MONTH(S)	3
DON'T KNOW	6
REFUSED	7

☐ IF YOU HAVE SET A Shot Record (SR SECTION) CALLBACK----------> GO TO D5

☐ ALL OTHERS----------> GO TO D5

SECTION D

Provider Questions

D5 To get a complete picture of the vaccinations received by your (children/child), we would like to contact doctors or health clinics to obtain a copy of the vaccination records for your (children/child). This study is voluntary and is authorized by the U.S. Public Health Service Act. It's all right to skip any questions you don't want to answer. The information you give will be kept in strict confidence and will be summarized for research purposes only.

D5_1 In order to evaluate my performance, my supervisor may record and listen as I ask the questions.

I READ THESE STATEMENTS TO THE RESPONDENT.

YES 1

D6 How many locations have provided vaccinations for your child named [NAME OF (FIRST) ELIGIBLE CHILD] whose birth date is [DATE OF BIRTH OF (FIRST) ELIGIBLE CHILD]?

NUMBER: |___|___|

D6A.1 Starting with the most recent, please tell me the name, address and telephone number for each doctor or clinic. (Would you take a moment to find shot cards, appointment cards or other records you may have?)

YES, CONTINUE ON 1
NO, CAN'T FIND, CONTINUE 2
REFUSED . . . . . 7 GO TO D14

D6B.1.1.1 What is the last name of the doctor?

LAST_____

D6B.2.1.1 Do you know the doctor's first name?

FIRST_____

D6B.3.1.1 Please tell me the name of the office or the clinic.

OFFICE_____

D6B.4.1.1 What is the street address of the office or the clinic?

STREET_____

D6B.5.1.1 Is there a suite, floor, or room number?

SUITE #_____

D6B.6.1.1 What city is that in?

CITY_____

D6B.7.1.1 What state is that in?

STATE_____

D6B.8.1.1 What is the zip code?

ZIP CODE_____

D6B.9.1.1 What is their telephone number?

TELEPHONE_____

INTERVIEWER NOTE: IF MORE THAN ONE PROVIDER GO TO THE SUPPLEMENTAL PROVIDER SHEET - D6B.1.2.1

D8 In order to help the doctor or clinic locate your child's vaccination records,

D8A.1 What is [NAME OF (FIRST) ELIGIBLE CHILD]'s full name - first, middle, and last name?

FIRST_____

D8B.1 (What is the [NAME OF (FIRST) ELIGIBLE CHILD]'s full name - first, middle, and last name?)

MIDDLE_____

D8C.1 (What is the [NAME OF (FIRST) ELIGIBLE CHILD]'s full name - first, middle, and last name?)

LAST _____

D9A. What is your full name - first, middle, and last?

FIRST_____

D9B. (What is your full name - first, middle, and last?)

MIDDLE_____

D9C. (What is your full name - first, middle, and last?)

LAST _____

INTERVIEWER NOTE: IF THERE ARE ANY ADDITIONAL ELIGIBLE CHILDREN, GO TO THE SUPPLEMENTAL CHILD SHEET, D6.2.

D9D. I need to verify that I am speaking with someone who can authorize the release of immunization records for [NAME OF ELIGIBLE CHILD(REN)]. Are you that person?

YES	1	
NO	2	GO TO D9D1
DON'T KNOW	6	GO TO D14
REFUSED	7	GO TO D14

D6C. The vaccination records collected from the provider(s) will be kept in strict confidence.

D7. Do we have your permission to contact the provider(s) named in this interview, give the provider(s) basic information that identifies your child(ren), and request that information relevant to your child(ren)'s immunization history be sent to the Centers for Disease Control and Prevention or its contractors for study purposes only?

YES	1
NO	2

D14. Those are all the questions I have. I'd like to thank you again on behalf of the Centers for Disease Control and Prevention for the time and effort you've spent answering these questions. [**TERMINATE INTERVIEW**]

ASK ONLY IF D9D = 2

D9D1. Please give me the full name of someone who can authorize the release of these immunization records.

D9D1F. What is the full name - first, middle, and last?

FIRST_____

D9D1M. (What is the full name - first, middle, and last?)

MIDDLE_____

D9D1L. (What is the full name - first, middle, and last?)

LAST _____

D9D1A May I speak with that person now?

YES	1	GO TO D9D1NEW
NO	2	

D9D2. When would be a good time to call this person?

D9D2_1 DATE_____

D9D2_2 TIME_____

Those are all the questions I have. (I'd like to thank you again on behalf of the Centers for Disease Control and Prevention for the time and effort you've spent answering these questions.) [**TERMINATE INTERVIEW**]

READ WHEN NEW PERSON COMES TO THE PHONE
OR
FOR Authorized Consent Respondent CALLBACK INTRODUCTION

D9D1NEW Hello, my name is _____. Am I speaking with [NAME LISTED IN D9D1, WHO CAN AUTHORIZE RELEASE OF SHOT RECORDS]?

YES 1
NO . . . . . 2 GO TO D9D2

D9D2ANEW I'm calling on behalf of the Centers for Disease Control and Prevention. We talked with [FILL: NAME FROM D9A] and collected immunization and provider information for [NAME OF ELIGIBLE CHILD(REN)]. We understand that you could authorize the release of immunization information for [NAME OF ELIGIBLE CHILD(REN)]. This study is voluntary and is authorized by the U.S. Public Health Service Act. It's alright to skip any questions you don't want to answer. The information you give will be kept in strict confidence and will be summarized for research purposes only.

D9D. I need to verify that I am speaking with someone who can authorize the release of immunization records for [NAME OF (FIRST) ELIGIBLE CHILD]. Are you that person?

YES 1

NO . . . . . 2 RETURN TO D9D1

DON'T KNOW . . . . . 6 GO TO D14

REFUSED . . . . . 7 GO TO D14

D6C. The vaccination records collected from the provider(s) will be kept in strict confidence.

D7. Do we have your permission to contact the provider(s) named in this interview, give the provider(s) basic information that identifies your child(ren), and request that information relevant to your child(ren)'s immunization history be sent to the Centers for Disease Control and Prevention or its contractors for study purposes only?

YES 1
NO 2

D14. Those are all the questions I have. I'd like to thank you again on behalf of the Centers for Disease Control and Prevention for the time and effort you've spent answering these questions. [**TERMINATE INTERVIEW**]

SUPPLEMENTAL PROVIDER SHEET

CASE # |___|___|___|___|___|___|___|___|

ELIGIBLE CHILD'S NAME:_____ CHILD#:_____

ELIGIBLE CHILD'S BIRTH DATE: ____ / ____ / ____ . PROVIDER#:_____

D6B.1.2.1 What is the last name of the next doctor?

LAST_____

D6B.2.2.1 Do you know the doctor's first name?

FIRST_____

D6B.3.2.1 Please tell me the name of the office or the clinic.

OFFICE_____

D6B.4.2.1 What is the street address of the office or the clinic?

STREET_____

D6B.5.2.1 Is there a suite, floor, or room number?

SUITE #_____

D6B.6.2.1 What city is that in?

CITY_____

D6B.7.2.1 What state is that in?

STATE_____

D6B.8.2.1 What is the zip code?

ZIP CODE_____

D6B.9.2.1 What is their telephone number?

TELEPHONE_____

INTERVIEWER NOTE: IF THERE ARE ANY ADDITIONAL PROVIDERS, OBTAIN ANOTHER SUPPLEMENTAL PROVIDER SHEET. WHEN YOU ARE FINISHED USING THE SUPPLEMENTAL PROVIDER SHEETS, RETURN TO THE QUESTIONNAIRE AT QUESTION **D6C.**

SUPPLEMENTAL CHILD SHEET
PAGE 1

CASE # |___|___|___|___|___|___|___|___|

NEXT ELIGIBLE CHILD'S NAME:_____CHILD#:_____

NEXT ELIGIBLE CHILD'S BIRTH DATE: ____ / ____ / ____

WHICH SHOT SECTION COMPLETED? (circle one): A / B

D6.2 How many locations have provided vaccinations for your child named [NAME OF NEXT ELIGIBLE CHILD] whose birth date is [DATE OF BIRTH OF NEXT ELIGIBLE CHILD]?

NUMBER: |___|___|

D6A.2 Starting with the most recent, please tell me the name, address and telephone number for each doctor or clinic. (Would you take a moment to find shot cards, appointment cards or other records you may have?)

YES, CONTINUE ON 1
NO, CAN'T FIND, CONTINUE 2
REFUSED . . . . . 7 GO TO D14B

D6B.1.1.2 What is the last name of the next doctor?

LAST_____

D6B.2.1.2 Do you know the doctor's first name?

FIRST_____

D6B.3.1.2 Please tell me the name of the office or the clinic.

OFFICE_____

D6B.4.1.2 What is the street address of the office or the clinic?

STREET_____

D6B.5.1.2 Is there a suite, floor, or room number?

SUITE #_____

D6B.6.1.2 What city is that in?

CITY_____

SUPPLEMENTAL CHILD SHEET
PAGE 2

D6B.7.1.2 What state is that in?

STATE_____

D6B.8.1.2 What is the zip code?

ZIP CODE_____

D6B.9.1.2 What is their telephone number?

TELEPHONE_____

INTERVIEWER NOTE: IF MORE THAN ONE PROVIDER GO TO AN ADDITIONAL SUPPLEMENTAL PROVIDER SHEET - D6B.1.2.1

D8A.2 In order to help the doctor or clinic locate your child's vaccination records, what is [NAME OF (NEXT) ELIGIBLE CHILD]'s full name - first, middle, and last name?

FIRST_____

D8B.2 MIDDLE_____

D8C.2 LAST _____

INTERVIEWER NOTE: IF THERE ARE ANY ADDITIONAL ELIGIBLE CHILDREN, OBTAIN ANOTHER SUPPLEMENTAL CHILD FORM.

Appendix C

NIS Provider Questionnaire

Major changes to the NIS Immunization History Questionnaire

For Q2/1999 the IHQ sent to providers was redesigned to accommodate the addition of two vaccines to the shot grid, to delete the two questions asking whether the provider was the child's medical home, to add a question about the reporting of immunizations to a community or state immunization registry by the provider or his/her facility, and to add a question about the clinical specialty of the person who ordered the child's vaccinations.

The major change in the IHQ was that the form itself was rotated so that it now had a landscape, rather than portrait, orientation. The immunization table naming the vaccines and giving the date of each shot displayed the vaccines across the top of the table with date and type of vaccine listed below each vaccine. The question asking for the child's date of birth was moved from the back page (Q10) to the front (Q2), and preceded the immunization table. The combination vaccine Hep B - Hib (e.g., Comvax) was placed in the column between the "DTP-Hib (Tetramune or Acthib/DTP) DTaP-Hib (TriHibit)" and the "Hib" columns. The rotavirus vaccine was placed in the column between the "Varicella" column and the "Other Vaccines (Specify)" column. Question 9 became Question 10.

These questions were deleted:

8a. Was this facility ever this child's medical home for primary care? (**Medical home**: the place where care is delivered or directed by practitioners known to the child and family, who are able to manage or facilitate essentially all aspects of pediatric care.)
- 1 Yes (Go to question 8b.)
- 2 No (Go to item 9.)
- 3 Unknown (Go to item 9.)

8b. If "Yes," what specialty is (was) this child's primary care provider?
- 1 Pediatrician
- 2 Family Physician
- 3 General practitioner
- 4 Other (Describe) _____

These questions were added:

8. Did you or your facility report *any* of this child's immunizations to your community or state immunization registry?
- 1 Yes
- 2 No
- 3 Not applicable (there is no registry in my community/state)

9. Please indicate the clinical speciality of the person(s) at this facility who ordered *all* this child's vaccinations(s). (Check all that apply.)
- 1 Pediatrician
- 2 Family Physician

3 General Practitioner
4 Nurse (Specify RN, LPN, etc.) _____
5 Pediatric Nurse Practitioner
6 Family Nurse Practitioner
7 Physician Assistant
8 Other Practitioner (Specify.) _____

NATIONAL IMMUNIZATION SURVEY PROVIDER STUDY
IMMUNIZATION HISTORY QUESTIONNAIRE

INSTRUCTIONS: Please review your records and complete this questionnaire for the child identified below. Then mail it in the postage-paid envelope provided or FAX it to: *Victor G. Coronado, MD, MPH, FAX : (312) 867-4419* OR *(800) 699-1905*

1. Which of the following best describes your records of immunization for this child? (Check only one box.)

   1 **G** a. Have immunization record for this child. (Go to item 2 below.)
   2 **G** b. Have provided care to this child, but do not have his/her immunization record. (Go to question 3 on next page.)
   4 **G** c. Have no record of providing care to this child. (Return questionnaire to CDC as instructed above.)
   5 **G** d. Other: _____

2. Referring to all sources of immunization history, please specify below the month, day and year when each of the following immunizations was given, either by your office or by another provider (OP), as documented in your records. If you prefer, you may attach a copy of the complete immunization history and complete Questions 3 through 12.

   Circle the "OP" for any immunization given by another provider, after the date for that immunization. Please see item 12.

	Dates of immunization				
	(1) mm-dd-yy	(2) mm-dd-yy	(3) mm-dd-yy	(4) mm-dd-yy	(5) mm-dd-yy
DT/DTP/DTaP (check one box per date)	___-___-___ OP ☐ *DT* ☐ *DTP* ☐ *DTaP*	___-___-___ OP ☐ *DT* ☐ *DTP* ☐ *DTaP*	___-___-___ OP ☐ *DT* ☐ *DTP* ☐ *DTaP*	___-___-___ OP ☐ *DT* ☐ *DTP* ☐ *DTaP*	___-___-___ OP ☐ *DT* ☐ *DTP* ☐ *DTaP*
DTP-Hib (Tetramune or Acthib/DTP) DTaP-Hib (TriHibit) (check one box per date)	___-___-___ OP ☐ *DTP/Hib* ☐ *DTaP/Hib*	___-___-___ OP ☐ *DTP/Hib* ☐ *DTaP/Hib*	___-___-___ OP ☐ *DTP/Hib* ☐ *DTaP/Hib*	___-___-___ OP ☐ *DTP/Hib* ☐ *DTaP/Hib*	___-___-___ OP ☐ *DTP/Hib* ☐ *DTaP/Hib*
Hib	___-___-___ OP	___-___-___ OP	___-___-___ OP	___-___-___ OP	___-___-___ OP
Hepatitis B (enter date or check box)	___-___-___ OP ☐ *Administered at birth*	___-___-___ OP	___-___-___ OP	___-___-___ OP	___-___-___ OP
Polio (OPV or IPV) (check one box per date)	___-___-___ OP ☐ *OPV* ☐ *IPV*	___-___-___ OP ☐ *OPV* ☐ *IPV*	___-___-___ OP ☐ *OPV* ☐ *IPV*	___-___-___ OP ☐ *OPV* ☐ *IPV*	___-___-___ OP ☐ *OPV* ☐ *IPV*
MMR	___-___-___ OP	___-___-___ OP	___-___-___ OP	___-___-___ OP	___-___-___ OP
Measles only	___-___-___ OP	___-___-___ OP	___-___-___ OP	___-___-___ OP	___-___-___ OP
Varicella	___-___-___ OP	___-___-___ OP	___-___-___ OP	___-___-___ OP	___-___-___ OP
Other Vaccines (Specify)	___-___-___ OP	___-___-___ OP	___-___-___ OP	___-___-___ OP	___-___-___ OP

3. What was the date of this child's first visit for any reason to this place of practice?

_____ - _____ - _____ or 8 **G** Don't Know
mm dd yy

4. What was the date of this child's most recent visit for any reason to this place of practice?

_____ - _____ - _____ or 8 **G** Don't Know
mm dd yy

5. Which types of care does this facility routinely provide? (Check all that apply.)

1 **G** a. Comprehensive well-child care (examination, anticipatory guidance, screening)
2 **G** b. Acute illness care
3 **G** c. Follow-up visits
4 **G** d. After-hours telephone coverage
5 **G** e. WIC Program/services
6 **G** f. Other (Describe:)_____

6. Which of the following best describes this facility? (Check only one box, representing the most specific description.)

1 **G** a. Federally-qualified health center, including community/migrant/rural/Indian health center
2 **G** b. Hospital-based clinic, including universit clinic and residency teaching practice
3 **G** c. Private practice, including solo, group practice or HMO
4 **G** d. Public health department-operated clinic
5 **G** . Military health care facility
6 **G** . Other (Describe:)_____

7. Is this facility a Vaccines for Children provider?

1 **G** a. Yes
2 **G** b. No
3 **G** c. Unknown

8a. Was this facility ever this child's medical home for primary care? (**Medical home**: the place where care is delivered or directed by practitioners known to the child and family, who are able to manage or facilitate essentially all aspects of pediatric care.)

1 **G** a. Yes (Go to question 8b.)
2 **G** b. No (Go to item 9.)
3 **G** c. Unknown (Go to item 9.)

8b. If "Yes," what specialty is (was) this child's primary care provider?

1 **G** a. Pediatrician
2 **G** b. Family Physician
3 **G** c. General practitioner
4 **G** d. Other (Describe)_____

9. Name of person completing questionnaire:_____

Phone: (_____)_____

10. According to your records, what is this child's date of birth?

_____-_____-_____ or 8 **G** Don't know
mm dd yy

11. According to your records, did this child ever use another last name (excluding names prior to adoption)?

1 **G** Yes [Specify name(s):] _____
2 **G** No

INSTRUCTIONS: If you know of other providers that may have immunization records for this child, please continue with item 12. Otherwise, return this questionnaire to CDC. Call 1-800-886-4993 with any questions. Thank you.

12. Please enter below the names, addresses and telephone numbers of other providers who may have an immunization record for this child, and the name and address for any provider of immunizations with OP circled in item 2.

(1) _____
_____
_____
(_____)_____

(2) _____
_____
_____
(_____)_____

Appendix D

Summary Statistics for Sampling Weights by IAP Area

Q1/1999-Q4/1999 : Child Weight for Completed Household Interviews (HY_WGT)

IAP	Area	N	SUM	MIN	MAX	MEAN	CV
	TOTAL U.S.	34442	5630107.64	2.876	1347.99	163.466	109.408
1	CT	412	63406.04	50.572	248.90	153.898	23.106
2	MA-REST OF STATE	402	102184.81	17.081	470.97	254.191	27.619
3	MA-CITY OF BOSTON	398	11797.28	6.183	120.78	29.641	54.187
4	ME	386	20914.58	21.140	88.87	54.183	24.271
5	NH	389	21112.34	18.598	98.79	54.273	30.860
6	RI	420	17826.20	13.305	70.98	42.443	28.981
7	VT	412	9832.40	7.046	47.42	23.865	38.130
8	NJ-REST OF STATE	541	160478.63	2.876	1114.66	296.633	50.441
9	NJ-CITY OF NEWARK	425	7826.15	4.031	112.03	18.414	54.613
10	NY-REST OF STATE	440	195473.14	132.535	722.06	444.257	24.469
11	NY-NYC 5 COUNTIES	495	171910.49	113.831	535.70	347.294	25.123
12	DISTRICT OF COLUMBIA	491	10396.88	5.408	33.54	21.175	28.535
13	DE	438	13876.95	8.324	51.37	31.683	25.792
14	MD-REST OF STATE	492	94293.37	7.311	355.62	191.653	39.661
15	MD-CITY OF BALTIMORE	392	16076.06	7.640	178.27	41.010	44.862
16	PA-REST OF STATE	414	175496.93	11.481	1168.74	423.906	35.327
17	PA-PHILADELPHIA COUNTY	490	31923.96	22.430	151.60	65.151	24.400
18	VA	432	138372.78	12.841	711.25	320.307	31.994
19	WV	394	28639.80	19.168	118.63	72.690	28.545
20	AL-REST OF STATE	446	75708.59	19.814	414.71	169.750	39.119
21	AL-JEFFERSON COUNTY	396	13430.85	10.529	124.22	33.916	30.416
22	FL-REST OF STATE	448	226711.35	24.552	876.64	506.052	35.705
23	FL-DUVAL COUNTY	449	18298.76	8.744	171.52	40.754	34.987
24	FL-DADE COUNTY	405	48545.17	35.792	232.85	119.865	31.394
25	GA-REST OF STATE	405	138680.45	24.011	690.48	342.421	35.084
26	GA-FULTON/DEKALB COUNTIES	437	32616.97	18.891	301.66	74.638	41.909
27	KY	413	75796.35	49.694	350.26	183.526	39.636
28	MS	395	58957.26	14.709	736.32	149.259	52.322
29	NC	426	155717.03	119.289	597.96	365.533	24.998
30	SC	507	77371.55	28.583	271.43	152.607	35.614
31	TN-REST OF STATE	394	71533.06	15.461	344.48	181.556	36.082
32	TN-SHELBY COUNTY	453	20620.10	11.422	80.21	45.519	32.185
33	TN-DAVIDSON COUNTY	454	11569.14	6.339	56.55	25.483	35.218
34	IL-REST OF STATE	439	187819.20	80.894	778.36	427.834	36.940
35	IL-CITY OF CHICAGO	505	74563.13	39.402	1061.51	147.650	50.278
36	IN-REST OF STATE	411	100489.65	28.794	519.06	244.500	39.639
37	IN-MARION COUNTY	392	20056.67	12.938	206.45	51.165	43.694
38	MI-REST OF STATE	461	168277.86	19.784	612.00	365.028	40.388
39	MI-CITY OF DETROIT	413	24315.73	17.793	252.99	58.876	41.439
40	MN	386	95357.38	23.647	419.87	247.040	34.335
41	OH-REST OF STATE	429	165992.96	20.608	620.07	386.930	30.959
42	OH-CUYAHOGA COUNTY	493	27865.86	20.257	115.49	56.523	34.936
43	OH-FRANKLIN COUNTY	442	22981.92	14.051	74.52	51.995	21.240
44	WI-REST OF STATE	408	75874.59	25.038	295.68	185.967	23.769
45	WI-MILWAUKEE COUNTY	388	21851.92	16.488	225.29	56.319	45.586
46	AR	428	52192.76	34.784	225.48	121.946	35.936
47	LA-REST OF STATE	520	79889.81	8.006	398.39	153.634	47.191
48	LA-ORLEANS PARISH	464	10557.65	4.907	101.05	22.754	45.686
49	NM	470	39335.17	22.329	174.93	83.692	37.995

Q1/1999-Q4/1999 : Child Weight for Completed Household Interviews (HY_WGT)

IAP	Area	N	SUM	MIN	MAX	MEAN	CV
50	OK	464	69116.50	39.589	582.58	148.958	40.0858
51	TX-REST OF STATE	568	307801.69	21.969	1099.33	541.904	51.5129
52	TX-DALLAS COUNTY	369	55220.01	46.282	281.20	149.648	26.8313
53	TX-EL PASO COUNTY	520	20679.43	9.460	65.03	39.768	31.8138
54	TX-CITY OF HOUSTON	467	59989.77	38.890	472.19	128.458	39.9290
55	TX-BEXAR COUNTY	455	32662.59	16.469	126.77	71.786	38.4781
56	IA	411	52547.31	49.215	190.55	127.852	20.5916
57	KS	467	54751.42	33.541	199.94	117.241	27.0424
58	MO	449	104721.25	60.756	402.29	233.232	24.6459
59	NE	415	32562.51	30.775	140.03	78.464	30.1420
60	CO	506	78583.02	49.114	283.58	155.302	28.8308
61	MT	392	15326.77	15.154	58.98	39.099	20.2555
62	ND	427	10635.24	10.474	49.23	24.907	20.9681
63	SD	422	14953.52	9.032	204.78	35.435	48.6025
64	UT	409	57051.04	45.109	297.81	139.489	39.5649
65	WY	406	8952.36	7.827	38.63	22.050	30.4748
66	AZ-REST OF STATE	487	40716.23	22.834	198.31	83.606	41.1279
67	AZ-MARICOPA COUNTY	450	66432.72	45.325	232.01	147.628	24.6978
68	CA-REST OF STATE	454	429620.29	12.665	1347.99	946.300	23.4387
69	CA-LOS ANGELES COUNTY	495	240219.31	104.351	1253.56	485.292	23.9295
70	CA-SANTA CLARA COUNTY	407	38994.01	27.917	245.94	95.808	21.9255
71	CA-SAN DIEGO COUNTY	496	64015.89	41.134	258.39	129.064	33.8746
72	HI	457	25750.03	14.169	104.64	56.346	39.3326
73	NV	498	41865.16	21.230	181.77	84.067	30.1231
74	AK	480	14038.71	9.946	61.93	29.247	30.2790
75	ID	421	26799.04	19.731	100.12	63.656	25.0394
76	OR	396	64665.48	63.311	287.97	163.297	29.1835
77	WA-REST OF STATE	438	84265.53	43.052	355.12	192.387	26.8815
78	WA-KING COUNTY	476	32353.12	27.281	305.75	67.969	30.6879

Q1/1999-Q4/1999 : Child Weight for Children with Adequate Provider Data (W0)

IAP	Area	N	SUM	MIN	MAX	MEAN	CV
	TOTAL U.S.	22521	5630107.64	4.378	4378.42	249.994	118.656
1	CT	291	63406.04	59.265	585.88	217.890	36.556
2	MA-REST OF STATE	257	102184.81	29.304	922.23	397.606	31.988
3	MA-CITY OF BOSTON	265	11797.28	8.576	223.38	44.518	67.018
4	ME	274	20914.58	26.925	177.74	76.331	29.396
5	NH	253	21112.34	23.474	154.84	83.448	32.146
6	RI	255	17826.20	22.054	209.98	69.907	41.621
7	VT	315	9832.40	7.957	76.97	31.214	43.258
8	NJ-REST OF STATE	337	160478.63	4.378	1651.25	476.198	53.793
9	NJ-CITY OF NEWARK	246	7826.15	5.819	255.63	31.814	75.280
10	NY-REST OF STATE	279	195473.14	220.462	2439.57	700.621	39.584
11	NY-NYC 5 COUNTIES	262	171910.49	181.097	1421.36	656.147	35.164
12	DISTRICT OF COLUMBIA	293	10396.88	9.223	80.18	35.484	36.839
13	DE	299	13876.95	14.088	98.10	46.411	33.258
14	MD-REST OF STATE	318	94293.37	20.402	739.04	296.520	45.770
15	MD-CITY OF BALTIMORE	221	16076.06	12.909	280.72	72.742	52.186
16	PA-REST OF STATE	283	175496.93	24.459	2305.45	620.130	46.325
17	PA-PHILADELPHIA COUNTY	282	31923.96	35.484	262.99	113.206	33.502
18	VA	272	138372.78	168.559	1696.67	508.723	40.036
19	WV	294	28639.80	24.874	175.70	97.414	32.106
20	AL-REST OF STATE	302	75708.59	25.396	721.75	250.691	46.834
21	AL-JEFFERSON COUNTY	264	13430.85	17.692	108.05	50.874	34.377
22	FL-REST OF STATE	284	226711.35	31.745	2205.87	798.279	43.034
23	FL-DUVAL COUNTY	307	18298.76	9.867	205.10	59.605	36.723
24	FL-DADE COUNTY	262	48545.17	50.146	639.32	185.287	43.758
25	GA-REST OF STATE	285	138680.45	27.641	1592.71	486.598	44.263
26	GA-FULTON/DEKALB COUNTIES	256	32616.97	27.816	425.44	127.410	46.305
27	KY	299	75796.35	61.051	572.55	253.499	40.917
28	MS	277	58957.26	52.447	664.53	212.842	53.636
29	NC	292	155717.03	172.433	1216.49	533.278	33.194
30	SC	333	77371.55	49.028	631.37	232.347	41.223
31	TN-REST OF STATE	290	71533.06	20.550	497.20	246.666	36.895
32	TN-SHELBY COUNTY	281	20620.10	17.562	193.35	73.381	39.841
33	TN-DAVIDSON COUNTY	294	11569.14	11.919	94.25	39.351	34.589
34	IL-REST OF STATE	294	187819.20	112.736	1495.75	638.841	43.881
35	IL-CITY OF CHICAGO	270	74563.13	71.199	2431.37	276.160	68.725
36	IN-REST OF STATE	282	100489.65	38.364	1135.03	356.346	49.532
37	IN-MARION COUNTY	246	20056.67	38.391	282.22	81.531	49.210
38	MI-REST OF STATE	303	168277.86	27.626	1207.30	555.372	45.551
39	MI-CITY OF DETROIT	243	24315.73	31.780	357.06	100.065	42.745
40	MN	273	95357.38	34.459	1220.37	349.294	51.417
41	OH-REST OF STATE	298	165992.96	35.898	1459.36	557.023	43.925
42	OH-CUYAHOGA COUNTY	325	27865.86	23.712	256.54	85.741	49.368
43	OH-FRANKLIN COUNTY	296	22981.92	20.293	155.04	77.642	27.178
44	WI-REST OF STATE	298	75874.59	35.949	410.44	254.613	22.716
45	WI-MILWAUKEE COUNTY	252	21851.92	20.975	321.04	86.714	57.321
46	AR	290	52192.76	41.892	545.64	179.975	47.271
47	LA-REST OF STATE	335	79889.81	13.434	1019.15	238.477	55.241
48	LA-ORLEANS PARISH	256	10557.65	10.035	160.24	41.241	42.478
49	NM	298	39335.17	32.252	415.19	131.997	51.136

Q1/1999-Q4/1999 : Child Weight for Children with Adequate Provider Data (W0)

IAP	Area	N	SUM	MIN	MAX	MEAN	CV
50	OK	295	69116.50	55.363	707.88	234.29	47.4197
51	TX-REST OF STATE	348	307801.69	49.603	2102.97	884.49	49.8821
52	TX-DALLAS COUNTY	200	55220.01	82.076	632.43	276.10	37.1383
53	TX-EL PASO COUNTY	335	20679.43	12.619	143.71	61.73	33.0098
54	TX-CITY OF HOUSTON	248	59989.77	49.095	1254.79	241.89	61.3942
55	TX-BEXAR COUNTY	276	32662.59	24.177	301.21	118.34	50.3202
56	IA	304	52547.31	48.917	397.04	172.85	29.9951
57	KS	328	54751.42	44.711	439.00	166.93	37.0852
58	MO	314	104721.25	77.253	645.36	333.51	31.1971
59	NE	296	32562.51	37.205	265.57	110.01	43.1563
60	CO	319	78583.02	82.523	647.16	246.34	36.4402
61	MT	282	15326.77	17.287	107.10	54.35	27.3362
62	ND	306	10635.24	12.356	99.42	34.76	35.1142
63	SD	327	14953.52	11.784	144.84	45.73	48.0727
64	UT	298	57051.04	65.637	550.85	191.45	52.0651
65	WY	309	8952.36	9.545	76.75	28.97	38.9191
66	AZ-REST OF STATE	311	40716.23	29.017	355.46	130.92	52.1074
67	AZ-MARICOPA COUNTY	253	66432.72	83.430	566.85	262.58	37.4393
68	CA-REST OF STATE	279	429620.29	103.717	4378.42	1539.86	36.6793
69	CA-LOS ANGELES COUNTY	259	240219.31	251.794	2248.25	927.49	34.4701
70	CA-SANTA CLARA COUNTY	295	38994.01	39.287	313.53	132.18	27.4769
71	CA-SAN DIEGO COUNTY	292	64015.89	57.244	465.99	219.23	38.1696
72	HI	299	25750.03	21.429	251.66	86.12	42.5810
73	NV	313	41865.16	33.316	455.00	133.75	45.1749
74	AK	349	14038.71	10.084	109.38	40.23	38.0132
75	ID	311	26799.04	26.145	162.94	86.17	27.4104
76	OR	278	64665.48	78.126	634.30	232.61	39.4444
77	WA-REST OF STATE	294	84265.53	68.965	609.71	286.62	32.0304
78	WA-KING COUNTY	322	32353.12	30.436	476.90	100.48	43.7931

Appendix E

Disposition of Child with respect to Provider Record Check for NIS, Q1/1999 to Q4/1999

DISPCODE: Disposition of Child with Respect to Provider Record Check for NIS - Q1\1999 to Q4\1999:

Number Of Children	*Disposition Code Number and Definition*
10,253	1 = All identified providers responded, no problems indicated in cross check between household and provider shot dates.
9,400	2 = All identified providers responded, no NIS shot card to cross check.
883	3 = All identified providers responded, poor immunization history matching results.
111	4 = All identified providers responded, poor immunization history matching results, additional mismatch indicators present.
1,385	5 = Some but not all identified providers responded, but provider information indicates 4:3:1:3:3 up-to-date.
54	6 = Some but not all identified providers responded, but provider information matches NIS shot card immunization history.
565	7 = Some but not all identified providers responded, completeness of provider immunization history is unknown.
34	8 = Some but not all identified providers responded, but provider information indicates 4:3:1:3:3 up-to-date when post-RDD-interview immunizations are included.
80	9 = Some but not all identified providers responded, but provider information indicates at least as many doses for each vaccine as the RDD respondent (or at least 1 dose for MCV).
171	10 = Some but not all identified providers responded, but the household reported an inexact

number of vaccinations ("All","Don't Know", "Refused" or missing) for one or more vaccines and any exact responses meet previous criteria (for DISPCODE 9).

150 11 = Some but not all identified providers responded, but definite number of shots was reported by household not from a shot card for one or more vaccines and any other vaccines meet previous criteria (for DISPCODE 9 or 10).

23,086 TOTAL

Notes: The criteria for all dispositions (except 7) were applied in order. A case where some but not all providers responded is assigned disposition 7 if it does not qualify for dispositions 5, 6, 8, 9, 10 or 11.

When checking the criteria for dispositions 10 and 11, the provider history must contain at least three distinct vaccination dates (visits) for the provider immunization count to be accepted for vaccines for which an inexact response was reported, from recall, in the household survey.

Appendix F

Examples of the Use of SUDAAN To Estimate Vaccination Coverage Rates and Their Standard Errors

```
**********;
title1 'SUD_IAP.SAS';
*************************************************************************
THIS PROGRAM WILL PRODUCE IAP AREA  ESTIMATES AND STANDARD ERRORS
FOR PUTD4313 USING SAS CALLABLE SUDAAN.

SUDAAN NOTES:
    1. ALL VARIABLES USED MUST BE NUMERIC.
    2. VARIABLES IN THE SUBGROUP STATEMENT MUST HAVE VALUES 1,2,..K
       WHERE K IS THE NUMBER OF LEVELS FOR EACH VARIABLE.
    3. DATA MUST BE SORTED ACCORDING TO THE SAMPLE DESIGN VARIABLES
       (STRATUM AND PRIMARY SAMPLING UNIT), SPECIFIED IN THE
       NEST STATEMENT.
*************************************************************************;
options ps=78 ls=90 obs= max;

libname dd      'c:\nispuf99';   *--- SPECIFY PATH TO SAS DATASET ---*;
libname library 'c:\nispuf99'; *--- IF DATASET WAS CREATED WITH FORMATS STORED ---*;
                                *--- PERMANENTLY SPECIFY PATH TO LIBRARY       ---*;
                                *--- OTHERWISE COMMENT THIS STATEMENT OUT      ---*;

%let in_file=dd.nispuf99;     *--- NAME OF SAS DATASET ---*;
%let wt=w0;                   *--- WEIGHT TO USE ---*;

Proc format;
         /*
           THE FOLLOWING FORMAT WILL BE USED FOR PUTD4313.
           ORIGINAL VALUES OF PUTD4313 ARE 1,0.
           MUST BE CONVERTED TO 1,2 IN SUDAAN.
         */
 value put4313f
    1='4:3:1:3 Up-to-date'
    2='Not 4:3:1:3 Up-to-date';

 value itrueiaf
  0 ='U.S Total'
  01='Connecticut'
  02='MA-Rest of State'
  03='MA-City of Boston'
  04='Maine'
  05='New Hampshire'
  06='Rhode Island'
  07='Vermont'
  08='NJ-Rest of State'
  09='NJ-City of Newark'
  10='NY-Rest of State '
  11='NY-5 Counties    '
  12='Dist of Columbia '
  13='Delaware         '
  14='MD-Rest of State '
  15='MD-Baltimore City'
  16='PA-Rest of State '
  17='PA-Philadelphia  '
  18='Virginia         '
  19='West Virginia    '
  20='AL-Rest of State '
```

21='AL-Jefferson Cnty'
22='FL-Rest of State '
23='FL-Duval County '
24='FL-Dade County '
25='GA-Rest of State'
26='GA-Fulton/Dekalb '
27='Kentucky '
28='Mississippi '
29='North Carolina '
30='South Carolina '
31='TN-Rest of State '
32='TN-Shelby County '
33='TN-Davidson Cnty '
34='IL-Rest of State '
35='IL-City Chicago '
36='IN-Rest of State '
37='IN-Marion County '
38='MI-Rest of State '
39='MI-Detroit '
40='Minnesota '
41='OH-Rest of State '
42='OH-Cuyahoga Cnty '
43='OH-Franklin Cnty '
44='WI-Rest of State '
45='WI-Milwaukee Cnty'
46='Arkansas '
47='LA-Rest of State '
48='LA-Orleans Parish'
49='New Mexico '
50='Oklahoma '
51='TX-Rest of State '
52='TX-Dallas County '
53='TX-El Paso Cnty '
54='TX-City Houston '
55='TX-Bexar County '
56='Iowa '
57='Kansas '
58='Missouri '
59='Nebraska '
60='Colorado '
61='Montana '
62='North Dakota '
63='South Dakota '
64='Utah '
65='Wyoming '
66='AZ-Rest of State '
67='AZ-Maricopa Cnty '
68='CA-Rest of State '
69='CA-Los Angeles '
70='CA-Santa Clara '
71='CA-San Diego Cnty'
72='Hawaii '
73='Nevada '
74='Alaska '
75='Idaho '
76='Oregon '

```
   77='WA-Rest of State '
   78='WA-King County   ';

data sud_file;
 set &in_file(keep= seqnumhh seqnumc putd4313 itrueiap  w0);

 if putd4313=0 then putd4313=2; *--- CONVERT PUTD4313=0 TO PUTD4313=2 ---*;

 nseqnumh=1*seqnumhh; *--- CONVERT HOUSEHOLD ID SEQNUMHH FROM CHARACTER TO NUMERIC ---*;

*=== SORT BY NEST VARIABLES: ITRUEIAP (STRATUM) NSEQNUMH (PRIMARY SAMPLING UNIT) ===*;
proc sort;
 by itrueiap nseqnumh;

proc crosstab data=sud_file filetype=sas design=wr;
weight &wt;
nest itrueiap nseqnumh;
subgroup  itrueiap putd4313 ;
levels      78      2      ;
tables    itrueiap * putd4313 ;
print nsum wsum  rowper serow/style=nchs ;
rtitle "4:3:1:3  ESTIMATES BY IAP";
rformat itrueiap itrueiaf.;
rformat putd4313 put4313f.;
output rowper serow/filename=sud_est filetype=sas;

proc print data=sud_est(where=(putd4313=1)) noobs label;
format itrueiap itrueiaf.;
var itrueiap rowper serow ;
label
     rowper='Percent 4:3:1:3 Up-to-date'
     serow='Standard Error'
 ;
title "4:3:1:3  ESTIMATES BY IAP";
```

```
**********;
title1 'SUDSTATE.SAS';
*******************************************************************************
THIS PROGRAM WILL PRODUCE STATE  ESTIMATES AND STANDARD ERRORS
FOR PUTD4313 USING SAS CALLABLE SUDAAN.

NOTE : THE STATE VARIABLE IS BASED ON FIPSTATE CODES ,THERE ARE
      NO STATES WITH FIPS CODES 3,7,14,43,52.

SUDAAN NOTES:
    1. ALL VARIABLES USED MUST BE NUMERIC.
    2. VARIABLES IN THE SUBGROUP STATEMENT MUST HAVE VALUES 1,2,..K
       WHERE K IS THE NUMBER OF LEVELS FOR EACH VARIABLE.
    3. DATA MUST BE SORTED ACCORDING TO THE SAMPLE DESIGN VARIABLES
       (STRATUM AND PRIMARY SAMPLING UNIT), SPECIFIED IN THE
       NEST STATEMENT.
*******************************************************************************;
options ps=78 ls=90 obs= max;

libname dd      'c:\nispuf99';    *--- SPECIFY PATH TO SAS DATASET ---*;
libname library 'c:\nispuf99';  *--- IF DATASET WAS CREATED WITH FORMATS STORED ---*;
                                  *--- PERMANENTLY SPECIFY PATH TO LIBRARY       ---*;
                                  *--- OTHERWISE COMMENT THIS STATEMENT OUT      ---*;

%let in_file=dd.nispuf99; *--- NAME OF SAS DATASET ---*;
%let wt=w0;                    *--- WEIGHT TO USE ---*;

PROC FORMAT;
 /*
  THE FOLLOWING FORMAT WILL BE USED FOR PUTD4313.
  ORIGINAL VALUES OF PUTD4313 ARE 1,0.
  MUST BE CONVERTED TO 1,2 IN SUDAAN.
 */
 value put4313f
    1='4:3:1:3 Up-to-date'
    2='Not 4:3:1:3 Up-to-date'
 ;
 value statef
    0 ='U.S. Total       '
    1 ='Alabama          '
    2 ='Alaska           '
    4 ='Arizona          '
    5 ='Arkansas         '
    6 ='California       '
    8 ='Colorado         '
    9 ='Connecticut      '
   10 ='Delaware         '
   11 ='Dist. of Columbia'
   12 ='Florida          '
   13 ='Georgia          '
   15 ='Hawaii           '
   16 ='Idaho            '
   17 ='Illinois         '
   18 ='Indiana          '
   19 ='Iowa             '
   20 ='Kansas           '
```

```
    21 ='Kentucky        '
    22 ='Louisiana       '
    23 ='Maine           '
    24 ='Maryland        '
    25 ='Massachusetts   '
    26 ='Michigan        '
    27 ='Minnesota       '
    28 ='Mississippi     '
    29 ='Missouri        '
    30 ='Montana         '
    31 ='Nebraska        '
    32 ='Nevada          '
    33 ='New Hampshire   '
    34 ='New Jersey      '
    35 ='New Mexico      '
    36 ='New York        '
    37 ='North Carolina  '
    38 ='North Dakota    '
    39 ='Ohio            '
    40 ='Oklahoma        '
    41 ='Oregon          '
    42 ='Pennsylvania    '
    44 ='Rhode Island    '
    45 ='South Carolina  '
    46 ='South Dakota    '
    47 ='Tennessee       '
    48 ='Texas           '
    49 ='Utah            '
    50 ='Vermont         '
    51 ='Virginia        '
    53 ='Washington      '
    54 ='West Virginia   '
    55 ='Wisconsin       '
    56 ='Wyoming         '
;

data sud_file;
 set &in_file(keep= seqnumhh seqnumc putd4313  itrueiap state w0);

 if putd4313=0 then putd4313=2; *** CONVERT PUTD4313=0 TO PUTD4313=2 ***;

 nseqnumh=1*seqnumhh;   *** CONVERT HOUSEHOLD ID SEQNUMH FROM CHARACTER TO NUMERIC ***;

*=== SORT BY NEST VARIABLES: ITRUEIAP (STRATUM) NSEQNUMH (PRIMARY SAMPLING UNIT) ===*;
proc sort;
 by itrueiap nseqnumh;

proc crosstab data=sud_file filetype=sas design=wr;
weight w0;
nest itrueiap nseqnumh;
subgroup  state putd4313 ;
levels      56    2      ;
tables state * putd4313 ;
print nsum wsum  rowper serow/style=nchs ;
rtitle "4:3:1:3  ESTIMATES BY STATE";
rformat state statef.;
```

```
rformat putd4313 put4313f.;
output rowper serow  / filename=sud_est filetype=sas;

*** EXCLUDE 3,7,14,43,52 THERE ARE NO STATES WITH THESE FIPS CODES *** ;
proc print data=sud_est(where=(putd4313=1
                        & state notin (3,7,14,43,52))) label noobs;
var state rowper serow ;
label
    rowper='Percent 4:3:1:3 Up-to-date'
    serow='Standard Error'
 ;
title "4:3:1:3  ESTIMATES BY STATE";
```

Appendix G

Table of Contents

and

Alphabetical Index of Variables

from

National Immunization Survey
1999 Public-Use Data File
Documentation, Code Book and Frequencies

1999 National Immunization Survey Public-Use Data File

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
AGEGRP	0057	0057	3	AGE CATEGORY OF CHILD (RECODE)
ALL4SHOT	0037	0037	2	4:3:1:3 UP-TO-DATE (HH REPORT)
C_431	0038	0038	2	HOUSEHOLD REPORT OF 4:3:1 UP-TO-DATE BY SHOT CARD USE
C_4313	0039	0039	2	HOUSEHOLD REPORT OF 4:3:1:3 UP-TO-DATE BY SHOT CARD USE
C_DTP	0040	0040	2	HOUSEHOLD REPORT OF 4+ DTP UP-TO-DATE BY SHOT CARD USE
C_HEP	0041	0041	2	HOUSEHOLD REPORT OF 3+ HEPATITIS B UP-TO-DATE BY SHOT CARD USE
C_HIB	0042	0042	2	HOUSEHOLD REPORT OF 3+ HIB UP-TO-DATE BY SHOT CARD USE
C_MMR	0043	0043	2	HOUSEHOLD REPORT OF 1+ MEASLES-CONTAINING VACCINE UP-TO-DATE BY SHOT CARD USE
C_POL	0044	0044	2	HOUSEHOLD REPORT OF 3+ POLIO UP-TO-DATE BY SHOT CARD USE
C_VRC	0045	0045	2	HOUSEHOLD REPORT OF 1+ VARICELLA UP-TO-DATE BY SHOT CARD USE
C1R	0058	0059	3	NUMBER OF PEOPLE LIVING IN THE HOUSEHOLD (RECODE)
C5R	0060	0061	3	RELATIONSHIP OF RESPONDENT TO CHILD (RECODE)
CEN_REG	0062	0062	3	CENSUS REGION BASED ON STATE
CHILDNM	0063	0063	3	NUMBER OF CHILDREN LESS THAN 18 YEARS IN HH (RECODE)
D6R	0096	0096	5	NUMBER OF VACCINATION PROVIDERS IDENTIFIED BY RESPONDENT (RECODE)
D7	0097	0097	5	CONSENT TO OBTAIN CHILD'S IMMUNIZATION RECORDS FROM VACCINATION PROVIDERS IDENTIFIED IN QUESTION D6 IN THE INTERVIEW
DDTAH1	0599	0602	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #1
DDTAH2	0603	0606	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #2
DDTAH3	0607	0610	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #3
DDTAH4	0611	0614	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #4
DDTAH5	0615	0618	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #5
DDTAH6	0619	0622	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #6
DDTAH7	0623	0626	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #7
DDTAH8	0627	0630	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #8
DDTAP1	0631	0634	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #1
DDTAP2	0635	0638	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #2

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
DDTAP3	0639	0642	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #3
DDTAP4	0643	0646	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #4
DDTAP5	0647	0650	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #5
DDTAP6	0651	0654	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #6
DDTAP7	0655	0658	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #7
DDTAP8	0659	0662	9	AGE IN DAYS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #8
DDTHM1	0663	0666	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #1
DDTHM2	0667	0670	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #2
DDTHM3	0671	0674	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #3
DDTHM4	0675	0678	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #4
DDTHM5	0679	0682	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #5
DDTHM6	0683	0686	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #6
DDTHM7	0687	0690	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #7
DDTHM8	0691	0694	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #8
DDTHN1	0695	0698	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #1
DDTHN2	0699	0702	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #2
DDTHN3	0703	0706	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #3
DDTHN4	0707	0710	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #4
DDTHN5	0711	0714	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #5
DDTHN6	0715	0718	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #6
DDTHN7	0719	0722	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #7
DDTHN8	0723	0726	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #8
DDTM1	0727	0730	9	AGE IN DAYS OF PROVIDER-REPORTED DT (MARKED) SHOT #1
DDTM2	0731	0734	9	AGE IN DAYS OF PROVIDER-REPORTED DT (MARKED) SHOT #2
DDTM3	0735	0738	9	AGE IN DAYS OF PROVIDER-REPORTED DT (MARKED) SHOT #3

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
DDTM4	0739	0742	9	AGE IN DAYS OF PROVIDER-REPORTED DT (MARKED) SHOT #4
DDTM5	0743	0746	9	AGE IN DAYS OF PROVIDER-REPORTED DT (MARKED) SHOT #5
DDTM6	0747	0750	9	AGE IN DAYS OF PROVIDER-REPORTED DT (MARKED) SHOT #6
DDTM7	0751	0754	9	AGE IN DAYS OF PROVIDER-REPORTED DT (MARKED) SHOT #7
DDTM8	0755	0758	9	AGE IN DAYS OF PROVIDER-REPORTED DT (MARKED) SHOT #8
DDTP1	0759	0762	9	AGE IN DAYS OF PROVIDER-REPORTED DTP SHOT (ALL TYPES INCLUDING DT) #1
DDTP2	0763	0766	9	AGE IN DAYS OF PROVIDER-REPORTED DTP SHOT (ALL TYPES INCLUDING DT) #2
DDTP3	0767	0770	9	AGE IN DAYS OF PROVIDER-REPORTED DTP SHOT (ALL TYPES INCLUDING DT) #3
DDTP4	0771	0774	9	AGE IN DAYS OF PROVIDER-REPORTED DTP SHOT (ALL TYPES INCLUDING DT) #4
DDTP5	0775	0778	9	AGE IN DAYS OF PROVIDER-REPORTED DTP SHOT (ALL TYPES INCLUDING DT) #5
DDTP6	0779	0782	9	AGE IN DAYS OF PROVIDER-REPORTED DTP SHOT (ALL TYPES INCLUDING DT) #6
DDTP7	0783	0786	9	AGE IN DAYS OF PROVIDER-REPORTED DTP SHOT (ALL TYPES INCLUDING DT) #7
DDTP8	0787	0790	9	AGE IN DAYS OF PROVIDER-REPORTED DTP SHOT (ALL TYPES INCLUDING DT) #8
DDTPHB1	0791	0794	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB SHOT (ALL TYPES) #1
DDTPHB2	0795	0798	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB SHOT (ALL TYPES) #2
DDTPHB3	0799	0802	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB SHOT (ALL TYPES) #3
DDTPHB4	0803	0806	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB SHOT (ALL TYPES) #4
DDTPHB5	0807	0810	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB SHOT (ALL TYPES) #5
DDTPHB6	0811	0814	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB SHOT (ALL TYPES) #6
DDTPHB7	0815	0818	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB SHOT (ALL TYPES) #7
DDTPHB8	0819	0822	9	AGE IN DAYS OF PROVIDER-REPORTED DTP/HIB SHOT (ALL TYPES) #8
DDTPM1	0823	0826	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (MARKED) #1
DDTPM2	0827	0830	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (MARKED) #2
DDTPM3	0831	0834	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (MARKED) #3
DDTPM4	0835	0838	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (MARKED) #4

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
DDTPM5	0839	0842	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (MARKED) #5
DDTPM6	0843	0846	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (MARKED) #6
DDTPM7	0847	0850	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (MARKED) #7
DDTPM8	0851	0854	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (MARKED) #8
DDTPN1	0855	0858	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #1
DDTPN2	0859	0862	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #2
DDTPN3	0863	0866	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #3
DDTPN4	0867	0870	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #4
DDTPN5	0871	0874	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #5
DDTPN6	0875	0878	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #6
DDTPN7	0879	0882	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #7
DDTPN8	0883	0886	9	AGE IN DAYS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #8
DHA1_AGE	1463	1464	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #1
DHA2_AGE	1465	1466	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #2
DHA3_AGE	1467	1468	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #3
DHA4_AGE	1469	1470	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #4
DHA5_AGE	1471	1472	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #5
DHA6_AGE	1473	1474	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #6
DHA7_AGE	1475	1476	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #7
DHA8_AGE	1477	1478	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP/HIB (MARKED) SHOT #8
DHB1_AGE	1479	1480	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (ALL TYPES) SHOT #1
DHB2_AGE	1481	1482	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (ALL TYPES) SHOT #2
DHB3_AGE	1483	1484	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (ALL TYPES) SHOT #3
DHB4_AGE	1485	1486	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (ALL TYPES) SHOT #4
DHB5_AGE	1487	1488	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (ALL TYPES) SHOT #5

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
DHB6_AGE	1489	1490	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (ALL TYPES) SHOT #6
DHB7_AGE	1491	1492	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (ALL TYPES) SHOT #7
DHB8_AGE	1493	1494	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (ALL TYPES) SHOT #8
DHEPB1	0887	0890	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #1
DHEPB2	0891	0894	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #2
DHEPB3	0895	0898	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #3
DHEPB4	0899	0902	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #4
DHEPB5	0903	0906	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #5
DHEPB6	0907	0910	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #6
DHEPB7	0911	0914	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #7
DHEPB8	0915	0918	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #8
DHEPX1	0919	0922	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B-ONLY SHOT #1
DHEPX2	0923	0926	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B-ONLY SHOT #2
DHEPX3	0927	0930	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B-ONLY SHOT #3
DHEPX4	0931	0934	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B-ONLY SHOT #4
DHEPX5	0935	0938	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B-ONLY SHOT #5
DHEPX6	0939	0942	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B-ONLY SHOT #6
DHEPX7	0943	0946	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B-ONLY SHOT #7
DHEPX8	0947	0950	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B-ONLY SHOT #8
DHIB1	0951	0954	9	AGE IN DAYS OF PROVIDER-REPORTED HIB SHOT (ALL TYPES) #1
DHIB2	0955	0958	9	AGE IN DAYS OF PROVIDER-REPORTED HIB SHOT (ALL TYPES) #2
DHIB3	0959	0962	9	AGE IN DAYS OF PROVIDER-REPORTED HIB SHOT (ALL TYPES) #3
DHIB4	0963	0966	9	AGE IN DAYS OF PROVIDER-REPORTED HIB SHOT (ALL TYPES) #4
DHIB5	0967	0970	9	AGE IN DAYS OF PROVIDER-REPORTED HIB SHOT (ALL TYPES) #5
DHIB6	0971	0974	9	AGE IN DAYS OF PROVIDER-REPORTED HIB SHOT (ALL TYPES) #6

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
DHIB7	0975	0978	9	AGE IN DAYS OF PROVIDER-REPORTED HIB SHOT (ALL TYPES) #7
DHIB8	0979	0982	9	AGE IN DAYS OF PROVIDER-REPORTED HIB SHOT (ALL TYPES) #8
DHIBN1	0983	0986	9	AGE IN DAYS OF PROVIDER-REPORTED HIB (UNKNOWN TYPE) SHOT #1
DHIBN2	0987	0990	9	AGE IN DAYS OF PROVIDER-REPORTED HIB (UNKNOWN TYPE) SHOT #2
DHIBN3	0991	0994	9	AGE IN DAYS OF PROVIDER-REPORTED HIB (UNKNOWN TYPE) SHOT #3
DHIBN4	0995	0998	9	AGE IN DAYS OF PROVIDER-REPORTED HIB (UNKNOWN TYPE) SHOT #4
DHIBN5	0999	1002	9	AGE IN DAYS OF PROVIDER-REPORTED HIB (UNKNOWN TYPE) SHOT #5
DHIBN6	1003	1006	9	AGE IN DAYS OF PROVIDER-REPORTED HIB (UNKNOWN TYPE) SHOT #6
DHIBN7	1007	1010	9	AGE IN DAYS OF PROVIDER-REPORTED HIB (UNKNOWN TYPE) SHOT #7
DHIBN8	1011	1014	9	AGE IN DAYS OF PROVIDER-REPORTED HIB (UNKNOWN TYPE) SHOT #8
DHIBO1	1015	1018	9	AGE IN DAYS OF PROVIDER-REPORTED HIB OTHER SHOT #1
DHIBO2	1019	1022	9	AGE IN DAYS OF PROVIDER-REPORTED HIB OTHER SHOT #2
DHIBO3	1023	1026	9	AGE IN DAYS OF PROVIDER-REPORTED HIB OTHER SHOT #3
DHIBO4	1027	1030	9	AGE IN DAYS OF PROVIDER-REPORTED HIB OTHER SHOT #4
DHIBO5	1031	1034	9	AGE IN DAYS OF PROVIDER-REPORTED HIB OTHER SHOT #5
DHIBO6	1035	1038	9	AGE IN DAYS OF PROVIDER-REPORTED HIB OTHER SHOT #6
DHIBO7	1039	1042	9	AGE IN DAYS OF PROVIDER-REPORTED HIB OTHER SHOT #7
DHIBO8	1043	1046	9	AGE IN DAYS OF PROVIDER-REPORTED HIB OTHER SHOT #8
DHIBP1	1047	1050	9	AGE IN DAYS OF PROVIDER-REPORTED PEDVAX HIB SHOT #1
DHIBP2	1051	1054	9	AGE IN DAYS OF PROVIDER-REPORTED PEDVAX HIB SHOT #2
DHIBP3	1055	1058	9	AGE IN DAYS OF PROVIDER-REPORTED PEDVAX HIB SHOT #3
DHIBP4	1059	1062	9	AGE IN DAYS OF PROVIDER-REPORTED PEDVAX HIB SHOT #4
DHIBP5	1063	1066	9	AGE IN DAYS OF PROVIDER-REPORTED PEDVAX HIB SHOT #5
DHIBP6	1067	1070	9	AGE IN DAYS OF PROVIDER-REPORTED PEDVAX HIB SHOT #6
DHIBP7	1071	1074	9	AGE IN DAYS OF PROVIDER-REPORTED PEDVAX HIB SHOT #7

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
DHIBP8	1075	1078	9	AGE IN DAYS OF PROVIDER-REPORTED PEDVAX HIB SHOT #8
DHIBX1	1079	1082	9	AGE IN DAYS OF PROVIDER-REPORTED HIB-ONLY SHOT #1
DHIBX2	1083	1086	9	AGE IN DAYS OF PROVIDER-REPORTED HIB-ONLY SHOT #2
DHIBX3	1087	1090	9	AGE IN DAYS OF PROVIDER-REPORTED HIB-ONLY SHOT #3
DHIBX4	1091	1094	9	AGE IN DAYS OF PROVIDER-REPORTED HIB-ONLY SHOT #4
DHIBX5	1095	1098	9	AGE IN DAYS OF PROVIDER-REPORTED HIB-ONLY SHOT #5
DHIBX6	1099	1102	9	AGE IN DAYS OF PROVIDER-REPORTED HIB-ONLY SHOT #6
DHIBX7	1103	1106	9	AGE IN DAYS OF PROVIDER-REPORTED HIB-ONLY SHOT #7
DHIBX8	1107	1110	9	AGE IN DAYS OF PROVIDER-REPORTED HIB-ONLY SHOT #8
DHM1_AGE	1495	1496	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #1
DHM2_AGE	1497	1498	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #2
DHM3_AGE	1499	1500	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #3
DHM4_AGE	1501	1502	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #4
DHM5_AGE	1503	1504	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #5
DHM6_AGE	1505	1506	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #6
DHM7_AGE	1507	1508	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #7
DHM8_AGE	1509	1510	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (MARKED) SHOT #8
DHN1_AGE	1511	1512	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #1
DHN2_AGE	1513	1514	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #2
DHN3_AGE	1515	1516	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #3
DHN4_AGE	1517	1518	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #4
DHN5_AGE	1519	1520	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #5
DHN6_AGE	1521	1522	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #6
DHN7_AGE	1523	1524	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #7
DHN8_AGE	1525	1526	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP/HIB (UNMARKED) SHOT #8

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
DHPHB1	1111	1114	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B/HIB (COMVAX) SHOT #1
DHPHB2	1115	1118	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B/HIB (COMVAX) SHOT #2
DHPHB3	1119	1122	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B/HIB (COMVAX) SHOT #3
DHPHB4	1123	1126	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B/HIB (COMVAX) SHOT #4
DHPHB5	1127	1130	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B/HIB (COMVAX) SHOT #5
DHPHB6	1131	1134	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B/HIB (COMVAX) SHOT #6
DHPHB7	1135	1138	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B/HIB (COMVAX) SHOT #7
DHPHB8	1139	1142	9	AGE IN DAYS OF PROVIDER-REPORTED HEPATITIS B/HIB (COMVAX) SHOT #8
DIPVM1	1143	1146	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/IPV SHOT (MARKED) #1
DIPVM2	1147	1150	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/IPV SHOT (MARKED) #2
DIPVM3	1151	1154	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/IPV SHOT (MARKED) #3
DIPVM4	1155	1158	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/IPV SHOT (MARKED) #4
DIPVM5	1159	1162	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/IPV SHOT (MARKED) #5
DIPVM6	1163	1166	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/IPV SHOT (MARKED) #6
DIPVM7	1167	1170	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/IPV SHOT (MARKED) #7
DIPVM8	1171	1174	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/IPV SHOT (MARKED) #8
DISPCODE	0098	0099	6	NIS PROVIDER RECORD-CHECK DISPOSITION CODE
DMMR1	1175	1178	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES-CONTAINING VACCINE SHOT #1
DMMR2	1179	1182	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES-CONTAINING VACCINE SHOT #2
DMMR3	1183	1186	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES-CONTAINING VACCINE SHOT #3
DMMR4	1187	1190	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES-CONTAINING VACCINE SHOT #4
DMMRX1	1191	1194	9	AGE IN DAYS OF PROVIDER-REPORTED MMR SHOT #1
DMMRX2	1195	1198	9	AGE IN DAYS OF PROVIDER-REPORTED MMR SHOT #2
DMMRX3	1199	1202	9	AGE IN DAYS OF PROVIDER-REPORTED MMR SHOT #3
DMMRX4	1203	1206	9	AGE IN DAYS OF PROVIDER-REPORTED MMR SHOT #4
DMP1	1207	1210	9	AGE IN DAYS OF PROVIDER-REPORTED MUMPS SHOT #1
DMP2	1211	1214	9	AGE IN DAYS OF PROVIDER-REPORTED MUMPS SHOT #2
DMP3	1215	1218	9	AGE IN DAYS OF PROVIDER-REPORTED MUMPS SHOT

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
				#3
DMP4	1219	1222	9	AGE IN DAYS OF PROVIDER-REPORTED MUMPS SHOT #4
DMPRB1	1223	1226	9	AGE IN DAYS OF PROVIDER-REPORTED MUMPS/RUBELLA SHOT #1
DMPRB2	1227	1230	9	AGE IN DAYS OF PROVIDER-REPORTED MUMPS/RUBELLA SHOT #2
DMPRB3	1231	1234	9	AGE IN DAYS OF PROVIDER-REPORTED MUMPS/RUBELLA SHOT #3
DMPRB4	1235	1238	9	AGE IN DAYS OF PROVIDER-REPORTED MUMPS/RUBELLA SHOT #4
DMS1	1239	1242	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES SHOT #1
DMS2	1243	1246	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES SHOT #2
DMS3	1247	1250	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES SHOT #3
DMS4	1251	1254	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES SHOT #4
DMSMP1	1255	1258	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES/MUMPS SHOT #1
DMSMP2	1259	1262	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES/MUMPS SHOT #2
DMSMP3	1263	1266	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES/MUMPS SHOT #3
DMSMP4	1267	1270	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES/MUMPS SHOT #4
DMSRB1	1271	1274	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES/RUBELLA #1
DMSRB2	1275	1278	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES/RUBELLA #2
DMSRB3	1279	1282	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES/RUBELLA #3
DMSRB4	1283	1286	9	AGE IN DAYS OF PROVIDER-REPORTED MEASLES/RUBELLA #4
DOPVM1	1287	1290	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/OPV SHOT #1
DOPVM2	1291	1294	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/OPV SHOT #2
DOPVM3	1295	1298	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/OPV SHOT #3
DOPVM4	1299	1302	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/OPV SHOT #4
DOPVM5	1303	1306	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/OPV SHOT #5
DOPVM6	1307	1310	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/OPV SHOT #6
DOPVM7	1311	1314	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/OPV SHOT #7

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
DOPVM8	1315	1318	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO/OPV SHOT #8
DPM1_AGE	1527	1528	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (MARKED) SHOT #1
DPM2_AGE	1529	1530	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (MARKED) SHOT #2
DPM3_AGE	1531	1532	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (MARKED) SHOT #3
DPM4_AGE	1533	1534	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (MARKED) SHOT #4
DPM5_AGE	1535	1536	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (MARKED) SHOT #5
DPM6_AGE	1537	1538	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (MARKED) SHOT #6
DPM7_AGE	1539	1540	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (MARKED) SHOT #7
DPM8_AGE	1541	1542	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (MARKED) SHOT #8
DPN1_AGE	1543	1544	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #1
DPN2_AGE	1545	1546	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #2
DPN3_AGE	1547	1548	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #3
DPN4_AGE	1549	1550	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #4
DPN5_AGE	1551	1552	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #5
DPN6_AGE	1553	1554	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #6
DPN7_AGE	1555	1556	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #7
DPN8_AGE	1557	1558	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (UNMARKED) SHOT #8
DPOLIO1	1319	1322	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO SHOT (ALL TYPES) #1
DPOLIO2	1323	1326	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO SHOT (ALL TYPES) #2
DPOLIO3	1327	1330	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO SHOT (ALL TYPES) #3
DPOLIO4	1331	1334	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO SHOT (ALL TYPES) #4
DPOLIO5	1335	1338	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO SHOT (ALL TYPES) #5
DPOLIO6	1339	1342	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO SHOT (ALL TYPES) #6
DPOLIO7	1343	1346	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO SHOT (ALL TYPES) #7
DPOLIO8	1347	1350	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO SHOT (ALL TYPES) #8

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
DPOLN1	1351	1354	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #1
DPOLN2	1355	1358	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #2
DPOLN3	1359	1362	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #3
DPOLN4	1363	1366	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #4
DPOLN5	1367	1370	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #5
DPOLN6	1371	1374	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #6
DPOLN7	1375	1378	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #7
DPOLN8	1379	1382	9	AGE IN DAYS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #8
DRB1	1383	1386	9	AGE IN DAYS OF PROVIDER-REPORTED RUBELLA SHOT #1
DRB2	1387	1390	9	AGE IN DAYS OF PROVIDER-REPORTED RUBELLA SHOT #2
DRB3	1391	1394	9	AGE IN DAYS OF PROVIDER-REPORTED RUBELLA SHOT #3
DRB4	1395	1398	9	AGE IN DAYS OF PROVIDER-REPORTED RUBELLA SHOT #4
DRB5	1399	1402	9	AGE IN DAYS OF PROVIDER-REPORTED RUBELLA SHOT #5
DRB6	1403	1406	9	AGE IN DAYS OF PROVIDER-REPORTED RUBELLA SHOT #6
DRB7	1407	1410	9	AGE IN DAYS OF PROVIDER-REPORTED RUBELLA SHOT #7
DRB8	1411	1414	9	AGE IN DAYS OF PROVIDER-REPORTED RUBELLA SHOT #8
DROT1	1415	1418	9	AGE IN DAYS OF PROVIDER-REPORTED ROTAVIRUS SHOT #1
DROT2	1419	1422	9	AGE IN DAYS OF PROVIDER-REPORTED ROTAVIRUS SHOT #2
DROT3	1423	1426	9	AGE IN DAYS OF PROVIDER-REPORTED ROTAVIRUS SHOT #3
DROT4	1427	1430	9	AGE IN DAYS OF PROVIDER-REPORTED ROTAVIRUS SHOT #4
DROT5	1431	1434	9	AGE IN DAYS OF PROVIDER-REPORTED ROTAVIRUS SHOT #5
DROT6	1435	1438	9	AGE IN DAYS OF PROVIDER-REPORTED ROTAVIRUS SHOT #6
DROT7	1439	1442	9	AGE IN DAYS OF PROVIDER-REPORTED ROTAVIRUS SHOT #7
DROT8	1443	1446	9	AGE IN DAYS OF PROVIDER-REPORTED ROTAVIRUS SHOT #8
DTA1_AGE	1559	1560	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #1

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
DTA2_AGE	1561	1562	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #2
DTA3_AGE	1563	1564	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #3
DTA4_AGE	1565	1566	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #4
DTA5_AGE	1567	1568	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #5
DTA6_AGE	1569	1570	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #6
DTA7_AGE	1571	1572	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #7
DTA8_AGE	1573	1574	9	AGE IN MONTHS OF PROVIDER-REPORTED DTAP (MARKED) SHOT #8
DTM1_AGE	1575	1576	9	AGE IN MONTHS OF PROVIDER-REPORTED DT (MARKED) SHOT #1
DTM2_AGE	1577	1578	9	AGE IN MONTHS OF PROVIDER-REPORTED DT (MARKED) SHOT #2
DTM3_AGE	1579	1580	9	AGE IN MONTHS OF PROVIDER-REPORTED DT (MARKED) SHOT #3
DTM4_AGE	1581	1582	9	AGE IN MONTHS OF PROVIDER-REPORTED DT (MARKED) SHOT #4
DTM5_AGE	1583	1584	9	AGE IN MONTHS OF PROVIDER-REPORTED DT (MARKED) SHOT #5
DTM6_AGE	1585	1586	9	AGE IN MONTHS OF PROVIDER-REPORTED DT (MARKED) SHOT #6
DTM7_AGE	1587	1588	9	AGE IN MONTHS OF PROVIDER-REPORTED DT (MARKED) SHOT #7
DTM8_AGE	1589	1590	9	AGE IN MONTHS OF PROVIDER-REPORTED DT (MARKED) SHOT #8
DTP_SOUR	0046	0046	2	SHOT CARD USED FOR DTP REPORTING
DTP1_AGE	1591	1592	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (ALL TYPES INCLUDING DT) SHOT #1
DTP2_AGE	1593	1594	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (ALL TYPES INCLUDING DT) SHOT #2
DTP3_AGE	1595	1596	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (ALL TYPES INCLUDING DT) SHOT #3
DTP4_AGE	1597	1598	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (ALL TYPES INCLUDING DT) SHOT #4
DTP5_AGE	1599	1600	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (ALL TYPES INCLUDING DT) SHOT #5
DTP6_AGE	1601	1602	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (ALL TYPES INCLUDING DT) SHOT #6
DTP7_AGE	1603	1604	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (ALL TYPES INCLUDING DT) SHOT #7
DTP8_AGE	1605	1606	9	AGE IN MONTHS OF PROVIDER-REPORTED DTP (ALL TYPES INCLUDING DT) SHOT #8
DVRC1	1447	1450	9	AGE IN DAYS OF PROVIDER-REPORTED VARICELLA SHOT #1

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
DVRC2	1451	1454	9	AGE IN DAYS OF PROVIDER-REPORTED VARICELLA SHOT #2
DVRC3	1455	1458	9	AGE IN DAYS OF PROVIDER-REPORTED VARICELLA SHOT #3
DVRC4	1459	1462	9	AGE IN DAYS OF PROVIDER-REPORTED VARICELLA SHOT #4
EDUC1	0064	0064	3	EDUCATION OF MOTHER CATEGORIES
ENTRY	0065	0065	3	CHILD LIVES IN STATE WITH HEPATITIS B STATE ENTRY LAW FOR DAY CARE/HEAD START (1996-1997 SCHOOL YEAR)
FRSTBRN	0066	0066	3	FIRST BORN STATUS OF CHILD
FUL2_MMR	0047	0047	2	HOUSEHOLD REPORT OF 1+ MMR AT ANY AGE
FULL_CPO	0048	0048	2	HOUSEHOLD REPORT OF 1+ VARICELLA AT ANY AGE
FULL_DTP	0049	0049	2	HOUSEHOLD REPORT OF 4+ DTP
FULL_HEP	0050	0050	2	HOUSEHOLD REPORT OF 3+ HEPATITIS B
FULL_HIB	0051	0051	2	HOUSEHOLD REPORT OF 3+ HIB
FULL_POL	0052	0052	2	HOUSEHOLD REPORT OF 3+ POLIO
HEP_BRTH	0110	0110	8	HEPATITIS B GIVEN AT BIRTH FLAG
HEP1_AGE	1607	1608	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #1
HEP2_AGE	1609	1610	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #2
HEP3_AGE	1611	1612	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #3
HEP4_AGE	1613	1614	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #4
HEP5_AGE	1615	1616	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #5
HEP6_AGE	1617	1618	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #6
HEP7_AGE	1619	1620	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #7
HEP8_AGE	1621	1622	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B (ALL TYPES) SHOT #8
HHB1_AGE	1623	1624	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B-HIB SHOT #1
HHB2_AGE	1625	1626	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B-HIB SHOT #2
HHB3_AGE	1627	1628	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B-HIB SHOT #3
HHB4_AGE	1629	1630	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B-HIB SHOT #4
HHB5_AGE	1631	1632	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B-HIB SHOT #5
HHB6_AGE	1633	1634	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B-HIB SHOT #6
HHB7_AGE	1635	1636	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B-HIB SHOT #7
HHB8_AGE	1637	1638	9	AGE IN MONTHS OF PROVIDER-REPORTED HEPATITIS B-HIB SHOT #8

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
HIB1_AGE	1639	1640	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (ALL TYPES) SHOT #1
HIB2_AGE	1641	1642	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (ALL TYPES) SHOT #2
HIB3_AGE	1643	1644	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (ALL TYPES) SHOT #3
HIB4_AGE	1645	1646	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (ALL TYPES) SHOT #4
HIB5_AGE	1647	1648	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (ALL TYPES) SHOT #5
HIB6_AGE	1649	1650	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (ALL TYPES) SHOT #6
HIB7_AGE	1651	1652	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (ALL TYPES) SHOT #7
HIB8_AGE	1653	1654	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (ALL TYPES) SHOT #8
HIN1_AGE	1655	1656	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (UNMARKED) SHOT #1
HIN2_AGE	1657	1658	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (UNMARKED) SHOT #2
HIN3_AGE	1659	1660	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (UNMARKED) SHOT #3
HIN4_AGE	1661	1662	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (UNMARKED) SHOT #4
HIN5_AGE	1663	1664	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (UNMARKED) SHOT #5
HIN6_AGE	1665	1666	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (UNMARKED) SHOT #6
HIN7_AGE	1667	1668	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (UNMARKED) SHOT #7
HIN8_AGE	1669	1670	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB (UNMARKED) SHOT #8
HIO1_AGE	1671	1672	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB OTHER SHOT #1
HIO2_AGE	1673	1674	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB OTHER SHOT #2
HIO3_AGE	1675	1676	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB OTHER SHOT #3
HIO4_AGE	1677	1678	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB OTHER SHOT #4
HIO5_AGE	1679	1680	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB OTHER SHOT #5
HIO6_AGE	1681	1682	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB OTHER SHOT #6
HIO7_AGE	1683	1684	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB OTHER SHOT #7
HIO8_AGE	1685	1686	9	AGE IN MONTHS OF PROVIDER-REPORTED HIB OTHER SHOT #8
HIP1_AGE	1687	1688	9	AGE IN MONTHS OF PROVIDER-REPORTED PEDVAX HIB SHOT #1

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
HIP2_AGE	1689	1690	9	AGE IN MONTHS OF PROVIDER-REPORTED PEDVAX HIB SHOT #2
HIP3_AGE	1691	1692	9	AGE IN MONTHS OF PROVIDER-REPORTED PEDVAX HIB SHOT #3
HIP4_AGE	1693	1694	9	AGE IN MONTHS OF PROVIDER-REPORTED PEDVAX HIB SHOT #4
HIP5_AGE	1695	1696	9	AGE IN MONTHS OF PROVIDER-REPORTED PEDVAX HIB SHOT #5
HIP6_AGE	1697	1698	9	AGE IN MONTHS OF PROVIDER-REPORTED PEDVAX HIB SHOT #6
HIP7_AGE	1699	1700	9	AGE IN MONTHS OF PROVIDER-REPORTED PEDVAX HIB SHOT #7
HIP8_AGE	1701	1702	9	AGE IN MONTHS OF PROVIDER-REPORTED PEDVAX HIB SHOT #8
HUTD4313	0053	0053	2	HOUSEHOLD REPORT OF 4:3:1:3 UTD (UP-TO-DATE)
HY_WGT	0012	0021	1	MODIFIED-POSTSTRATIFICATION (HH) WEIGHT FOR CHILD
I_CWIC01	0075	0075	3	CHILD EVER RECEIVED WIC BENEFITS
I_CWIC03	0076	0076	3	CHILD IS CURRENTLY GETTING WIC BENFITS
I_CWIC05	0077	0077	3	SPELL OF MORE THAN 6 MONTHS WITH NO WIC BENEFITS
I_CWIC07	0078	0078	3	AT LAST WIC CERTIFICATION VISIT DID ANYONE ASK TO CHECK CHILD'S SHOT RECORD OR VACCINE INFORMATION
I_HADCPX	0054	0054	2	DID CHILD EVER HAVE CHICKEN POX?
I_HISP_K	0079	0079	3	HISPANIC ORIGIN OF CHILD
I_HISP_M	0080	0080	3	HISPANIC ORIGIN OF MOTHER
I_RACEKR	0081	0081	3	RACE OF CHILD (RECODE)
I_RACEMR	0082	0082	3	RACE OF MOTHER (RECODE)
IAGECPXR	0055	0055	2	AGE IN MONTHS WHEN CHILD HAD CHICKEN POX (RECODE)
ICONTWIC	0074	0074	3	DID CHILD HAVE CONTINUOUS WIC PARTICIPATION FROM BIRTH?
INCPORAT	0067	0070	3	INCOME TO POVERTY RATIO
INCPOV1R	0071	0071	3	POVERTY STATUS(RECODE)
INCQ298R	0072	0073	3	FAMILY INCOME CATEGORIES (RECODE)
INOPHONR	0091	0091	3	LENGTH OF INTERRUPTION IN TELEPHONE SERVICE IN DAYS(RECODE)
INTRP	0090	0090	3	INTERRUPTION IN PHONE SERVICE OF 7 DAYS OR MORE
IPV1_AGE	1703	1704	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/IPV (MARKED) SHOT #1
IPV2_AGE	1705	1706	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/IPV (MARKED) SHOT #2
IPV3_AGE	1707	1708	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/IPV (MARKED) SHOT #3
IPV4_AGE	1709	1710	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/IPV (MARKED) SHOT #4
IPV5_AGE	1711	1712	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/IPV (MARKED) SHOT #5

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
IPV6_AGE	1713	1714	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/IPV (MARKED) SHOT #6
IPV7_AGE	1715	1716	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/IPV (MARKED) SHOT #7
IPV8_AGE	1717	1718	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/IPV (MARKED) SHOT #8
ITRUEIAP	0092	0093	4	IAP AREA OF CURRENT RESIDENCE
LANGUAGE	0083	0083	3	LANGUAGE THE INTERVIEW WAS CONDUCTED IN
M_AGEGRP	0086	0086	3	AGE OF MOTHER CATEGORIES
MARITAL	0084	0084	3	MARITAL STATUS OF MOTHER CATEGORIES
MMR1_AGE	1719	1720	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES-CONTAINING VACCINE SHOT #1
MMR2_AGE	1721	1722	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES-CONTAINING VACCINE SHOT #2
MMR3_AGE	1723	1724	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES-CONTAINING VACCINE SHOT #3
MMR4_AGE	1725	1726	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES-CONTAINING VACCINE SHOT #4
MMX1_AGE	1727	1728	9	AGE IN MONTHS OF PROVIDER-REPORTED MMR SHOT #1
MMX2_AGE	1729	1730	9	AGE IN MONTHS OF PROVIDER-REPORTED MMR SHOT #2
MMX3_AGE	1731	1732	9	AGE IN MONTHS OF PROVIDER-REPORTED MMR SHOT #3
MMX4_AGE	1733	1734	9	AGE IN MONTHS OF PROVIDER-REPORTED MMR SHOT #4
MOBIL	0085	0085	3	GEOGRAPHIC MOBILITY STATUS: STATE OF RESIDENCE OF CHILD AT BIRTH VERSUS CURRENT STATE OF RESIDENCE
MP1_AGE	1735	1736	9	AGE IN MONTHS OF PROVIDER-REPORTED MUMPS SHOT #1
MP2_AGE	1737	1738	9	AGE IN MONTHS OF PROVIDER-REPORTED MUMPS SHOT #2
MP3_AGE	1739	1740	9	AGE IN MONTHS OF PROVIDER-REPORTED MUMPS SHOT #3
MP4_AGE	1741	1742	9	AGE IN MONTHS OF PROVIDER-REPORTED MUMPS SHOT #4
MPR1_AGE	1743	1744	9	AGE IN MONTHS OF PROVIDER-REPORTED MUMPS/RUBELLA SHOT #1
MPR2_AGE	1745	1746	9	AGE IN MONTHS OF PROVIDER-REPORTED MUMPS/RUBELLA SHOT #2
MPR3_AGE	1747	1748	9	AGE IN MONTHS OF PROVIDER-REPORTED MUMPS/RUBELLA SHOT #3
MPR4_AGE	1749	1750	9	AGE IN MONTHS OF PROVIDER-REPORTED MUMPS/RUBELLA SHOT #4
MS1_AGE	1751	1752	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES-ONLY SHOT #1
MS2_AGE	1753	1754	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES-ONLY SHOT #2

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
MS3_AGE	1755	1756	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES-ONLY SHOT #3
MS4_AGE	1757	1758	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES-ONLY SHOT #4
MSM1_AGE	1759	1760	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES/MUMPS SHOT #1
MSM2_AGE	1761	1762	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES/MUMPS SHOT #2
MSM3_AGE	1763	1764	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES/MUMPS SHOT #3
MSM4_AGE	1765	1766	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES/MUMPS SHOT #4
MSR1_AGE	1767	1768	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES/RUBELLA SHOT #1
MSR2_AGE	1769	1770	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES/RUBELLA SHOT #2
MSR3_AGE	1771	1772	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES/RUBELLA SHOT #3
MSR4_AGE	1773	1774	9	AGE IN MONTHS OF PROVIDER-REPORTED MEASLES/RUBELLA SHOT #4
N_PRVR	0100	0100	6	NUMBER OF PROVIDERS RESPONDING WITH VACCINATION DATA FOR CHILD (RECODE)
NCARER1	0101	0101	7	CHILD'S PROVIDERS OFFER COMPREHENSIVE CHILD CARE
NCARER2	0102	0102	7	CHILD'S PROVIDERS OFFER ACUTE ILLNESS CARE
NCARER3	0103	0103	7	CHILD'S PROVIDERS OFFER FOLLOW UP VISITS
NCARER4	0104	0104	7	CHILD'S PROVIDERS OFFER AFTER-HOURS TELEPHONE COVERAGE
NCARER5	0105	0105	7	CHILD'S PROVIDERS OFFER WIC PROGRAM/SERVICES
NCARER6	0106	0106	7	CHILD'S PROVIDERS OFFER OTHER SERVICES
OPV1_AGE	1775	1776	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/OPV (MARKED) SHOT #1
OPV2_AGE	1777	1778	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/OPV (MARKED) SHOT #2
OPV3_AGE	1779	1780	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/OPV (MARKED) SHOT #3
OPV4_AGE	1781	1782	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/OPV (MARKED) SHOT #4
OPV5_AGE	1783	1784	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/OPV (MARKED) SHOT #5
OPV6_AGE	1785	1786	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/OPV (MARKED) SHOT #6
OPV7_AGE	1787	1788	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/OPV (MARKED) SHOT #7
OPV8_AGE	1789	1790	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO/OPV (MARKED) SHOT #8
P_NUHEPX	0123	0123	8	NUMBER OF HEPATITIS B-ONLY SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
				INTERVIEW DATE.
P_NUHIBN	0124	0124	8	NUMBER OF HIB (UNMARKED) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUHIBO	0125	0125	8	NUMBER OF HIB (OTHER) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUHIBP	0126	0126	8	NUMBER OF PEDVAX HIB SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUHIBX	0127	0127	8	NUMBER OF HIB-ONLY SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUHPHB	0128	0128	8	NUMBER OF HEPATITIS B/HIB (COMVAX) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMDAH	0129	0129	8	NUMBER OF DTAP/HIB (MARKED) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMDHB	0130	0130	8	NUMBER OF DTP/HIB COMBINATION SHOTS (ALL TYPES), AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMDHM	0131	0131	8	NUMBER OF DTP/HIB (MARKED) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMDHN	0132	0132	8	NUMBER OF DTP/HIB (UNMARKED) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMDTA	0133	0133	8	NUMBER OF DTAP (MARKED) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
P_NUMDTM	0134	0134	8	NUMBER OF DT (MARKED) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMDTP	0135	0135	8	NUMBER OF DTP SHOTS (ALL TYPES INCLUDING DT), AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMHEP	0136	0136	8	NUMBER OF HEPATITIS B (ALL TYPES) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMHIB	0137	0137	8	NUMBER OF HIB (ALL TYPES) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMIPV	0138	0138	8	NUMBER OF IPV (MARKED) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMMMR	0139	0139	8	NUMBER OF MCV (MEASLES-CONTAINING VACCINE) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMMMX	0140	0140	8	NUMBER OF TRUE MMR (NOT INCLUDING MEASLES-ONLY SHOTS), AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMOLN	0141	0141	8	NUMBER OF POLIO (UNMARKED) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMOPV	0142	0142	8	NUMBER OF OPV (MARKED) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMPOL	0143	0143	8	NUMBER OF POLIO (ALL TYPES) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMRB	0144	0144	8	NUMBER OF RUBELLA SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
P_NUMROT	0145	0145	8	NUMBER OF ROTAVIRUS SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMTPM	0146	0146	8	NUMBER OF DTP (MARKED) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMTPN	0147	0147	8	NUMBER OF DTP (UNMARKED) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_NUMVRC	0148	0148	8	NUMBER OF VARICELLA (CHICKEN POX) SHOTS, AS DETERMINED FROM PROVIDER INFORMATION. DOES NOT INCLUDE SHOTS REPORTED BY THE PROVIDER(S) AS OCCURRING AFTER THE RDD INTERVIEW DATE.
P_U12VRC	0115	0115	8	UTD (UP-TO-DATE) FLAG FOR PROVIDER 1+ VARICELLA AT 12+ MONTHS
P_UTD331	0114	0114	8	UTD (UP-TO-DATE) FLAG FOR PROVIDER 3:3:1
P_UTD431	0111	0111	8	UTD (UP-TO-DATE) FLAG FOR PROVIDER 4:3:1
P_UTDHEP	0116	0116	8	UTD (UP-TO-DATE) FLAG FOR PROVIDER 3+ HEPATITIS B
P_UTDHIB	0117	0117	8	UTD (UP-TO-DATE) FLAG FOR PROVIDER 3+ HIB
P_UTDMCV	0118	0118	8	UTD (UP-TO-DATE) FLAG FOR PROVIDER 1+ MCV
P_UTDMMX	0119	0119	8	UTD (UP-TO-DATE) FLAG FOR PROVIDER 1+ MMR (NOT INCLUDING ANY MEASLES-ONLY SHOTS)
P_UTDPOL	0120	0120	8	UTD (UP-TO-DATE) FLAG FOR PROVIDER 3+ POLIO
P_UTDTP3	0121	0121	8	UTD (UP-TO-DATE) FLAG FOR PROVIDER 3+ DTP
P_UTDTP4	0122	0122	8	UTD (UP-TO-DATE) FLAG FOR PROVIDER 4+ DTP
PDAT	0036	0036	1	CHILD HAS ADEQUATE PROVIDER DATA
PLN1_AGE	1791	1792	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #1
PLN2_AGE	1793	1794	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #2
PLN3_AGE	1795	1796	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #3
PLN4_AGE	1797	1798	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #4
PLN5_AGE	1799	1800	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #5
PLN6_AGE	1801	1802	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #6
PLN7_AGE	1803	1804	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #7
PLN8_AGE	1805	1806	9	AGE IN MONTHS OF PROVIDER-REPORTED POLIO (UNMARKED) SHOT #8
POL1_AGE	1807	1808	9	AGE ON MONTHS OF PROVIDER-REPORTED POLIO (ALL TYPES) SHOT # 1

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
POL2_AGE	1809	1810	9	AGE ON MONTHS OF PROVIDER-REPORTED POLIO (ALL TYPES) SHOT # 2
POL3_AGE	1811	1812	9	AGE ON MONTHS OF PROVIDER-REPORTED POLIO (ALL TYPES) SHOT # 3
POL4_AGE	1813	1814	9	AGE ON MONTHS OF PROVIDER-REPORTED POLIO (ALL TYPES) SHOT # 4
POL5_AGE	1815	1816	9	AGE ON MONTHS OF PROVIDER-REPORTED POLIO (ALL TYPES) SHOT # 5
POL6_AGE	1817	1818	9	AGE ON MONTHS OF PROVIDER-REPORTED POLIO (ALL TYPES) SHOT # 6
POL7_AGE	1819	1820	9	AGE ON MONTHS OF PROVIDER-REPORTED POLIO (ALL TYPES) SHOT # 7
POL8_AGE	1821	1822	9	AGE ON MONTHS OF PROVIDER-REPORTED POLIO (ALL TYPES) SHOT # 8
PROV_FAC	0107	0107	7	PROVIDER FACILITY TYPE
PUT43133	0113	0113	8	UTD (UP-TO-DATE) FLAG FOR PROVIDER 4:3:1:3:3
PUTD4313	0112	0112	8	UTD (UP-TO-DATE) FLAG FOR PROVIDER 4:3:1:3
RACEKIDR	0087	0087	3	RACE/ETHNICITY OF CHILD (RECODE)
RACEMOMR	0088	0088	3	RACE/ETHNICITY OF MOTHER (RECODE)
RB1_AGE	1823	1824	9	AGE IN MONTHS OF PROVIDER-REPORTED RUBELLA SHOT #1
RB2_AGE	1825	1826	9	AGE IN MONTHS OF PROVIDER-REPORTED RUBELLA SHOT #2
RB3_AGE	1827	1828	9	AGE IN MONTHS OF PROVIDER-REPORTED RUBELLA SHOT #3
RB4_AGE	1829	1830	9	AGE IN MONTHS OF PROVIDER-REPORTED RUBELLA SHOT #4
RB5_AGE	1831	1832	9	AGE IN MONTHS OF PROVIDER-REPORTED RUBELLA SHOT #5
RB6_AGE	1833	1834	9	AGE IN MONTHS OF PROVIDER-REPORTED RUBELLA SHOT #6
RB7_AGE	1835	1836	9	AGE IN MONTHS OF PROVIDER-REPORTED RUBELLA SHOT #7
RB8_AGE	1837	1838	9	AGE IN MONTHS OF PROVIDER-REPORTED RUBELLA SHOT #8
REGISTRY	0108	0108	7	CHILD'S PROVIDERS REPORTED CHILD'S VACCINATIONS TO IMMUNIZATION REGISTRY
ROT1_AGE	1839	1840	9	AGE IN MONTHS OF PROVIDER-REPORTED ROTAVIRUS SHOT #1
ROT2_AGE	1841	1842	9	AGE IN MONTHS OF PROVIDER-REPORTED ROTAVIRUS SHOT #2
ROT3_AGE	1843	1844	9	AGE IN MONTHS OF PROVIDER-REPORTED ROTAVIRUS SHOT #3
ROT4_AGE	1845	1846	9	AGE IN MONTHS OF PROVIDER-REPORTED ROTAVIRUS SHOT #4
ROT5_AGE	1847	1848	9	AGE IN MONTHS OF PROVIDER-REPORTED ROTAVIRUS SHOT #5
ROT6_AGE	1849	1850	9	AGE IN MONTHS OF PROVIDER-REPORTED ROTAVIRUS SHOT #6

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
ROT7_AGE	1851	1852	9	AGE IN MONTHS OF PROVIDER-REPORTED ROTAVIRUS SHOT #7
ROT8_AGE	1853	1854	9	AGE IN MONTHS OF PROVIDER-REPORTED ROTAVIRUS SHOT #8
SEQNUMC	0001	0006	1	UNIQUE CHILD IDENTIFIER
SEQNUMHH	0007	0011	1	UNIQUE HOUSEHOLD IDENTIFIER
SEX	0089	0089	3	GENDER OF CHILD
SHOTCARD	0056	0056	2	SHOT CARD USE FLAG
STATE	0094	0095	4	STATE OF RESIDENCE (STATE FIPS CODE)
VB11	0149	0178	8	VERBATIM TEXT FOR 1ST OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 1ST PROVIDER.
VB12	0179	0208	8	VERBATIM TEXT FOR 1ST OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 2ND PROVIDER.
VB13	0209	0238	8	VERBATIM TEXT FOR 1ST OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 3RD PROVIDER.
VB21	0239	0268	8	VERBATIM TEXT FOR 2ND OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 1ST PROVIDER.
VB22	0269	0298	8	VERBATIM TEXT FOR 2ND OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 2ND PROVIDER.
VB23	0299	0328	8	VERBATIM TEXT FOR 2ND OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 3RD PROVIDER.
VB31	0329	0358	8	VERBATIM TEXT FOR 3RD OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 1ST PROVIDER.
VB32	0359	0388	8	VERBATIM TEXT FOR 3RD OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 2ND PROVIDER.
VB33	0389	0418	8	VERBATIM TEXT FOR 3RD OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 3RD PROVIDER.
VB41	0419	0448	8	VERBATIM TEXT FOR 4TH OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 1ST PROVIDER.
VB42	0449	0478	8	VERBATIM TEXT FOR 4TH OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 2ND PROVIDER.
VB43	0479	0508	8	VERBATIM TEXT FOR 4TH OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 3RD PROVIDER.
VB51	0509	0538	8	VERBATIM TEXT FOR 5TH OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 1ST PROVIDER.

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VARIABLE NAME	BEGIN POSITION	END POSITION	SECTION NUMBER	VARIABLE LABEL
VB52	0539	0568	8	VERBATIM TEXT FOR 5TH OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 2ND PROVIDER.
VB53	0569	0598	8	VERBATIM TEXT FOR 5TH OTHER SHOT (ADDITIONAL SHOT OF TYPE NOT PRE-PRINTED ON PROVIDER SURVEY FORM) REPORTED BY 3RD PROVIDER.
VFC_PRO	0109	0109	7	PARTICIPATION OF CHILD'S PROVIDERS IN VACCINES FOR CHILDREN PROGRAM
VRC1_AGE	1855	1856	9	AGE IN MONTHS OF PROVIDER-REPORTED VARICELLA SHOT #1
VRC2_AGE	1857	1858	9	AGE IN MONTHS OF PROVIDER-REPORTED VARICELLA SHOT #2
VRC3_AGE	1859	1860	9	AGE IN MONTHS OF PROVIDER-REPORTED VARICELLA SHOT #3
VRC4_AGE	1861	1862	9	AGE IN MONTHS OF PROVIDER-REPORTED VARICELLA SHOT #4
W0	0022	0031	1	OVERALL VACCINATION HISTORY NONRESPONSE ADJUSTED WEIGHT FOR CHILDREN WITH ADEQUATE PROVIDER DATA
YEAR	0032	0035	1	YEAR OF INTERVIEW

Appendix H

Summary Tables

Table H.1: Estimated population total and sample sizes of children 19-35 months of age by state and IAP area, 1999 NIS

State/IAP Area	Estimated Population Total of Children	Number of Children with Completed HH Interviews	Number of Children with Adequate Provider Data
U.S. National	5,630,108	34,442	22,521
Alabama	89,139	842	566
Rest of State	75,709	446	302
Jefferson County	13,431	396	264
Alaska	14,039	480	349
Arizona	107,149	937	564
Rest of State	40,716	487	311
Maricopa County	66,433	450	253
Arkansas	52,193	428	290
California	772,850	1,852	1,125
Rest of State	429,620	454	279
Los Angeles	240,219	495	259
Santa Clara	38,994	407	295
San Diego County	64,016	496	292
Colorado	78,583	506	319
Connecticut	63,406	412	291
Delaware	13,877	438	299
Dist. of Columbia	10,397	491	293
Florida	293,555	1,302	853
Rest of State	226,711	448	284
Duval County	18,299	449	307
Dade County	48,545	405	262
Georgia	171,297	842	541
Rest of State	138,680	405	285
Fulton/DeKalb	32,617	437	256
Hawaii	25,750	457	299
Idaho	26,799	421	311
Illinois	262,382	944	564
Rest of State	187,819	439	294
Chicago	74,563	505	270
Indiana	120,546	803	528
Rest of State	100,490	411	282
Marion County	20,057	392	246
Iowa	52,547	411	304
Kansas	54,751	467	328
Kentucky	75,796	413	299

Table H.1: Estimated population total and sample sizes of children 19-35 months of age by state and IAP area, 1999 NIS (continued)

State/IAP Area	Estimated Population Total of Children	Number of Children with Completed HH Interviews	Number of Children with Adequate Provider Data
Louisiana	90,447	984	591
Rest of State	79,890	520	335
Orleans Parish	10,558	464	256
Maine	20,915	386	274
Maryland	110,369	884	539
Rest of State	94,293	492	318
Baltimore City	16,076	392	221
Massachusetts	113,982	800	522
Rest of State	102,185	402	257
City of Boston	11,797	398	265
Michigan	192,594	874	546
Rest of State	168,278	461	303
Detroit	24,316	413	243
Minnesota	95,357	386	273
Mississippi	58,957	395	277
Missouri	104,721	449	314
Montana	15,327	392	282
Nebraska	32,563	415	296
Nevada	41,865	498	313
New Hampshire	21,112	389	253
New Jersey	168,305	966	583
Rest of State	160,479	541	337
Newark	7,826	425	246
New Mexico	39,335	470	298
New York	367,384	935	541
Rest of State	195,473	440	279
NYC - 5 Counties	171,910	495	262
North Carolina	155,717	426	292
North Dakota	10,635	427	306
Ohio	216,841	1,364	919
Rest of State	165,993	429	298
Cuyahoga County	27,866	493	325
Franklin County	22,982	442	296
Oklahoma	69,117	464	295
Oregon	64,665	396	278

Table H.1: Estimated population total and sample sizes of children 19-35 months of age by state and IAP area, 1999 NIS (continued)

State/IAP Area	Estimated Population Total of Children	Number of Children with Completed HH Interviews	Number of Children with Adequate Provider Data
Pennsylvania	207,421	904	565
Rest of State	175,497	414	283
Philadelphia	31,924	490	282
Rhode Island	17,826	420	255
South Carolina	77,372	507	333
South Dakota	14,954	422	327
Tennessee	103,722	1,301	865
Rest of State	71,533	394	290
Shelby County	20,620	453	281
Davidson County	11,569	454	294
Texas	476,353	2,379	1,407
Rest of State	307,802	568	348
Dallas County	55,220	369	200
El Paso County	20,679	520	335
City of Houston	59,990	467	248
Bexar County	32,663	455	276
Utah	57,051	409	298
Vermont	9,832	412	315
Virginia	138,373	432	272
Washington	116,619	914	616
Rest of State	84,266	438	294
King County	32,353	476	322
West Virginia	28,640	394	294
Wisconsin	97,727	796	550
Rest of State	75,875	408	298
Milwaukee County	21,852	388	252
Wyoming	8,952	406	309

Table H.2: Age Group by WIC Participation, National Immunization Survey, 1999

		Children with Completed Household Interviews		Children with Adequate Provider Data	
Age Group in Months	**Ever on WIC**	**Unweighted Sample Size**	**Weighted Sample Size**	**Unweighted Sample Size**	**Weighted Sample Size**
19 - 23	YES	5164	875003.5	3437	893215.2
19 - 23	NO	4990	772113.7	3268	747464.4
19 - 23	DON'T KNOW ABOUT THE PROGRAM	123	18529.5	74	13822.0
24 - 29	YES	6082	1041533.1	3990	1062198.1
24 - 29	NO	5931	923119.6	3972	922281.3
24 - 29	DON'T KNOW ABOUT THE PROGRAM	142	25007.4	95	25135.9
30 - 35	YES	5958	1024598.9	3826	1054020.9
30 - 35	NO	5926	928856.3	3783	888777.4
30 - 35	DON'T KNOW ABOUT THE PROGRAM	126	21345.5	76	23192.3

Table H.3: Age Group by Family Income, National Immunization Survey, 1999

		Children with Completed Household Interviews		Children with Adequate Provider Data	
Age Group in Months	**Family Income**	**Unweighted Sample Size**	**Weighted Sample Size**	**Unweighted Sample Size**	**Weighted Sample Size**
19 - 23	MISSING	130	21488.4	7	1174.0
19 - 23	0-$7,500	635	98739.1	418	101795.2
19 - 23	$7,501-$10,000	550	95726.4	360	100481.1
19 - 23	$10,001-$12,500	240	46665.1	167	48765.7
19 - 23	$12,501-$15,000	455	77940.9	330	84685.9
19 - 23	$15,001-$17,500	235	43759.5	166	40852.2
19 - 23	$17,501-$20,000	606	106859.0	425	107998.8
19 - 23	$20,001-$25,000	641	104715.1	428	98713.7
19 - 23	$25,001-$30,000	746	116601.4	501	104636.7
19 - 23	$30,001-$35,000	457	78040.3	315	80350.3
19 - 23	$35,001-$40,000	576	88002.0	376	81673.4
19 - 23	$40,001-$45,000	371	53797.7	258	55309.6
19 - 23	$45,001-$50,000	547	88839.5	387	89308.5
19 - 23	$50,001+	2820	422753.5	1947	422748.1
19 - 23	DON'T KNOW	875	156205.9	525	182351.7
19 - 23	REFUSED	393	65513.0	169	53656.9
24 – 29	MISSING	153	25000.9	14	5295.0
24 - 29	0-$7,500	714	119504.9	490	114826.9
24 - 29	$7,501-$10,000	606	103066.4	395	107532.9
24 - 29	$10,001-$12,500	316	55007.7	222	63092.1
24 - 29	$12,501-$15,000	493	86822.3	309	80956.5
24 - 29	$15,001-$17,500	262	45829.1	183	47064.0
24 - 29	$17,501-$20,000	635	114249.8	435	120169.2
24 - 29	$20,001-$25,000	750	124298.8	509	128017.6
24 - 29	$25,001-$30,000	861	148231.8	610	155318.7
24 - 29	$30,001-$35,000	561	91758.7	389	95190.5
24 - 29	$35,001-$40,000	744	113985.4	502	108837.6
24 - 29	$40,001-$45,000	432	67804.8	300	71001.3
24 - 29	$45,001-$50,000	672	97992.0	463	97142.3
24 - 29	$50,001+	3405	526175.3	2405	537850.9
24 - 29	DON'T KNOW	1080	191625.8	626	204789.3
24 - 29	REFUSED	471	78306.5	205	72530.6
30 - 35	MISSING	153	25269.8	13	4903.4
30 - 35	0-$7,500	678	111759.0	440	120600.2
30 - 35	$7,501-$10,000	578	112408.0	352	108001.0
30 - 35	$10,001-$12,500	300	63774.2	190	59606.0
30 - 35	$12,501-$15,000	435	74114.2	297	76241.4
30 - 35	$15,001-$17,500	304	51004.3	213	57800.4
30 - 35	$17,501-$20,000	653	119408.7	442	125664.2
30 - 35	$20,001-$25,000	769	132407.3	488	129873.2
30 - 35	$25,001-$30,000	851	143870.9	565	141446.4
30 - 35	$30,001-$35,000	613	89204.1	412	89857.6
30 - 35	$35,001-$40,000	730	114112.0	485	113779.0
30 - 35	$40,001-$45,000	435	65291.1	294	63866.6
30 - 35	$45,001-$50,000	674	106095.6	462	110588.4
30 - 35	$50,001+	3405	515031.0	2313	535774.0
30 - 35	DON'T KNOW	966	171339.0	552	178660.7
30 - 35	REFUSED	466	79711.6	167	49328.1

Table H.4: Age Group by Race/Ethnicity, National Immunization Survey, 1999

		Children with Completed Household Interviews		Children with Adequate Provider Data	
Age Group In Months	**Race/Ethnicity Of Child**	**Unweighted Sample Size**	**Weighted Sample Size**	**Unweighted Sample Size**	**Weighted Sample Size**
19 - 23	HISPANIC	1854	363762.6	1198	351871.9
19 - 23	WHITE, NON HISPANIC	6006	964967.0	4128	959880.4
19 - 23	BLACK, NON HISPANIC	1813	247990.7	1063	252379.5
19 - 23	ALL OTHER, NON HISPANIC	604	88926.4	390	90369.8
24 - 29	HISPANIC	2201	428224.0	1409	427645.9
24 - 29	WHITE, NON HISPANIC	7129	1159479.9	4932	1166425.7
24 - 29	BLACK, NON HISPANIC	2066	300501.2	1229	310580.7
24 - 29	ALL OTHER, NON HISPANIC	759	101455.1	487	104963.1
30 - 35	HISPANIC	2179	429933.7	1361	442415.3
30 - 35	WHITE, NON HISPANIC	7043	1134093.6	4710	1127961.6
30 - 35	BLACK, NON HISPANIC	2086	304459.8	1170	290027.4
30 - 35	ALL OTHER, NON HISPANIC	702	106313.7	444	105586.3

Table H.5: Age Group by Gender, National Immunization Survey, 1999

		Children with Completed Household Interviews		Children with Adequate Provider Data	
Age Group In Months	**Gender**	**Unweighted Sample Size**	**Weighted Sample Size**	**Unweighted Sample Size**	**Weighted Sample Size**
19 - 23	MALE	5192	846487.6	3411	834203.7
19 - 23	FEMALE	5085	819159.1	3368	820297.9
24 - 29	MALE	6083	1002448.7	4059	1016653.9
24 - 29	FEMALE	6072	987211.4	3998	992961.5
30 - 35	MALE	6089	1006121.3	3869	1004214.2
30 - 35	FEMALE	5921	968679.5	3816	961776.4

Table H.6: Shot Card Use by Presence of Adequate Provider Data, National Immunization Survey, 1999

Shot Card Use	Presence of Adequate Provider Data	Unweighted Sample Size
SHOT CARD	ADEQUATE PROVIDER DATA	11964
SHOT CARD	NO ADEQUATE PROVIDER DATA	4865
NO SHOT CARD	ADEQUATE PROVIDER DATA	10557
NO SHOT CARD	NO ADEQUATE PROVIDER DATA	7056

Table H.7: Estimates of Vaccination Coverage and 95-Percent Confidence-Interval Half-Widths, National Immunization Survey, 1999

State/IAP Area	3+ DTP	4+ DTP	3+ POLIO	1+ MCV	3+ HIB	3+ HEP B	1+ VARICELLA	3:3:1	4:3:1	4:3:1:3	4:3:1:3:3
US National	95.9±0.4	83.3±0.8	89.6±0.6	91.5±0.6	93.5±0.5	88.1±0.7	57.5±1.0	86.1±0.7	79.9±0.8	78.4±0.9	73.2±0.9
Alabama	96.3±2.0	83.9±4.1	87.8±3.6	90.1±3.4	94.8±2.3	90.7±3.4	71.3±5.0	84.8±4.0	79.7±4.5	78.4±4.6	74.1±5.0
AL-Jefferson Cnty	97.1±2.4	89.9±4.0	91.8±3.5	95.2±2.6	96.2±2.6	90.3±3.6	76.1±5.4	90.0±3.8	86.6±4.4	85.2±4.6	78.8±5.2
AL-Rest of State	96.1±2.3	82.8±4.7	87.1±4.2	89.1±4.0	94.6±2.7	90.8±4.0	70.4±5.8	83.9±4.6	78.5±5.2	77.2±5.3	73.2±5.8
Alaska	96.0±2.5	83.5±4.6	91.7±3.3	90.7±3.9	92.4±3.2	88.8±3.6	29.9±5.3	87.5±4.2	82.2±4.7	80.1±4.8	74.5±5.1
Arizona	91.6±3.1	76.5±4.5	84.3±3.8	87.4±3.5	90.4±3.2	84.4±3.8	59.3±4.7	81.7±4.0	73.9±4.5	72.4±4.6	67.3±4.7
AZ-Maricopa Cnty	90.0±4.6	73.7±6.3	82.4±5.4	85.5±5.1	90.0±4.6	81.4±5.5	60.1±6.5	79.1±5.7	71.7±6.4	71.0±6.4	65.0±6.6
AZ-Rest of State	94.3±3.2	81.1±5.5	87.4±4.6	90.4±4.0	91.1±4.0	89.3±4.1	58.2±6.2	85.8±4.8	77.5±5.7	74.8±5.9	71.1±6.0
Arkansas	93.5±3.7	79.9±5.7	89.4±4.5	86.9±4.9	91.3±4.0	83.2±5.1	58.0±6.4	84.7±5.0	78.5±5.8	77.1±5.8	70.4±6.1
California	95.7±1.7	81.3±3.3	91.1±2.3	92.8±2.3	92.5±2.2	87.9±2.8	69.7±3.8	87.7±2.7	78.3±3.5	75.3±3.6	70.5±3.8
CA-Los Angeles	93.6±3.4	80.2±5.4	88.6±4.3	93.0±3.5	91.6±3.7	87.2±4.5	75.1±5.6	86.8±4.6	78.1±5.6	76.0±5.7	71.0±6.0
CA-San Diego Cnty	94.6±2.8	81.0±4.9	89.2±3.8	92.9±3.3	91.6±3.6	85.8±4.3	71.1±5.6	84.9±4.5	76.6±5.4	74.5±5.6	69.1±5.8
CA-Santa Clara	95.7±2.5	87.9±3.9	91.5±3.3	92.7±3.2	93.2±3.1	87.6±4.1	65.1±5.9	88.6±3.8	84.3±4.3	81.8±4.6	75.1±5.3
CA-Rest of State	97.1±2.3	81.5±5.1	92.7±3.3	92.6±3.6	93.0±3.3	88.6±4.3	67.0±6.0	88.6±4.1	78.1±5.4	74.4±5.6	70.0±5.9
Colorado	95.2±3.0	80.8±4.9	88.6±4.0	90.4±3.9	92.9±3.3	85.6±4.5	52.9±6.0	83.6±4.6	77.2±5.2	75.8±5.3	69.6±5.6
Connecticut	98.2±1.8	93.0±3.3	91.0±3.8	95.4±2.7	96.8±2.5	93.6±2.9	62.7±6.0	89.1±4.1	87.1±4.4	85.9±4.6	82.3±4.8
Delaware	98.3±1.7	83.6±4.6	93.0±3.1	94.2±2.9	96.2±2.4	87.7±4.0	61.4±6.0	89.4±3.8	80.0±5.0	78.2±5.1	69.0±5.7
Dist. of Columbia	94.4±3.4	83.5±5.0	86.6±4.6	91.2±3.7	92.4±3.8	86.2±4.5	77.9±5.3	83.6±5.0	78.5±5.4	77.5±5.4	70.9±5.8
Florida	96.7±2.1	86.0±3.6	92.7±2.8	91.7±3.0	93.1±2.9	92.9±2.5	50.7±5.1	87.9±3.6	82.0±4.1	80.3±4.2	77.9±4.4
FL-Dade Cnty	98.0±2.0	87.8±4.4	93.3±3.2	96.7±2.4	94.9±3.4	92.8±3.4	45.8±6.6	92.0±3.6	86.7±4.5	84.0±5.0	80.8±5.4
FL-Duval Cnty	96.1±2.2	81.9±4.7	91.3±3.5	90.8±3.6	94.0±3.0	92.8±3.2	50.6±6.1	86.7±4.2	79.1±4.9	77.7±5.1	76.7±5.1
FL-Rest of State	96.5±2.7	85.9±4.6	92.7±3.5	90.8±3.8	92.7±3.7	92.9±3.2	51.8±6.5	87.1±4.6	81.3±5.2	79.8±5.3	77.3±5.6
Georgia	97.3±1.9	85.4±4.1	92.6±2.8	91.5±3.3	95.3±2.3	91.0±3.1	61.7±5.4	88.7±3.7	83.1±4.3	81.9±4.4	77.9±4.6
GA-Fulton/DeKalb	97.8±1.8	89.0±4.1	93.0±3.4	93.4±3.3	93.2±3.2	88.8±4.5	66.3±6.5	90.2±3.9	86.4±4.5	83.4±4.8	76.8±5.7
GA-Rest of State	97.2±2.3	84.5±5.0	92.5±3.4	91.1±4.1	95.8±2.7	91.5±3.6	60.6±6.5	88.3±4.4	82.3±5.2	81.5±5.3	78.1±5.6
Hawaii	95.4±2.7	86.6±4.2	90.8±3.7	94.1±2.9	93.5±3.0	91.2±3.5	63.1±6.1	88.5±4.0	82.8±4.7	81.6±4.8	79.2±5.0
Idaho	92.7±3.1	75.0±5.2	87.0±4.0	86.1±4.1	90.7±3.6	81.6±4.7	16.1±4.3	80.7±4.7	70.0±5.5	69.4±5.5	65.0±5.7
Illinois	95.8±2.0	82.0±3.9	87.9±3.5	91.4±2.8	94.2±2.4	87.6±3.4	43.6±4.9	84.9±3.7	78.8±4.1	77.4±4.2	72.0±4.5
IL-City of Chicago	92.0±4.1	77.1±5.9	87.1±4.7	86.4±5.1	90.8±4.1	85.2±5.0	40.5±7.0	80.8±5.4	73.2±6.1	71.4±6.2	66.4±6.5
IL-Rest of State	97.4±2.2	84.0±5.0	88.2±4.4	93.4±3.3	95.5±3.0	88.6±4.4	44.9±6.3	86.6±4.7	81.0±5.3	79.8±5.4	74.2±5.8
Indiana	96.5±2.2	77.5±4.9	89.1±3.5	89.1±3.8	94.2±2.6	83.3±4.0	42.8±5.6	84.0±4.3	75.4±5.0	74.3±5.0	65.3±5.3
IN-Marion Cnty	96.7±2.3	84.0±5.3	91.0±4.0	92.2±3.6	94.9±2.8	78.4±5.6	51.7±7.1	87.6±4.5	79.7±5.8	79.1±5.8	64.2±6.8
IN-Rest of State	96.4±2.6	76.2±5.7	88.7±4.2	88.4±4.5	94.1±3.1	84.3±4.6	41.0±6.6	83.3±5.1	74.5±5.8	73.3±5.9	65.5±6.3
Iowa	97.6±1.8	86.1±4.2	91.4±3.4	91.1±3.5	95.6±2.5	89.6±3.6	46.0±5.9	88.0±3.9	84.5±4.4	83.4±4.5	78.9±4.9
Kansas	94.1±2.8	82.9±4.6	90.0±3.5	89.9±3.8	91.0±3.5	81.9±4.5	53.5±5.9	85.9±4.2	79.7±4.9	78.9±4.9	70.7±5.4
Kentucky	98.7±1.3	92.5±3.3	91.3±4.1	93.7±3.1	97.1±2.2	93.8±3.1	61.7±6.2	89.7±4.3	88.6±4.4	87.6±4.5	84.4±4.9
Louisiana	96.9±1.8	80.2±4.5	89.6±3.1	89.8±3.5	94.3±3.0	90.5±2.9	61.0±5.4	84.2±4.1	76.9±4.7	76.8±4.7	72.3±4.9
LA-Orleans Parish	95.5±2.6	79.7±5.1	84.7±4.8	85.8±4.6	93.1±3.3	86.1±4.5	55.3±6.7	78.5±5.5	72.6±5.8	71.5±5.9	64.9±6.3

Table H.7: Estimates of Vaccination Coverage and 95-Percent Confidence-Interval Half-Widths, National Immunization Survey, 1999 (continued)

State/IAP Area	3+ DTP	4+ DTP	3+ POLIO	1+ MCV	3+ HIB	3+ HEP B	1+ VARICELLA	3:3:1	4:3:1	4:3:1:3	4:3:1:3:3
LA-Rest of State	97.1±2.0	80.3±5.0	90.3±3.4	90.3±4.0	94.5±3.4	91.0±3.2	61.8±6.1	85.0±4.6	77.5±5.3	77.5±5.3	73.2±5.5
Maine	97.0±2.0	86.9±4.5	92.1±3.3	92.0±3.4	95.9±2.4	87.2±4.0	43.1±6.1	89.3±3.9	84.1±4.8	82.9±5.0	76.8±5.4
Maryland	96.4±2.0	85.0±3.9	88.5±3.5	95.8±2.0	94.2±2.6	87.7±3.5	71.7±4.9	86.6±3.6	80.5±4.2	79.4±4.3	72.7±4.7
MD-Baltimore City	93.1±4.1	79.2±6.2	86.2±5.2	92.9±4.0	89.8±4.7	84.4±5.4	78.6±6.2	83.7±5.5	73.2±6.6	71.9±6.8	65.6±7.1
MD-Rest of State	97.0±2.3	85.9±4.4	88.8±3.9	96.3±2.2	95.0±2.9	88.3±4.0	70.5±5.6	87.1±4.2	81.8±4.8	80.7±4.9	73.9±5.4
Massachusetts	97.6±2.0	90.7±3.5	93.4±3.0	94.0±2.9	95.2±3.0	92.0±3.2	66.0±5.6	90.8±3.4	87.3±3.9	85.2±4.4	81.4±4.7
MA-City of Boston	99.1±1.1	93.4±4.1	93.2±3.4	96.8±2.1	96.4±3.4	90.7±4.7	70.7±6.8	90.6±3.8	86.1±5.1	83.6±5.8	77.9±6.3
MA-Rest of State	97.4±2.2	90.4±3.9	93.4±3.3	93.6±3.2	95.0±3.3	92.1±3.5	65.5±6.2	90.9±3.8	87.4±4.3	85.3±4.8	81.8±5.2
Michigan	94.5±2.7	78.9±4.6	87.9±3.7	89.8±3.5	92.1±3.2	87.8±3.8	43.5±5.4	83.8±4.1	75.9±4.8	74.4±4.9	70.9±5.1
MI-City of Detroit	90.5±4.2	72.4±6.2	79.2±5.7	87.4±4.5	87.9±4.7	84.6±5.2	37.6±6.6	73.3±6.1	66.9±6.5	66.4±6.5	63.0±6.7
MI-Rest of State	95.1±3.0	79.8±5.2	89.1±4.1	90.2±4.0	92.7±3.6	88.3±4.3	44.3±6.1	85.3±4.6	77.2±5.4	75.6±5.5	72.1±5.8
Minnesota	99.3±1.1	90.6±4.1	93.5±3.5	95.7±2.5	97.2±2.5	90.6±3.8	61.6±6.5	91.1±3.9	87.0±4.8	85.2±5.1	78.5±5.7
Mississippi	95.8±3.0	83.9±5.2	88.8±4.5	92.3±3.7	94.2±3.3	91.1±3.9	39.4±6.4	86.2±4.8	81.7±5.4	81.7±5.4	79.0±5.6
Missouri	94.1±3.0	81.5±4.7	83.5±4.5	88.1±4.0	92.9±3.2	84.9±4.4	51.4±5.9	80.6±4.8	75.5±5.2	75.0±5.2	68.9±5.5
Montana	97.7±1.9	88.1±4.0	92.8±3.2	93.1±3.0	94.4±2.9	89.9±3.6	44.6±6.1	89.6±3.7	84.8±4.4	82.5±4.6	76.4±5.2
Nebraska	96.3±2.4	86.8±4.2	91.7±3.3	91.8±3.4	93.4±3.2	92.9±3.2	58.4±6.2	89.0±3.8	83.7±4.5	81.8±4.8	79.8±4.9
Nevada	91.2±3.8	76.9±5.1	85.5±4.5	88.7±4.0	89.0±4.1	84.9±4.6	48.3±6.2	82.7±4.7	73.4±5.3	73.1±5.4	68.5±5.6
New Hampshire	99.2±1.2	91.2±3.8	92.9±3.4	93.3±3.3	98.5±1.5	90.5±3.9	54.0±6.5	88.0±4.2	84.5±4.7	84.5±4.7	78.4±5.4
New Jersey	98.5±1.2	83.9±4.8	90.3±3.9	94.1±3.2	97.5±1.7	90.9±3.5	59.7±5.8	87.7±4.4	80.9±5.0	80.8±5.0	75.3±5.4
NJ-City of Newark	96.7±2.8	75.7±7.5	83.2±6.0	90.8±4.7	93.2±3.6	90.2±5.3	48.4±7.9	80.4±6.2	68.7±8.0	66.5±8.0	63.6±8.0
NJ-Rest of State	98.6±1.2	84.3±5.0	90.7±4.1	94.2±3.4	97.7±1.8	90.9±3.6	60.2±6.1	88.1±4.6	81.5±5.3	81.5±5.3	75.9±5.6
New Mexico	95.8±2.5	82.3±5.0	88.2±4.7	87.5±4.9	92.7±3.2	88.3±4.0	53.5±6.6	81.2±5.5	75.6±5.9	73.0±6.1	66.6±6.4
New York	97.7±1.4	87.2±3.0	91.4±2.4	94.9±1.9	94.4±2.0	92.9±2.3	59.2±4.5	88.7±2.8	83.4±3.3	81.0±3.5	78.2±3.6
NY-NYC 5 Counties	96.2±2.7	83.8±4.8	89.3±4.1	95.5±2.9	92.3±3.5	89.5±4.1	60.6±6.3	87.4±4.4	81.5±5.1	78.3±5.3	74.4±5.6
NY-Rest of State	99.1±1.0	90.2±3.5	93.2±2.8	94.5±2.6	96.2±2.3	95.9±2.3	57.9±6.3	90.0±3.5	85.0±4.2	83.3±4.5	81.6±4.6
North Carolina	96.6±2.3	84.4±4.8	87.6±4.3	92.5±3.3	96.6±2.3	89.0±3.9	59.4±6.2	86.1±4.5	81.8±5.0	81.8±5.0	77.1±5.4
North Dakota	95.7±2.6	88.4±4.0	89.6±3.8	90.8±3.5	92.9±3.2	90.2±3.7	45.9±6.0	85.5±4.3	83.0±4.5	80.4±4.8	76.3±5.2
Ohio	95.5±2.1	82.2±3.8	88.1±3.2	90.3±3.0	94.1±2.3	85.9±3.4	53.0±4.9	84.1±3.6	79.1±4.0	78.1±4.0	73.0±4.2
OH-Cuyahoga Cnty	94.9±2.9	79.3±5.3	86.9±4.4	91.2±3.8	92.3±3.6	88.4±4.0	54.5±6.1	83.2±4.9	74.6±5.6	73.5±5.7	67.2±6.0
OH-Franklin Cnty	96.8±2.1	84.7±4.5	88.8±3.9	94.7±2.8	93.6±3.0	81.4±4.8	65.4±5.7	86.7±4.2	79.1±5.1	77.9±5.1	66.9±6.0
OH-Rest of State	95.5±2.7	82.3±4.8	88.2±4.1	89.6±3.9	94.5±2.9	86.2±4.4	51.1±6.3	83.9±4.6	79.9±5.0	78.9±5.1	74.9±5.4
Oklahoma	96.0±2.7	79.4±5.3	88.6±4.1	88.8±4.3	92.3±3.6	87.2±4.4	66.4±6.1	82.5±4.9	74.0±5.7	72.9±5.7	70.4±5.8
Oregon	90.9±4.2	79.3±5.6	81.0±5.2	86.1±4.8	88.9±4.5	80.9±5.1	57.9±6.4	77.3±5.6	73.2±5.9	72.3±6.0	63.8±6.2
Pennsylvania	98.2±1.4	90.0±3.3	93.1±2.7	94.3±2.7	97.4±1.6	91.2±3.4	67.0±5.3	90.7±3.2	86.6±3.7	86.0±3.7	80.8±4.3
PA-Philadelphia	98.3±1.6	86.9±4.2	90.5±3.7	95.4±2.7	96.0±2.4	84.0±4.7	75.0±5.4	88.2±4.1	82.7±4.7	81.3±4.9	69.9±5.7
PA-Rest of State	98.2±1.6	90.6±3.9	93.6±3.1	94.1±3.1	97.7±1.8	92.5±3.9	65.6±6.2	91.1±3.8	87.3±4.2	86.8±4.3	82.8±5.0
Rhode Island	99.6±0.8	93.8±3.3	94.3±3.1	95.8±2.9	96.6±2.8	94.0±3.1	76.5±5.7	92.7±3.4	90.4±3.9	87.4±4.6	83.2±5.0
South Carolina	95.9±2.6	83.7±4.5	89.6±3.7	90.9±3.5	94.8±2.9	92.0±3.4	65.1±5.6	85.6±4.2	81.1±4.7	80.6±4.8	78.0±5.0
South Dakota	97.5±1.8	86.5±4.1	93.0±3.3	93.0±2.8	94.9±3.0	90.5±3.7	17.5±4.7	88.8±3.9	83.4±4.5	81.7±4.7	76.9±5.2
Tennessee	96.0±1.8	82.4±3.7	86.2±3.5	89.6±3.0	92.2±2.4	86.2±3.1	56.9±4.5	83.9±3.6	79.5±3.8	77.7±3.9	70.0±4.3

Table H.7: Estimates of Vaccination Coverage and 95-Percent Confidence-Interval Half-Widths, National Immunization Survey, 1999 (continued)

State/IAP Area	3+ DTP	4+ DTP	3+ POLIO	1+ MCV	3+ HIB	3+ HEP B	1+ VARICELLA	3:3:1	4:3:1	4:3:1:3	4:3:1:3:3
TN-Davidson Cnty	92.5±3.5	80.3±5.1	84.1±4.7	86.1±4.4	89.0±4.1	75.4±5.3	57.1±6.1	78.7±5.2	75.4±5.5	73.3±5.6	60.5±6.0
TN-Shelby Cnty	97.3±2.1	81.9±5.1	89.3±4.0	88.4±4.2	93.2±3.3	91.0±3.5	49.1±6.4	84.1±4.7	76.5±5.5	75.0±5.6	70.9±5.8
TN-Rest of State	96.2±2.5	82.9±5.2	85.6±4.8	90.5±4.2	92.5±3.3	86.6±4.3	59.2±6.2	84.7±4.9	81.0±5.3	79.2±5.4	71.2±5.9
Texas	91.8±2.4	77.5±3.5	85.2±3.0	87.9±2.9	88.1±2.8	81.7±3.3	58.9±4.0	81.6±3.3	74.7±3.6	72.4±3.7	64.8±4.0
TX-Bexar Cnty	92.0±3.8	71.7±6.2	86.3±4.6	87.9±4.6	89.9±4.3	88.0±4.4	63.2±6.4	83.9±4.9	70.2±6.2	69.9±6.2	67.3±6.3
TX-City of Houston	89.2±4.2	71.8±6.5	79.1±5.6	86.7±4.6	84.4±5.6	74.8±6.7	59.1±7.2	72.8±6.2	66.5±6.8	63.3±7.0	55.1±7.3
TX-Dallas Cnty	93.2±3.9	79.0±6.2	85.1±5.5	87.9±5.0	87.3±5.2	82.4±5.7	62.3±7.3	81.6±5.9	76.0±6.5	71.6±6.9	65.0±7.2
TX-El Paso Cnty	90.3±4.0	76.6±5.2	87.6±4.3	88.2±4.0	87.3±4.6	77.2±5.2	68.7±5.4	83.0±4.8	75.0±5.2	72.7±5.5	62.7±5.7
TX-Rest of State	92.1±3.6	79.1±5.1	86.1±4.4	88.2±4.2	88.9±4.1	82.5±4.7	57.1±5.9	83.0±4.8	76.5±5.3	74.5±5.4	66.5±5.8
Utah	92.9±3.5	83.5±4.9	90.0±4.0	92.3±3.7	91.1±4.0	74.0±5.8	41.6±6.4	87.4±4.4	81.7±5.1	80.2±5.3	65.8±6.2
Vermont	99.5±0.8	94.8±2.7	93.3±3.0	99.4±0.7	99.5±0.7	90.9±3.3	46.8±6.0	92.9±3.1	90.7±3.5	90.5±3.5	85.2±4.2
Virginia	98.1±1.8	87.1±4.5	91.5±3.8	89.4±4.4	95.5±2.8	89.5±4.3	64.6±6.3	84.4±5.0	81.6±5.2	80.3±5.3	74.9±5.8
Washington	94.4±2.2	80.9±3.7	88.6±2.9	89.3±2.8	92.6±2.7	85.5±3.4	32.1±4.3	83.3±3.4	76.5±3.9	74.9±4.0	67.1±4.4
WA-King Cnty	92.6±3.8	83.2±4.9	85.8±4.7	90.5±3.7	92.3±3.9	83.3±4.8	38.5±5.8	81.9±5.1	78.5±5.3	77.4±5.4	70.1±5.7
WA-Rest of State	95.2±2.7	80.1±4.8	89.6±3.6	88.8±3.6	92.7±3.5	86.4±4.3	29.6±5.6	83.9±4.3	75.8±5.0	74.0±5.2	66.0±5.6
West Virginia	99.1±0.9	85.8±4.4	92.5±3.1	93.3±3.1	97.6±1.7	92.2±3.3	51.3±6.1	89.2±3.7	82.1±4.7	81.0±4.8	77.8±5.0
Wisconsin	98.4±1.1	87.6±3.1	92.0±2.6	94.2±2.3	96.4±1.7	90.1±2.9	49.1±4.8	89.4±2.9	85.4±3.3	84.5±3.4	78.6±3.9
WI-Milwaukee Cnty	97.1±2.7	80.0±5.9	88.4±4.6	93.6±3.7	93.0±4.2	85.5±5.4	54.0±7.2	84.2±5.3	75.3±6.2	74.1±6.3	65.7±6.8
WI-Rest of State	98.8±1.2	89.8±3.7	93.0±3.0	94.3±2.8	97.4±1.8	91.4±3.3	47.7±5.9	90.8±3.4	88.2±3.8	87.6±3.9	82.3±4.5
Wyoming	96.7±2.7	86.3±4.6	93.7±3.3	92.6±3.3	94.9±3.1	93.9±3.2	46.1±6.1	89.5±4.0	83.5±4.9	82.8±4.9	81.5±5.0