Influenza, Pneumonia, and Shingles Vaccinations Rise among Older Adults, but Disparities Continue

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This Fact Sheet examines the prevalence of influenza, pneumonia, and shingles vaccinations among adults ages 50 and older in 2020. Vaccinations for all three diseases increased from 2019, yet racial and ethnic disparities continue.

Infectious diseases affect millions of Americans every year, and older adults’ higher prevalence of chronic medical conditions and decreased immune responses make them among the most at risk of serious illness and death from such diseases.1 Meanwhile, safe, effective vaccines for some of the most common infectious diseases—influenza (the flu), pneumonia, and shingles—have been widely available for decades. Still, millions of Americans, including many older adults, forgo these potentially lifesaving interventions. An important issue to examine, then, becomes how vaccination rates are trending, particularly among the most vulnerable. The AARP Public Policy Institute analyzed data from the National Health Interview Survey (NHIS) to determine the prevalence among older adults of vaccinations for flu, pneumonia, and shingles as recommended by the Advisory Committee on Immunization Practices (ACIP).2 Our findings show that slightly more older adults reported receiving these three vaccines during the first year of the COVID-19 pandemic than in 2019 (figure 1). However,
gaps between the vaccinations of White older adults and Black, American Indian, Hispanic, and Asian older adults continued. This Fact Sheet highlights vaccination changes between 2019 and 2020 for the three vaccines as well as vaccination disparities among older adults within various racial and ethnic groups.

**Flu Vaccinations**

The Centers for Disease Control and Prevention (CDC) estimate that between 2010 and 2020, influenza viruses annually caused 9 million to 41 million illnesses and 12,000 to 52,000 deaths. Among those affected, adults ages 65 and older have historically shouldered the greatest burden, with recent estimates showing that between 70 and 85 percent of all flu-related deaths occur in people in this age group. As such, ACIP recommends annual flu vaccinations for everyone ages 6 months and older and a high-dose vaccine for adults ages 65 and older.

In 2020, 70 percent of adults ages 65 and older reported getting a flu shot in the past 12 months (figure 2). This is an increase of 1 percent from 2019 and the highest rate since 2010, when the novel H1N1 strain hit the United States. Meanwhile, only 50 percent of adults ages 50 to 64 reported getting a flu shot.

Flu vaccinations varied considerably by race. Among adults ages 50 and older, White (62 percent) and Asian (61 percent) survey respondents were much more likely to have reported getting a flu vaccine in 2020 than Black (52 percent), Hispanic (50 percent), and American Indian/Alaska Native (50 percent) respondents.

It is difficult to assess the full impact of the COVID-19 pandemic on flu vaccinations solely from 2020 data because the NHIS asked those surveyed about flu vaccinations in the previous 12 months, which spanned the 2019-2020 and the 2020-2021 flu seasons. Moreover, the CDC went to great lengths to encourage flu vaccinations during the pandemic, including...
obtaining nearly 10 million more adult vaccine doses than usual and engaging in targeted communications and outreach campaigns. Additional data from 2021 and beyond will determine if this upward trend continues.

**Pneumonia Vaccinations**
In 2018, 1.5 million people contracted pneumonia, and approximately 44,000 people died from it. As with influenza, the disease burden for pneumonia falls heavily on older adults, with high death rates among those ages 65 and older. To limit pneumonia's impact, ACIP recommends the use of a pneumonia vaccine for adults ages 65 and older and for adults ages 19 to 64 with certain underlying medical conditions (e.g., chronic heart disease, certain cancers, and diabetes).

In 2020, nearly two-thirds (65 percent) of Americans ages 65 and older reported having ever received a pneumonia shot, whereas 20 percent of adults ages 50 to 64 reported ever receiving a pneumonia shot (figure 3). The gap in vaccination rates among these two groups is not surprising because ACIP recommends the use of a pneumonia vaccine for all adults ages 65 and older and only for adults ages 19 to 64 with specific risk factors.

Like influenza vaccinations, pneumonia vaccinations in 2020 varied by respondents’ race and ethnicity. American Indian and Alaska Native older adults had the highest vaccination rates (47 percent). Following were White and Black older adults at 46 percent and 32 percent, respectively. Asian (30 percent) and Hispanic (25 percent) older adults had the lowest rates.

**Shingles Vaccinations**
Approximately 1 million Americans get shingles every year, and almost one in three will develop shingles in their lifetime. Although shingles causes fewer than 100 deaths annually, up to 18 percent of those infected with the shingle-causing varicella zoster virus have a severely painful rash. ACIP recommends that all adults ages 50 and older, as well as adults 19 and older...
who are immunodeficient, receive a two-dose vaccine for the prevention of shingles. In 2020, only 16 percent of Americans ages 50 and older reported ever having received a shingles vaccination (figure 4). As with the influenza vaccine, White (33 percent) and Asian older adults (29 percent) were the most likely to receive the vaccine, whereas Black and Hispanic older adults, at 16 percent and 15 percent, respectively, were the least likely.

**Conclusion**

The examination of the NHIS data revealed both modest increases from 2019 to 2020 in flu, pneumonia, and shingles vaccinations and continued racial disparities in vaccination uptake. Several factors continue to prevent older adults from receiving ACIP-recommended vaccines, including barriers to accessing providers and negative attitudes toward vaccines.

In some cases, cost can be a barrier. For example, cost continues to affect overall shingles vaccines rates among adults ages 65 and older. Unlike the influenza and pneumonia vaccines, which are covered under Medicare Part B with no cost sharing, the shingles vaccine is covered under Medicare Part D with current cost sharing dependent on an enrollee’s prescription drug plan. Starting in 2023, cost sharing for the shingles vaccine and other ACIP-recommended Part D vaccines will be eliminated under the Inflation Reduction Act.

The increase in flu, pneumonia, and shingles vaccination rates among older adults from 2019 to 2020 is a trend in the right direction. Data from subsequent years will make it clear whether this is a one-time increase or if this upward trend will continue. However, sustaining the trend and finally eliminating racial and ethnic disparities will require action. Policies that make vaccinations more affordable and accessible for individuals and communities could foster continued increases in uptake as well as reduce racial disparities in vaccinations among older adults.

**FIGURE 4**

Shingles Vaccinations among Adults 50+ by Age and Race, 2020

<table>
<thead>
<tr>
<th>Age</th>
<th>50–64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>16%</td>
<td>43%</td>
</tr>
<tr>
<td>Black</td>
<td>33%</td>
<td>17%</td>
</tr>
<tr>
<td>AI/AN</td>
<td>27%</td>
<td>29%</td>
</tr>
<tr>
<td>Asian</td>
<td>29%</td>
<td>27%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>15%</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** AARP Public Policy Institute analysis of National Health Interview Survey (NHIS) data. Cell sizes were too small to reliably estimate vaccinations by race and ethnicity for the 50–64 and 65+ age groups. AI/AN = American Indian/Alaska Native.
1 Thomas T. Yoshikawa, “Epidemiology and Unique Aspects of Aging and Infectious Diseases,” *Clinical Infectious Diseases* 30, no. 6 (June 2000): 931–33, https://doi.org/10.1086/313792.

2 The Advisory Committee on Immunization Practices (ACIP) is a group of medical and public health experts who develop recommendations on how to use vaccines to control disease in the United States, including ages when vaccines should be given, the number of doses, the time between doses, and any precautions or contraindications.

3 The NHIS classified respondents into five racial and ethnic categories: non-Hispanic White, non-Hispanic Black, American Indian/Alaska Native, non-Hispanic Asian, and Hispanic.


8 James McSpadden and Elizabeth Carter, “Influenza Vaccinations among Adults 50 and Older: Slow Progress over the Past Decade,” AARP Public Policy Institute, September 2020, https://doi.org/10.26419/ppi.00110.001.


