Component Description

The Immunization section (variable name prefix IMQ) provides survey participant interview data on immunizations, including the hepatitis A vaccine, the hepatitis B vaccine, and the human papillomavirus (HPV) vaccine. The number of doses received is also obtained since all vaccines are multi-dose.

Eligible Sample

All survey participants 2 years of age and older are asked about the hepatitis A vaccination; all survey participants’ are asked about the hepatitis B vaccination; and all survey participants’ ages 9-59 are asked about the HPV vaccination.

Interview Setting and Mode of Administration

These questions were asked, in the home, by trained interviewers using the Computer-Assisted Personal Interviewing (CAPI) system. Persons 16 years of age and older and emancipated minors were interviewed directly. A proxy provided information for survey participants who were under 16 years of age and for participants who could not answer the questions themselves.

The Interviewer Procedure Manuals and Survey Questionnaires and Exam Manuals can be found on the NHANES website at <https://wwwn.cdc.gov/nchs/data/nhanes/2013-2014/questionnaires/imq_h.pdf>.

Quality Assurance & Quality Control

The CAPI system is programmed with built-in consistency checks to reduce data entry errors. CAPI also uses online help screens to assist interviewers in defining key terms used in the questionnaire.

Data Processing and Editing

Participants’ questionnaire interview responses were entered into a laptop computer and then uploaded to the NHANES computerized database in the same manner as other sections of the Sample Person Questionnaire. The data were edited for completeness, consistency, and illogical values.

Analytic Notes

The IMQ questionnaire data was collected on a full sample of respondents and can be analyzed in conjunction with results from MEC laboratory data. Analysts should review all NHANES hepatitis and HPV laboratory data release documentation and statistical and analytic guidelines prior to beginning data analysis.

Question IMQ011 in NHANES 2005-2006, 2007-2008, 2009-2010, 2011-2012 and 2013-2014 is comparable to question IMD010 in NHANES 2003-2004, and question IMQ010 in NHANES 2001-2002 and NHANES 1999-2000.

Although these data were collected as part of the household questionnaire, if they are merged with the MEC exam data, exam sample weights should be used for analyses.

Please refer to the [NHANES Analytic Guidelines](https://wwwn.cdc.gov/nchs/nhanes/analyticguidelines.aspx) and the on-line [NHANES Tutorial](https://www.cdc.gov/nchs/tutorials/) for further details on the use of sample weights and other analytic issues.

Codebook and Frequencies

SEQN - Respondent sequence number

**Variable Name:**

SEQN

**SAS Label:**

Respondent sequence number

**English Text:**

Respondent sequence number.

**Target:**

Both males and females 0 YEARS - 150 YEARS

IMQ011 - Received Hepatitis A vaccine

**Variable Name:**

IMQ011

**SAS Label:**

Received Hepatitis A vaccine

**English Text:**

Hepatitis (Hep-a-ti-tis) A vaccine is given as a two dose series to some children older than 2 years and also to some adults, especially people who travel outside the United States. It has only been available since 1995. {Have you/Has SP} ever received hepatitis A vaccine?

**English Instructions:**

INTERVIEWER INSTRUCTION: A COMBINATION HEPATITIS A AND HEPATITIS B VACCINE SHOULD BE COUNTED AS THE A VACCINE FOR THE PURPOSE OF THIS QUESTION. CODE 'YES AT LEAST 2 DOSES' IF RESPONDENT ANSWERS 3 OR 4 DOSES WERE RECEIVED. CODE 'LESS THAN 2 DOSES' ONLY IF MENTIONED BY RESPONDENT.

**Target:**

Both males and females 2 YEARS - 150 YEARS

| **Code or Value** | **Value Description** | **Count** | **Cumulative** | **Skip to Item** |
| --- | --- | --- | --- | --- |
| 1 | Yes, at least 2 doses | 4238 | 4238 |  |
| 2 | Less than 2 doses | 194 | 4432 |  |
| 3 | No doses | 3943 | 8375 |  |
| 7 | Refused | 6 | 8381 |  |
| 9 | Don't know | 1126 | 9507 |  |
| . | Missing | 668 | 10175 |  |

IMQ020 - Received Hepatitis B 3 dose series

**Variable Name:**

IMQ020

**SAS Label:**

Received Hepatitis B 3 dose series

**English Text:**

Hepatitis (Hep-a-ti-tis) B vaccine is given in three separate doses and has been recommended for all newborn infants since 1991. In 1995, it was recommended that adolescents be given the vaccine. Persons who may be exposed to other people's blood, such as health care workers, also may have received the vaccine. {Have you/Has SP} ever received the 3-dose series of the hepatitis B vaccine?

**English Instructions:**

INTERVIEWER INSTRUCTION: A COMBINATION HEPATITIS A AND HEPATITIS B VACCINE SHOULD BE COUNTED AS THE B VACCINE FOR THE PURPOSE OF THIS QUESTION. CODE 'YES AT LEAST 3 DOSES' IF RESPONDENT ANSWERS 4 DOSES WERE RECEIVED. CODE 'LESS THAN 3 DOSES' ONLY IF MENTIONED BY RESPONDENT.

**Target:**

Both males and females 0 YEARS - 150 YEARS

| **Code or Value** | **Value Description** | **Count** | **Cumulative** | **Skip to Item** |
| --- | --- | --- | --- | --- |
| 1 | Yes at least 3 doses | 5230 | 5230 |  |
| 2 | Less than 3 doses | 453 | 5683 |  |
| 3 | No doses | 3517 | 9200 |  |
| 7 | Refused | 7 | 9207 |  |
| 9 | Don't know | 968 | 10175 |  |
| . | Missing | 0 | 10175 |  |

IMQ050 - CHECK ITEM

**Variable Name:**

IMQ050

**English Instructions:**

CHECK ITEM. IF SP = FEMALE AND AGE IS >= 9 AND <= 59, CONTINUE. IF SP = MALE AND AGE IS >= 9 AND <= 59, GO TO IMQ070. OTHERWISE, GO TO END OF SECTION.

**Target:**

Both males and females 0 YEARS - 150 YEARS

IMQ040 - Received HPV vaccine

**Variable Name:**

IMQ040

**SAS Label:**

Received HPV vaccine

**English Text:**

Human Papillomavirus (HPV) vaccine is given to prevent cervical cancer in girls and women. There are two HPV vaccines available called Cervarix and Gardasil. It is given in 3 separate doses over a 6 month period. {Have you/Has SP} ever received one or more doses of the HPV vaccine?

**Target:**

Females only 9 YEARS - 59 YEARS

| **Code or Value** | **Value Description** | **Count** | **Cumulative** | **Skip to Item** |
| --- | --- | --- | --- | --- |
| 1 | Yes | 600 | 600 | IMQ080 |
| 2 | No | 2363 | 2963 |  |
| 7 | Refused | 0 | 2963 |  |
| 9 | Don't know | 125 | 3088 |  |
| . | Missing | 7087 | 10175 |  |

IMQ070 - Received HPV vaccine

**Variable Name:**

IMQ070

**SAS Label:**

Received HPV vaccine

**English Text:**

Human Papillomavirus (HPV) vaccine is given to prevent HPV infection and genital warts in boys and men. It is given in 3 separate doses over a 6 month period. {Have you/Has SP} ever received one or more doses of the HPV vaccine? (The brand name for the vaccine is Gardasil.)

**Target:**

Males only 9 YEARS - 59 YEARS

| **Code or Value** | **Value Description** | **Count** | **Cumulative** | **Skip to Item** |
| --- | --- | --- | --- | --- |
| 1 | Yes | 277 | 277 | IMQ090 |
| 2 | No | 2442 | 2719 |  |
| 7 | Refused | 0 | 2719 |  |
| 9 | Don't know | 207 | 2926 |  |
| . | Missing | 7249 | 10175 |  |

IMQ080 - HPV vaccine received

**Variable Name:**

IMQ080

**SAS Label:**

HPV vaccine received

**English Text:**

Which of the HPV vaccines did {you/SP} receive, Cervarix or Gardasil?

**Target:**

Females only 9 YEARS - 59 YEARS

| **Code or Value** | **Value Description** | **Count** | **Cumulative** | **Skip to Item** |
| --- | --- | --- | --- | --- |
| 1 | Cervarix | 41 | 41 |  |
| 2 | Gardasil | 338 | 379 |  |
| 3 | Both | 44 | 423 |  |
| 7 | Refused | 0 | 423 |  |
| 9 | Don't know | 177 | 600 |  |
| . | Missing | 9575 | 10175 |  |

IMQ090 - Age first dose HPV

**Variable Name:**

IMQ090

**SAS Label:**

Age first dose HPV

**English Text:**

How old {were you/was SP} when {you/SP} received your first dose of {Cervarix/Gardasil/the vaccine}?

**English Instructions:**

HARD EDIT: IF AGE SP RECEIVED FIRST DOSE IS GREATER THAN SP'S CURRENT AGE, DISPLAY "AGE SP RECEIVED FIRST DOSE CANNOT EXCEED SP'S CURRENT AGE." SOFT EDIT: IF DIFFERENCE BETWEEN SP'S CURRENT AGE AND AGE SP RECEIVED FIRST DOSE IS MORE THAN SEVEN YEARS, DISPLAY "UNLIKELY RESPONSE AS HPV VACCINES WERE NOT AVAILABLE AT THAT TIME. PLEASE CONFIRM AGE SP RECEIVED FIRST DOSE." ENTER AGE IN YEARS. CAPI INSTRUCTION: IF SP = MALE, THEN FILL GARDASIL. IF IMQ.080 = 1, DISPLAY "Cervarix"; ELSE IF IMQ.080 = 2, DISPLAY "Gardasil"; ELSE DISPLAY "the vaccine".

**Target:**

Both males and females 9 YEARS - 59 YEARS

| **Code or Value** | **Value Description** | **Count** | **Cumulative** | **Skip to Item** |
| --- | --- | --- | --- | --- |
| 5 to 54 | Range of Values | 796 | 796 |  |
| 777 | Refused | 1 | 797 |  |
| 999 | Don't know | 80 | 877 |  |
| . | Missing | 9298 | 10175 |  |

IMQ045 - Received HPV, # of doses

**Variable Name:**

IMQ045

**SAS Label:**

Received HPV, # of doses

**English Text:**

How many doses of {Cervarix/Gardasil/the vaccine} {have you/has SP} received?

**English Instructions:**

CAPI INSTRUCTION: IF SP = MALE, THEN FILL GARDASIL. IF IMQ.080 = 1, DISPLAY "Cervarix"; ELSE IF IMQ.080 = 2, DISPLAY "Gardasil"; ELSE DISPLAY "the vaccine".

**Target:**

Both males and females 9 YEARS - 59 YEARS

| **Code or Value** | **Value Description** | **Count** | **Cumulative** | **Skip to Item** |
| --- | --- | --- | --- | --- |
| 1 | 1 Dose | 180 | 180 |  |
| 2 | 2 Doses | 162 | 342 |  |
| 3 | 3 Doses | 481 | 823 |  |
| 7 | Refused | 0 | 823 |  |
| 9 | Don't know | 54 | 877 |  |
| . | Missing | 9298 | 10175 |  |