

The [Behavioral Risk Factor Surveillance System \(BRFSS\) Survey](#) asks Vermonters questions about their health habits, including vaccination status. The survey also asks about disabilities. Survey data from 2020, 2021 and 2022 were used to see how many Vermont adults with a disability got vaccines for influenza, pneumococcal, tetanus, COVID-19 and shingles.

Some individuals with a disability are more likely to get sick and have worse symptoms from diseases that could be prevented by vaccines. Medical conditions and social factors, like not having enough support, can make it harder for them to stay healthy, access care and get vaccines.

How many adults have a disability?

The 2022 survey (used to measure influenza, pneumococcal and tetanus vaccination rates) had around 8,800 respondents. Twenty-seven percent of those respondents have a disability. During the portion of the 2021 survey that included questions about COVID-19 vaccination, approximately 3,900 participants were included. Twenty-five percent of them have a disability. The 2020 survey (used to measure shingles vaccination rates) had approximately 6,500 respondents. Twenty-three percent of that group have a disability.

Percentage of respondents with disabilities by year (2020-2022)

Disability-Related Survey Question	2022 Survey	2021 Survey ¹	2020 Survey
Any Disability ²	27%	25%	23%
Difficulty Doing Errands Alone	6%	5%	6%
Hearing Loss	8%	7%	7%
Vision Loss	4%	3%	4%
Difficulty Making Decisions	12%	11%	9%
Difficulty Walking or Climbing Stairs	11%	11%	10%
Difficulty Dressing or Bathing	2%	3%	3%
New or Worsening Cognitive Decline ³	10%	---	7%

¹ Only includes respondents who were asked about COVID-19 vaccination.

² Includes any respondents who report difficulty doing errands alone, hearing loss, vision loss, difficulty walking or climbing stairs, or difficulty dressing or bathing. See [data notes](#) page for more information.

³ This question is only asked of respondents 45 years of age or older.

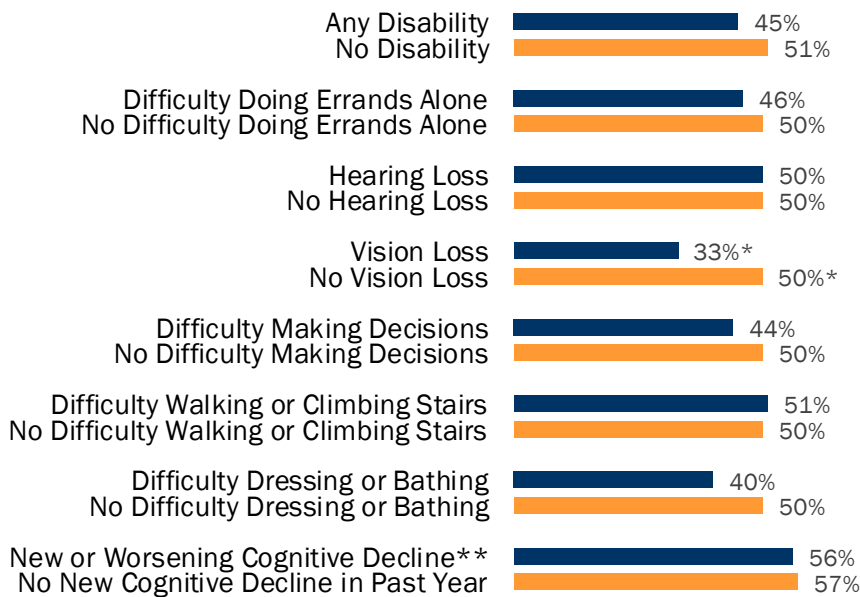
KEY POINTS

- Vaccination rates between those with any disability and those with no disability are statistically similar for all vaccines except for pneumococcal vaccination among those 18-64 years old with risk factors.
- Some groups with certain disabilities have higher or lower vaccination rates than individuals without those disabilities.

Influenza (Flu) Vaccination (2022)

The [Advisory Committee on Immunization Practices \(ACIP\) recommends](#) that everyone older than six months of age receive a yearly flu vaccine. As flu vaccination rates are typically higher among older adults, and the likelihood of having a disability increases with age, rates were determined for two different age groups. Adults 18 to 64 were grouped for one measure and adults 65 and older were measured as their own group (see next page for chart). In the 2022 survey, those who answered the question about flu vaccination included 4,600 respondents who were aged 18 to 64 years of age, and approximately 3,100 respondents aged 65 or older.

Influenza Vaccination Rates Among Adults 18-64 by Disability, 2022



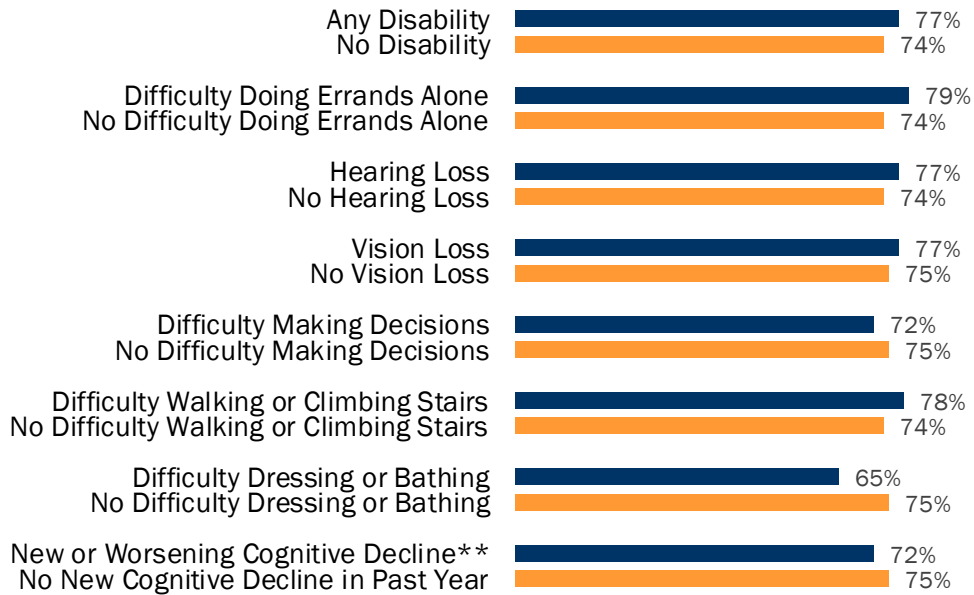
*Significant difference between groups

**This question is only asked of respondents 45 years of age or older.

Key Points

- Fifty percent of adults aged 18 to 64 received a flu vaccine in the most recent season.
- There is no difference in influenza vaccine rates for adults 18-64 based on disability status.
- Those with vision loss have a lower vaccination rate (33%) than those who do not (50%).
- There are no statistically significant differences among participants according to the following: difficulty doing errands alone due to a health condition, hearing loss, difficulty making decisions due to a health condition, difficulty walking or climbing stairs, difficulty dressing or bathing, or experiencing worsening cognitive decline in the last year.

Influenza Vaccination Rates Among Adults 65+ Years by Disability, 2022



*Significant difference between groups

**This question is only asked of respondents 45 years of age or older.

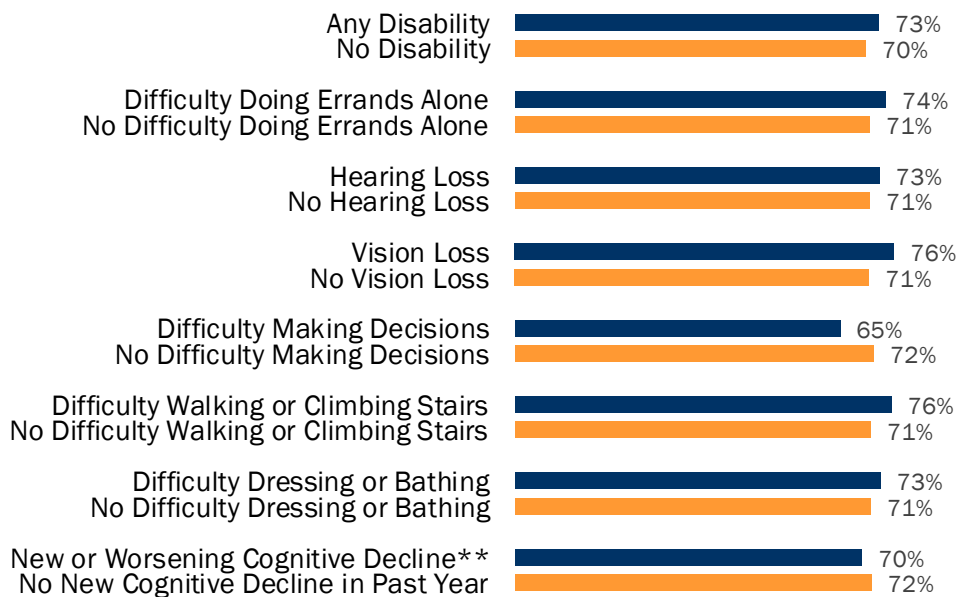
Key Points

- **Seventy-five percent of adults 65 and older received a flu vaccine in the most recent season.**
- **Among older adults, influenza vaccination rates do not differ significantly based on disability status.**
- **There are no significant differences according to the following: difficulty doing errands alone, hearing loss, vision loss, difficulty making decisions due to a health condition, difficulty walking or climbing stairs, difficulty dressing or bathing, or new or worsening cognitive decline.**

Pneumococcal Vaccination (2022)

[The recommendations for pneumococcal vaccination indicate](#) that all adults aged 65 and older, as well as those aged 18 to 64 years old with risk factors making them eligible for pneumococcal disease. In the 2022 survey, approximately 2,900 respondents 65 or older provided information about pneumococcal vaccination. Approximately 2,700 respondents aged 18-64 reported known risk factors making them eligible for the pneumococcal vaccination in the 2021 and 2022 surveys (years combined for a larger sample size).

Pneumococcal Vaccination Rates Among Adults 65+ by Disability, 2022



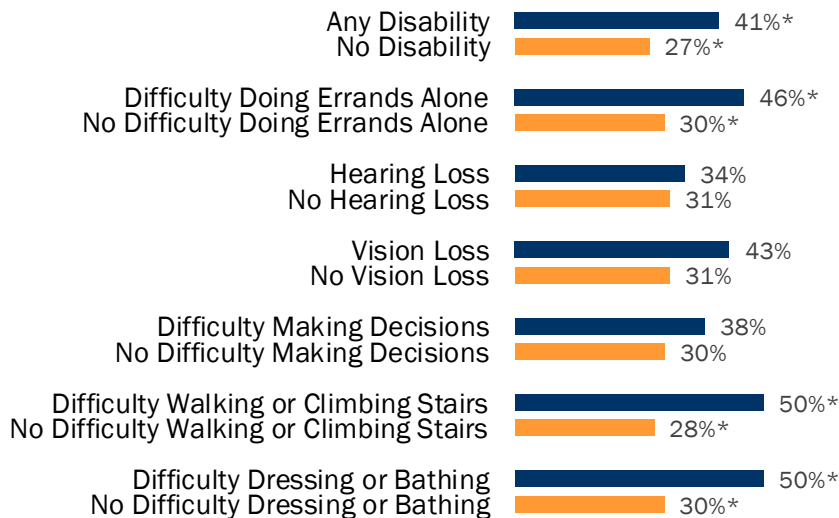
*Significant difference between groups

**This question is only asked of respondents 45 years of age or older.

Key Points

- **Seventy-one percent of adults 65 and older have ever received a pneumococcal vaccine.**
- **Among older adults, pneumococcal vaccination rates do not differ significantly based on disability status.**
- **There are no significant differences according to the following: difficulty doing errands alone, hearing loss, vision loss, difficulty making decisions due to a health condition, difficulty walking or climbing stairs, difficulty dressing or bathing, or new or worsening cognitive decline.**

Pneumococcal Vaccination Rates Among Adults 18-64 Years with Risk Factors by Disability, 2021-2022



*Significant difference between groups

Eligibility for pneumococcal vaccination among this age group was determined by respondents' answers to other survey questions.¹

Key Points

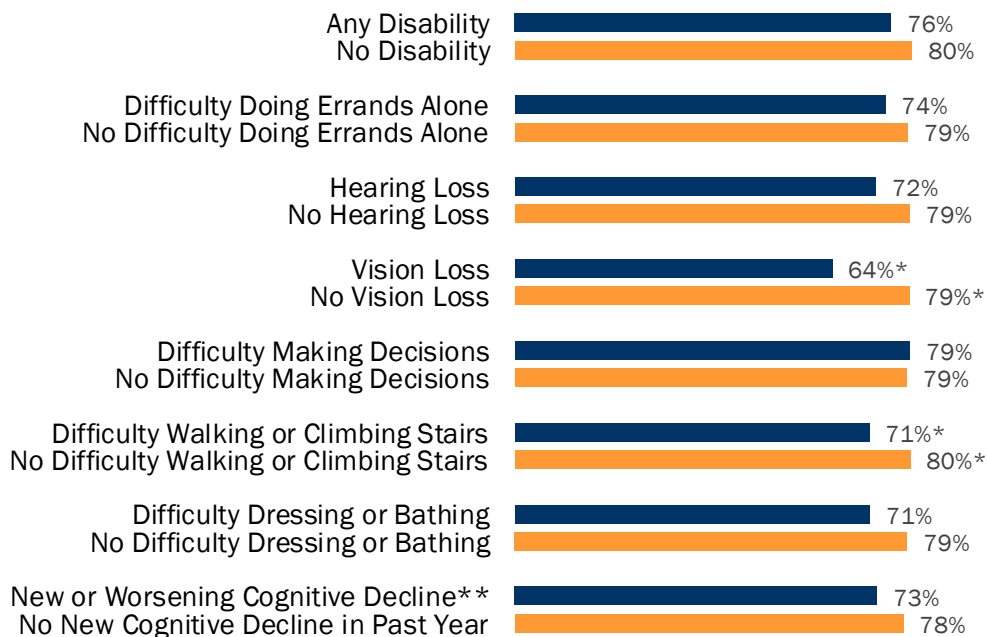
- Among adults aged 18 to 64 with risk factors for pneumococcal disease, 31% have ever received a pneumococcal vaccine.
- Those with any disability have a higher pneumococcal vaccination rate (41%) than those without a disability (27%).
- Those with difficulty doing errands alone also have a higher vaccination rate (46%) than those without difficulty doing errands alone (30%).
- Those with difficulty walking or climbing stairs have a higher vaccination rate (50%) than those without difficulty walking or climbing stairs (28%).
- Those with difficulty dressing or bathing have a higher vaccination rate (50%) than those without difficulty dressing or bathing (30%).
- There are no significant differences in rates according to the following: hearing loss, vision loss, or difficulty making decisions due to a health condition.

¹Among those age 18 to 64 years of age, respondents were considered to have risk factors for pneumococcal infections if the respondent currently has asthma, has been diagnosed with COPD, has been diagnosed with diabetes (excluding gestational diabetes during pregnancy), is a heavy drinker, is a current cigarette smoker, has a diagnosis of coronary artery disease or has ever had a myocardial infarction, or a stroke. The BRFSS Survey does not include questions on all possible pneumococcal risk factors; it is possible that there are other respondents who would be eligible to be vaccinated who were not included in this analysis.

Tetanus Vaccination (2022)

[The recommendations for tetanus vaccination indicate](#) that all adults receive a vaccine every ten years. For this analysis, those who received a tetanus vaccine in the past ten years are grouped together, regardless of whether that vaccine included pertussis.

Tetanus Vaccination Rates by Disability, 2022



*Significant difference between groups

**This question is only asked of respondents 45 years of age or older.

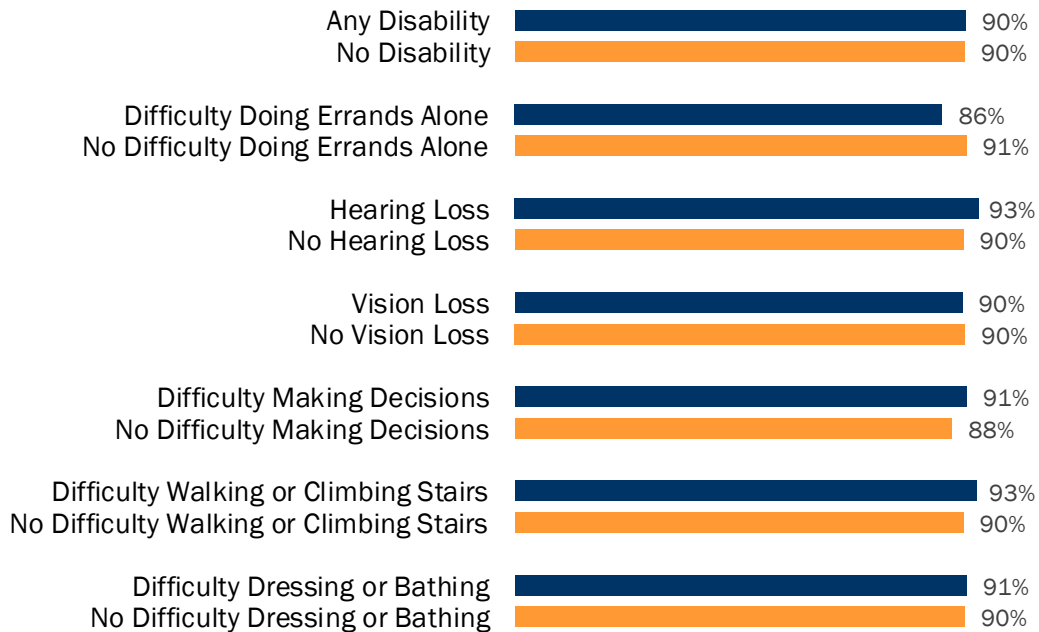
Key Points

- **Seventy-nine percent of Vermont adults received a tetanus vaccine in the past 10 years.**
- **There is no significant difference in tetanus vaccination rates between respondents with any disability compared to those with no disability.**
- **Two subgroups had significantly lower tetanus vaccination rates compared to adults without that disability: those with vision loss (64% versus 79%) and those with difficulty walking or climbing stairs (71% versus 80%).**
- **There are no significant differences in rates according to the following: hearing loss, difficulty doing errands alone due to a health condition, difficulty making decisions due to a health condition, difficulty dressing or bathing, and experiencing worsening cognitive decline in the last year.**

COVID-19 Vaccination (2021)

In late 2020 and early 2021, multiple COVID-19 vaccines received Emergency Use Authorization. Widespread efforts and campaigns to vaccinate the public against COVID-19 were underway in 2021. For the purpose of this report, we are only reporting on the first round of COVID-19 vaccines that were distributed in late 2020 and early 2021. This does not include later vaccines like "booster shots."

COVID-19 Vaccination Rates by Disability, 2021



*Significant difference between groups

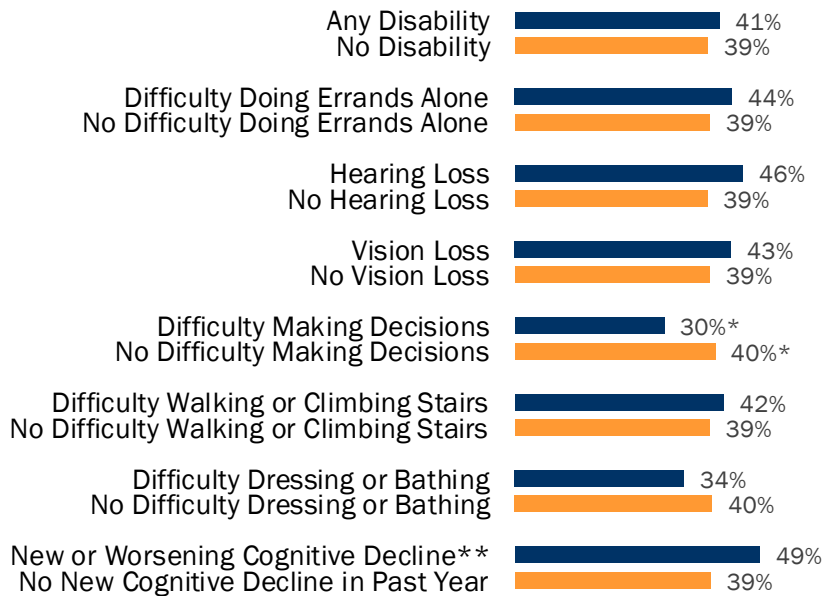
Key Points

- **Ninety percent of Vermont adults interviewed from July 2021 to December 2021 reported having received at least one dose of a COVID-19 vaccination.**
- **COVID-19 vaccination rates did not differ significantly based on whether respondents had a disability or not.**
- **There were no significant differences in rates according to the following: hearing difficulty doing errands alone, hearing loss, vision loss, difficulty making decisions due to a health condition, difficulty walking or climbing stairs, or difficulty dressing or bathing.**

Shingles Vaccination (2020, Ages 50+)

[CDC recommendations for shingles vaccination indicate](#) that adults 50 years of age and older should receive a vaccine. During the 2020 survey, questions about shingles vaccination were asked of respondents 50 years of age or older.

Shingles Vaccination Rates by Disability Among Ages 50+, 2020



*Significant difference between groups

**This question is only asked of respondents 45 years of age or older.

Key Points

- Among these respondents, 39% reported ever receiving a shingles vaccine.
- Shingles vaccination rates did not differ significantly based on whether respondents had a disability or not.
- Respondents who reported difficulty making decisions due to a health condition had a lower vaccination rate (30%) than those who did not (40%).
- There were no significant differences in rates according to the following: vision loss, hearing loss, difficulty doing errands alone due to a health condition, difficulty walking or climbing stairs, difficulty dressing or bathing, or experiencing worsening cognitive decline in the last year.

Key Takeaways

Among Vermont adults with a disability versus those without a disability, rates of immunization were statistically similar for influenza, tetanus, COVID-19 and shingles.

Among adults 65 years of age and older, pneumococcal vaccination rates were also similar. However, among adults 18 to 64 eligible for pneumococcal vaccinations, those with a disability had higher vaccination rates than those without a disability.

Additionally, some groups with specific disabilities had higher or lower vaccination rates compared to those without that specific disability:

- Those with difficulty doing errands on their own due to disability, those with difficulty walking, and those with difficulty dressing or bathing have higher pneumococcal vaccination rates than those without that difficulty in the 18 to 64 age group with risk factors.
- Two groups, including those with hearing loss and those with difficulty walking or climbing stairs have a higher vaccination rate for influenza vaccination.

Two groups with certain disabilities (vision loss and difficulty walking or climbing stairs) have significantly lower vaccination rates for tetanus and one group (difficulty making decisions) had a lower vaccination rate for shingles. Among those aged 18 to 64, those with vision loss have lower influenza vaccination rates than those without vision loss.

There were no significant differences in COVID-19 vaccination by any group.

For more information about accessible vaccination services in Vermont, see the [Vermont Center for Independent Living](#).

Data Notes

More information about the BRFSS Survey can be found [here](#).

To maintain consistency with the [BRFSS Annual Report](#), “any disability” includes those who report having serious difficulty walking or climbing stairs, concentrating or making decisions, hearing, seeing, dressing or bathing, or who has difficulty doing errands alone due to a health condition. This does not include those who report subjective new or worsening cognitive decline (only asked of respondents 45 year or older), even though cognitive decline can be considered a disability.

Vaccination rates shown in this report may not match those shown in other Vermont Department of Health reports, which often use data from the Vermont Immunization Registry (IMR). The IMR contains data on all vaccinations administered to Vermont residents, whereas the BRFSS Survey is a sample of Vermont residents.

The Vermont Department of Health recognizes the many social, economic and environmental inequities which drive the data in this report. We are working to incorporate data reflective of these lived experiences among all Vermonters. As BRFSS is a telephone survey, those with disabilities affecting their ability to complete a telephone survey (e.g. hearing loss, communication difficulties) may not be well represented in these data and this report.

For more information: AHS.VDHVaccinationData@vermont.gov