**Supplemental Files**

**Figure S1 Prevalence of hepatitis A virus (HAV) susceptibility among adults aged 20-59 years with human immunodeficiency virus (HIV) infection in the United States, NHANES 2007**–**2016.** HIV infection was defined by positive HIV antibody testing results. During 2007–2016, approximately 39.2% (95% CI: 24.8%–53.6%) among adults aged 20–59 years with HIV infection in the United States were HAV susceptible, which was significantly lower than that among overall adults aged 20–59 years (67.3%, 95% CI: 65.6%–69.1%). However, it was close to the previous estimates (38.0%) based on the Medical Monitoring Project (MMP) survey during 2009–2012 (Reference: [DeGroote NP](https://www.ncbi.nlm.nih.gov/pubmed/?term=DeGroote%20NP%5BAuthor%5D&cauthor=true&cauthor_uid=30003012), [Mattson CL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Mattson%20CL%5BAuthor%5D&cauthor=true&cauthor_uid=30003012), [Tie Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Tie%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=30003012), et al. Hepatitis A virus immunity and vaccination among at-risk persons receiving HIV medical care. [Prev Med Rep.](https://www.ncbi.nlm.nih.gov/pubmed/?term=Hepatitis+A+virus+immunity+and+vaccination+among+at-risk+persons+receiving+HIV+medical+care) **2018**; 11:139-144). As the immunity against HAV acquired either from past infection or vaccination, we could not differentiate between the two for the lower HAV susceptibility among adults with HIV infection.

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| **Table S1 Prevalence and predictors of non-vaccination to hepatitis A among U.S.-born adults aged ≥20 years in the United States, NHANES 2007**–**2016** | | | | | | | |
| **Characteristic** | **n/N** | **Univariate logistic regression** | |  | **Multivariate logistic regression a** | | |
| **Crude % (95% CI)** | **Crude OR (95% CI)** | **P-values** | **Adjusted % (95% CI)** | **Adjusted OR (95% CI)** | **P-values** |
| **Total** | 13,204/18,034 | 72.9 (71.7-74.1) | |  |  |  |  |
| **Sex** |  |  |  |  |  | | |
| Male | 6,428/8,710 | 72.9 (71.4-74.4) | ─ |  | 72.8 (71.2-74.3) | ─ |  |
| Female | 6,776/9,324 | 73.0 (71.5-74.4) | 1.00 (0.92-1.09) | 0.938 | 72.5 (71.1-73.8) | 0.98 (0.89-1.09) | 0.751 |
| **Age group (years)** |  |  |  |  |  |  |  |
| 20–29 | 1,386/2,931 | 49.7 (47.0-52.3) | ─ |  | 49.7 (47.1-52.3) | ─ |  |
| 30–39 | 1,794/2,832 | 64.9 (62.4-67.4) | 1.87 (1.61-2.18) | <0.001 | 65.0 (62.3-67.7) | 1.92 (1.62-2.27) | <0.001 |
| 40–49 | 2,029/2,800 | 74.4 (72.1-76.7) | 2.94 (2.55-3.40) | <0.001 | 74.3 (72.0-76.7) | 3.02 (2.59-3.53) | <0.001 |
| 50–59 | 2,308/2,873 | 80.6 (78.6-82.6) | 4.20 (3.59-4.92) | <0.001 | 80.6 (78.7-82.5) | 4.37 (3.75-5.10) | <0.001 |
| 60–69 | 2,496/2,998 | 82.1 (79.4-84.9) | 4.65 (3.74-5.79) | <0.001 | 82.4 (79.6-85.2) | 4.93 (3.93-6.19) | <0.001 |
| ≥70 | 3,191/3,600 | 88.3 (86.6-90.1) | 7.68 (6.40-9.20) | <0.001 | 87.6 (85.6-89.5) | 7.46 (6.08-9.16) | <0.001 |
| **Race/ethnicity** |  |  |  |  |  |  |  |
| Hispanic | 1,523/2,288 | 60.6 (57.9-63.2) | ─ |  | 67.7 (65.0-70.5) | ─ |  |
| Non-Hispanic white | 7,808/10,085 | 75.4 (74.0-76.8) | 2.00 (1.77-2.26) | <0.001 | 74.4 (73.2-75.6) | 1.43 (1.24-1.64) | <0.001 |
| Non-Hispanic black | 3,463/4,921 | 67.2 (64.6-69.8) | 1.33 (1.13-1.57) | <0.001 | 68.9 (66.6-71.2) | 1.06 (0.88-1.28) | 0.514 |
| **Marital status** |  |  |  |  |  |  |  |
| Never married | 2,177/3,605 | 60.5 (57.7-63.3) | ─ |  | NC | NC |  |
| Married/with a partner | 7,408/9,974 | 73.9 (72.6-75.2) | 1.85 (1.65-2.07) | <0.001 |  |  |  |
| Separated/widowed/divorced | 3,612/4,445 | 81.2 (79.6-82.9) | 2.82 (2.42-3.30) | <0.001 |  |  |  |
| **Poverty index b** |  |  |  |  |  |  |  |
| <130% | 3,600/5,090 | 69.4 (67.1-71.7) | ─ |  | 72.9 (70.5-75.2) | ─ |  |
| 130%–350% | 4,675/6,206 | 74.8 (73.0-76.5) | 1.31 (1.17-1.46) | <0.001 | 74.6 (73.0-76.3) | 1.11 (0.97-1.26) | 0.125 |
| >350% | 3,953/5,404 | 72.9 (71.0-74.8) | 1.19 (1.03-1.37) | 0.021 | 70.7 (69.0-72.5) | 0.89 (0.75-1.06) | 0.190 |
| **Health insurance** |  |  |  |  |  |  |  |
| Any | 11,055/14,948 | 73.3 (72.1-74.6) | ─ |  | 71.8 (70.5-73.0) | ─ |  |
| None | 2,139/3,073 | 70.4 (67.7-73.2) | 0.86 (0.75-1.00) | 0.043 | 75.9 (73.7-78.1) | 1.27 (1.09-1.47) | 0.002 |
| **Survey year** |  |  |  |  |  |  |  |
| 2007–2008 | 3,222/3,960 | 81.5 (79.2-83.7) | ─ |  | 81.8 (79.8-83.9) | ─ |  |
| 2009–2010 | 2,973/3,921 | 75.4 (72.9-78.0) | 0.70 (0.57-0.86) | <0.001 | 75.6 (73.2-77.9) | 0.67 (0.54-0.82) | <0.001 |
| 2011–2012 | 2,310/3,352 | 67.9 (64.7-71.1) | 0.48 (0.39-0.59) | <0.001 | 67.0 (63.6-70.4) | 0.42 (0.34-0.53) | <0.001 |
| 2013–2014 | 2,464/3,630 | 69.1 (67.3-70.9) | 0.51 (0.43-0.60) | <0.001 | 68.9 (66.9-71.0) | 0.46 (0.39-0.56) | <0.001 |
| 2015–2016 | 2,235/3,171 | 71.1 (69.0-73.1) | 0.56 (0.47-0.67) | <0.001 | 69.9 (67.6-72.2) | 0.49 (0.40-0.59) | <0.001 |
| Abbreviations: NHANES=National Health and Nutrition Examination Survey; n/N=number of negative anti-HAV results over total number of tested samples; CI=confidence interval; NC=not included. | | | | | | | |
| a Model was adjusted by sex, age group, race/ethnicity, poverty index, health insurance, and survey years. Goodness of model fit was assessed by the Hosmer-Lemeshow test. | | | | | | | |
| b Poverty index level is based on the Supplemental Nutrition Assistance Program (SNAP) eligibility. | | | | | |  |  |

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| **Table S2 Age-adjusted prevalence of non-vaccination to hepatitis A by selected characteristics among U.S.-born adults aged ≥20 years in the United States, NHANES 2007**–**2016** | | | | | | | | |
| **Characteristic** | **2007**–**2010** | | **2011**–**2014** | | **2015**–**2016** | | **P-values a** | **Relative % change b** |
| **n/N** | **% (95% CI)** | **n/N** | **% (95% CI)** | **n/N** | **% (95% CI)** |
| **Total** | 6,195/7,881 | 77.6 (75.9-79.3) | 4,774/6,982 | 66.7 (64.7-68.7) | 2,235/3,171 | 68.2 (65.9-70.5) | <.001 | -12.1\* |
| **Sex** |  |  |  |  |  |  |  |  |
| Male | 2,963/3,779 | 76.7 (74.6-78.7) | 2,349/3,396 | 68.7 (66.2-71.1) | 1,116/1,535 | 69.8 (65.9-73.6) | <.001 | -9.0\* |
| Female | 3,232/4,102 | 78.4 (76.4-80.4) | 2,425/3,586 | 64.8 (62.3-67.3) | 1,119/1,636 | 66.9 (64.3-69.5) | <.001 | -14.7\* |
| **Race/ethnicity** |  |  |  |  |  |  |  |  |
| Hispanic | 719/1,027 | 69.8 (66.1-73.5) | 432/694 | 65.3 (60.9-69.7) | 372/567 | 65.2 (62.3-68.0) | 0.007 | -6.6\* |
| Non-Hispanic white | 3,925/4,774 | 79.5 (77.8-81.2) | 2,742/3,806 | 67.8 (65.7-70.0) | 1,141/1,505 | 70.2 (67.7-72.8) | <.001 | -11.7\* |
| Non-Hispanic black | 1,443/1,920 | 72.7 (68.2-77.2) | 1,404/2,091 | 64.2 (60.9-67.6) | 616/910 | 65.3 (59.5-71.1) | 0.017 | -10.2\* |
| **Poverty index c** |  |  |  |  |  |  |  |  |
| <130% | 1,524/2,008 | 76.9 (73.4-80.5) | 1,521/2,291 | 67.8 (64.1-71.6) | 555/791 | 69.0 (63.8-74.1) | 0.002 | -10.3\* |
| 130%–350% | 2,296/2,816 | 79.3 (76.6-82.1) | 1,535/2,192 | 67.5 (64.1-70.9) | 844/1,198 | 71.9 (68.0-75.7) | <.001 | -9.3\* |
| >350% | 1,948/2,473 | 77.7 (75.5-79.8) | 1,398/2,037 | 65.8 (62.9-68.8) | 607/894 | 65.5 (61.2-69.8) | <.001 | -15.7\* |
| **Health insurance** |  |  |  |  |  |  |  |  |
| Any | 5,141/6,446 | 77.3 (75.7-78.9) | 3,945/5,706 | 65.6 (63.5-67.7) | 1,969/2,796 | 67.3 (64.5-70.0) | <.001 | -12.9\* |
| None | 1,049/1,430 | 79.6 (76.7-82.5) | 826/1,270 | 71.0 (65.7-76.3) | 264/373 | 77.3 (69.9-84.7) | 0.061 | -2.9 |
| Abbreviations: NHANES=National Health and Nutrition Examination Survey; n/N=number of negative anti-HAV results over total number of tested samples; CI=confidence interval. | | | | | | | | |
| a P-value for overall linear trend tests | | | | | | | | |
| b Relative percentage changes between 2007–2010 and 2015–2016. \*P-values <.05. | | | | | | | | |
| c Poverty index level is based on the Supplemental Nutrition Assistance Program (SNAP) eligibility. | | | | | | | | |