WASHINGTON STATE DEPARTMENT OF HEALTH

Long COVID Data Landscape in Washington State

DOH 170-033 January 2026

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Executive Summary

Long COVID is an infection-associated chronic condition that occurs after a SARS-CoV-2 infection. It is characterized by continuous, relapsing, or remitting symptoms affecting one or more organ systems for at least three months. There is currently no statewide or national surveillance system that monitors Long COVID. Because of this, surveys are an important way to understand how many people are affected. Population-based survey data provide important but distinct sources of information on Long COVID burden in Washington.

The Department of Health (DOH) used two surveys to estimate the burden of Long COVID:

- The Census Household Pulse Survey (HPS), collected from June 2022 to August 2024
- The Behavioral Risk Factor Surveillance System (BRFSS), collected during 2023

Both surveys asked adults about Long COVID symptoms and if those symptoms limited daily activities. However, the surveys differ in how often they are conducted and how results are reported. HPS provides frequent, point-in-time estimates. BRFSS provides annual, weighted estimates of adults who report Long COVID symptoms at the time of their interview.

Key Washington Findings

- In August 2024, HPS data showed that **6.2% of Washington adults** (about **380,000 people**) were experiencing Long COVID symptoms.
- From 2022 to 2024, Long COVID estimates from HPS ranged from **4.6% to 8.7%**.
- In 2024, about **20–30% of people with Long COVID** reported that symptoms greatly limited their daily activities.
- BRFSS data from 2023 showed that **5.8% of Washington adults** had Long COVID symptoms at the time they were surveyed.
- BRFSS estimates indicate groups reporting the highest burden of Long COVID are:
    - Females
    - People age 35-49
    - People who identify as Hispanic
    - Residents of rural counties

Long COVID remains a significant public health challenge that affects hundreds of thousands of Washington residents, many of whom experience limitations in daily activities. Although Long COVID questions have been removed from both HPS and BRFSS, BRFSS plans to reintroduce Long COVID questions in 2026. Until then, using other data sources is critical to understanding how Long COVID continues to affect people in Washington.

Introduction

The COVID-19 pandemic led to millions of acute illnesses across Washington. Many people were left with an ongoing, chronic condition, with sometimes debilitating symptoms. Long COVID, also called ‘post-acute sequelae of COVID-19’, is a chronic condition that occurs after SARS-CoV-2 infection. It is characterized by continuous, relapsing, or remitting symptoms affecting one or more organ systems for a period of at least three months. Any organ system can be affected. There have been hundreds of reported associated symptoms. Common signs and symptoms include:

- shortness of breath
- cough
- persistent fatigue
- post-exertion malaise
- difficulty concentrating
- memory changes
- recurring headaches
- lightheadedness
- fast heart rate
- sleep disturbances
- problems with taste or smell
- bloating, constipation, and/or diarrhea.[1-4]

Long COVID can follow a COVID-19 infection of any severity, even mild or symptom-free cases. Anyone can have Long COVID, regardless of age or background. Long COVID may persist from the acute illness or develop weeks or months later. Symptoms can range from mild to severe, and can resolve over a period of weeks, months, or even years. A prior DOH modeling study estimated that as of October 2023, 6.4% of Washington residents were living with Long COVID.[5] About 1 in 4 people with Long COVID report symptoms that make it hard to work, go to school, or manage daily life.[6]

Currently there is no conclusive biomarker for determining its presence of Long COVID. Doctors diagnose it clinically, based on symptoms and patient history.

Because symptoms vary and change over time, measuring Long COVID at the population level is difficult. Survey-based estimates vary depending on question wording, recall period, and timing relative to infection and symptom fluctuation. As a result, different surveys capture related, but not identical, aspects of Long COVID burden.

The clinical complexity and dynamic case definition of Long COVID create a complex and unique public health challenge. We are still trying to fully understand the persistent and lasting effects.[7,8] For these reasons, we don't have a full picture of the Long COVID burden in Washington. However, we are working to build the capacity to understand the Long COVID burden. Survey data allow us to estimate this burden in Washington across survey waves and demographics.

Methods

Census Household Pulse Survey (HPS)

The HPS is sponsored by the U.S. Census Bureau, with the Centers for Disease Control and Prevention (CDC) and other federal partners. It is a repeated cross-sectional survey across multiple waves. The goal of the survey is to provide rapid, short-turnaround survey data. It measures social, economic, and health impacts related to the COVID-19 pandemic.

- The survey is a probability sample of U.S. households, weighted to the adult population.
- The survey is online only. Response requests are sent by text or email.
- Data have been collected since April 2020.
- It is administered in 2-4 week "pulses." However, in October 2024, the survey shifted to collecting data every other month.[9]
- Results are released every few weeks.
- Results are weighted to represent the adult population.

Strengths:

- Timely data
- Shows state-level changes over time

Limitations:

- Low response rates
- Limited depth to questions

- Misses people without easy, reliable internet
- Small sample size means results are not reliable for many subgroups or geographic breakdowns
- Recall bias

Additionally, in both HPS and BRFSS, responses are self-reported rather than clinically confirmed, which may introduce reporting bias. However, this approach allows individuals to report symptoms that may not yet be captured in clinical or administrative data.

Behavioral Risk Factor Surveillance System (BRFSS)

The BRFSS is conducted annually by states, in collaboration with the CDC. Its purpose is to provide long-term surveillance of population well-being, access to resources, and barriers to resources, as well as health behaviors and other relevant factors. It includes a set of CDC-defined core questions, as well as rotating modules and state-added questions.

- Random-digit–dialed probability sample
- Data collected via telephone interviews
- Continuous data collection throughout the year
- Data is weighted to adjust for sampling design and nonresponse

Strengths:

- Large sample sizes allow for breakdowns by age, sex, race, and geography.
- Consistent data collection over decades allows for longitudinal trend tracking.

Limitations:

- Self-reported data
- Slower data release
- Potential underrepresentation of younger adults and populations less reachable by phone

HPS and BRFSS Long COVID Questions

Both BRFSS and HPS both included Long COVID questions in 2024.This creates an opportunity to compare how two widely used surveillance systems measure the same concept. Although the surveys differ in how they are designed and conducted, their Long COVID questions focus on similar ideas and can be compared at a broad, descriptive level.

Both surveys begin by identifying people who have had COVID-19. Respondents are asked whether they have ever tested positive for COVID-19 using any test type or were told by a healthcare provider that they had COVID-19. This shared entry point defines a similar group of respondents who are eligible for the Long COVID questions.

Next, both surveys ask about symptoms that lasted three months or longer and were not present before the COVID-19 infection. The surveys provide similar examples of long-term symptoms, including fatigue, trouble thinking or “brain fog,” shortness of breath, joint or muscle pain, heart palpitations or chest pain, dizziness, menstrual changes, and changes in taste or smell. This shows strong agreement in how Long COVID symptoms are defined.

The main difference between the surveys is how they ask about symptom duration and whether symptoms are current. HPS uses two questions. The first asks whether the respondent ever had symptoms lasting three months or longer. The next asks whether they currently have symptoms. BRFSS combines these concepts into one question that asks whether the respondent currently has symptoms that have lasted three months or longer. Even though the questions are structured differently, both surveys identify respondents with current Long COVID symptoms.

Both surveys end the Long COVID section by asking about how symptoms affect daily life. Respondents are asked whether long-term symptoms limit their ability to carry out day-to-day activities compared with before they had COVID-19. The response options are nearly identical in both surveys.

By 2024, the Long COVID questions in BRFSS and HPS were closely aligned. While there are some differences in question wording and order, these do not change the main concepts being measured. These differences should be considered when interpreting results, but they do not prevent high-level comparison between the two systems.

Long COVID Construct	BRFSS Question Wording	HPS Question Wording
Prior COVID-19 infection	Do you think you have ever had COVID-19?	Have you ever tested positive for COVID-19 or been told by a health care provider that you have or had COVID-19?
Ever experienced Long COVID symptoms	Some people experience long-lasting physical, emotional, or mental health symptoms after having COVID-19. Have you ever	Did you have any symptoms lasting 3 months or longer that you did not have prior to having coronavirus or COVID-19?

	had symptoms lasting 3 months or longer that you did not have prior to having COVID-19?	
Current Long COVID symptoms	Are you currently experiencing those symptoms?	Do you have symptoms now?
Duration of Long COVID symptoms	For how many months have you been experiencing those symptoms?	Not asked
Activity limitation due to Long COVID (current)	Do those long-term symptoms reduce your ability to carry out day-to-day activities compared with the time before you had COVID-19?	Do these long-term symptoms reduce your ability to carry out day-to-day activities compared with the time before you had COVID-19?
Duration of symptoms among those recovered	How long did the symptoms last?	Not asked
Activity limitation at worst severity	When those symptoms were at their worst, did they reduce your ability to carry out day-to-day activities compared with the time before you had COVID-19?	Not asked

Survey Continuity and Implications for Long-Term Surveillance

In January 2025, the Household Pulse Survey (HPS) was relaunched as the Household Trends and Outlook Pulse Survey (HTOPS). This change reflects updates to the survey design and how questions are organized. That affects whether questions stay the same over time. Long COVID questions were last included in HPS in September 2024, before this change. It is not yet clear whether comparable Long COVID questions will be included regularly in future HTOPS survey rounds. Questions are expected to rotate and ongoing inclusion has not been confirmed.

BRFSS included Long COVID questions in Washington's 2024 survey as state-added items. These questions were not included in the 2025 BRFSS survey. As of this writing, Washington plans to add back in Long COVID questions in 2026, but continued inclusion is not guaranteed.

Both surveys have provided valuable data for Long COVID surveillance, but the lack of certainty about whether these questions will continue to be included poses a major challenge. Without consistent questions over time, it is difficult to build a stable, long-term surveillance system to track Long COVID trends.

Results

Household Pulse Survey

- From June 2022 to August 2024, the proportion of adults with Long COVID ranged from 4.6% to 8.7%.
- In August 2024, 6.2% of Washington adults reported *current* Long COVID symptoms.
    - This was slightly higher than the U.S. average (5.3%).

Among adults with Long COVID:

- 15–35% reported *significant* limits on daily activities.
- In August 2024, about 1 in 6 had *significant* activity limits.
- About 80% reported some level of limitation.

HPS estimates illustrate temporal variability in reported Long COVID symptoms. They do not provide a single annual estimate directly comparable to BRFSS. We could have used a weighted average across survey waves to generate an annual summary estimate from HPS data, but to preserve the point-in-time nature of HPS estimates we did not do this. Direct comparisons between HPS and BRFSS estimates should therefore be interpreted with caution; the surveys differ in design, timing, and the aspects of Long COVID symptom experience they capture.

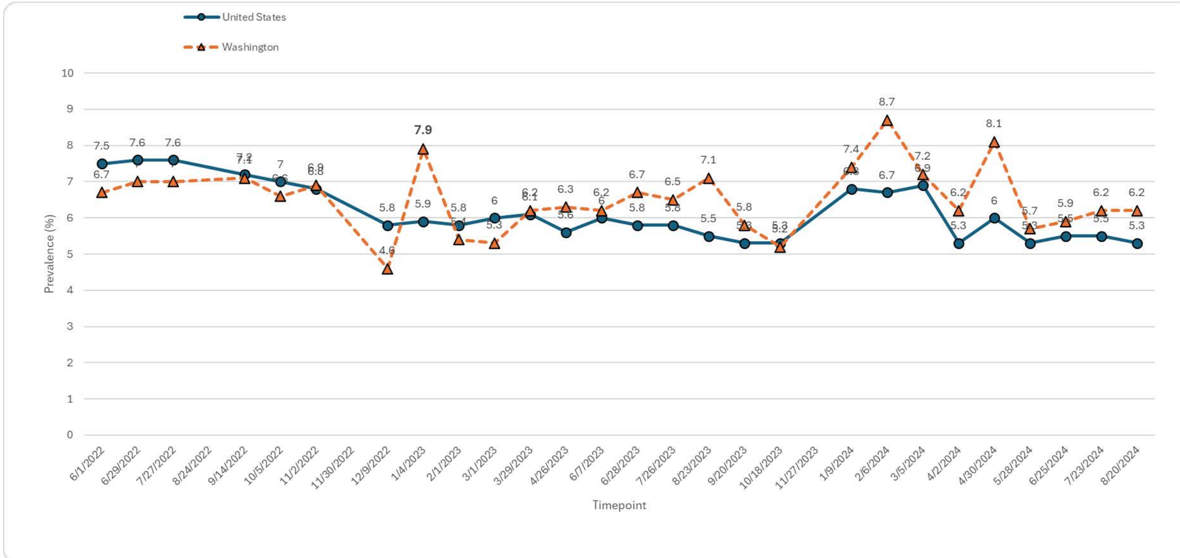

Figure 1. Source: **Household Pulse Survey.** This data represents the weighted proportion of Washington adults who were *currently* experiencing Long COVID symptoms, as a percentage of all adults, June 2022 – August 2024.

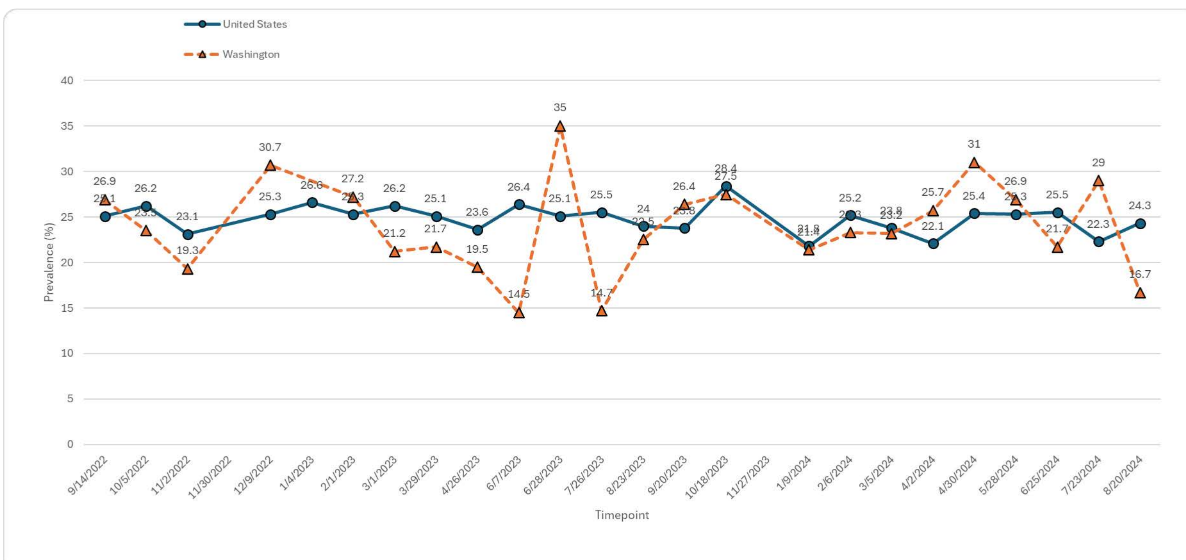

Figure 2. Source: **Household Pulse Survey.** This data represents the weighted proportion of adults who were experiencing *significant* activity limitations due to Long COVID symptoms, as a percentage of all those who reported Long COVID, June 2022 – August 2024.

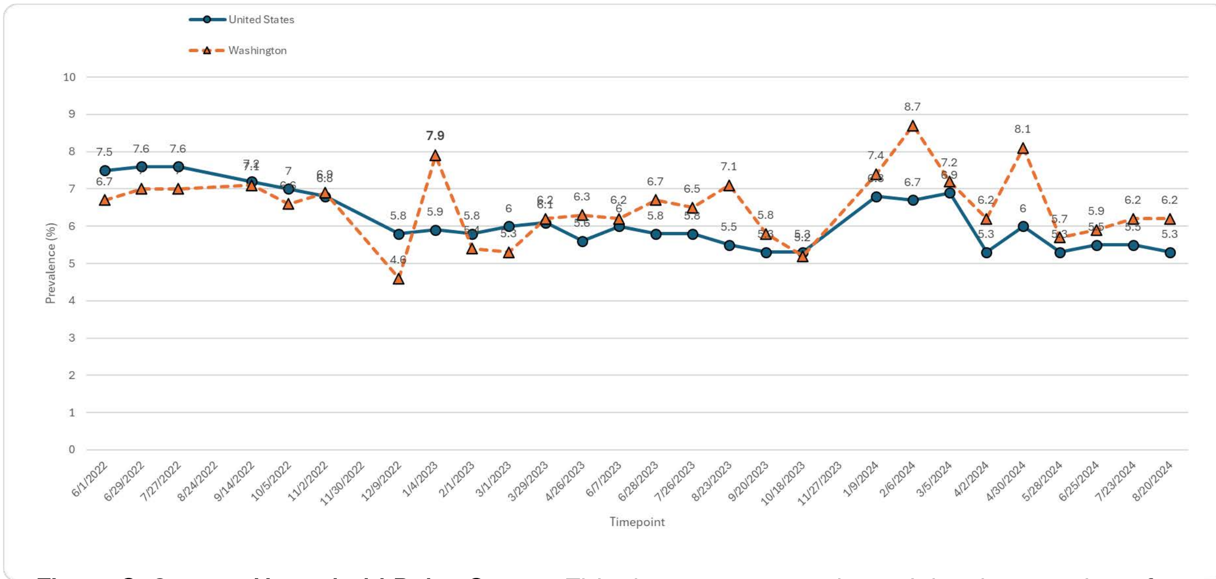

Figure 3. Source: **Household Pulse Survey.** This data represents the weighted proportion of adults who were experiencing *any* activity limitations due to Long COVID symptoms, as a percentage of all those who reported Long COVID, June 2022 – August 2024.

Behavioral Risk Factor Surveillance System

- Based on weighted responses, 5.8% of Washington adults reported current Long COVID symptoms in 2023 at the time they were surveyed.
    - This is an average proportion of adults experiencing Long COVID symptoms across the calendar year rather than a single point-in-time measure.
- Higher rates were reported among:
    - Adults age 35–49
    - Women
    - Hispanic adults
    - Rural residents
- Lower rates were reported among adults age 65+, men, and non-Hispanic Asian adults.

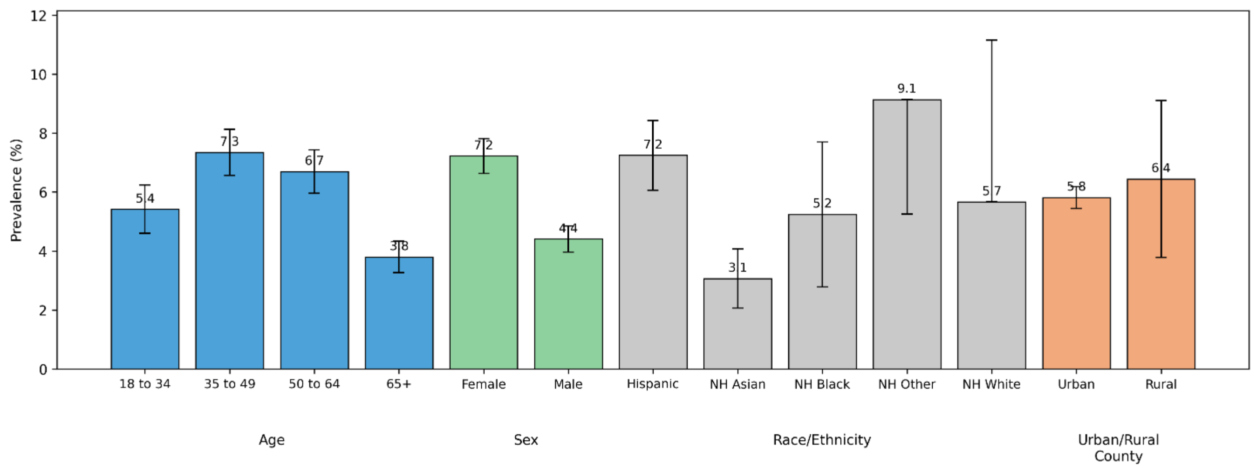

Figure 4. Source: **2023 Behavioral Risk Factor Surveillance System.** This data represents the weighted proportion of Washington adults who reported experiencing Long COVID at the time of their interview in 2023, broken down by self-reported age, sex, race/ethnicity, and urban-rural county status. Error bars represent 95% confidence intervals. NH = non-Hispanic.

Discussion

HPS and BRFSS provide different but complementary views of Long COVID. Each survey captures different aspects of Long COVID symptom experience due to differences in survey design, timing, and question framing. Estimates from the Household Pulse Survey (HPS) and the Behavioral Risk Factor Surveillance System (BRFSS) fall within a similar range, but they do not measure exactly the same thing and should not be interpreted as directly equivalent. Comparisons between HPS and BRFSS provide complementary context rather than a single unified estimate of Long COVID burden.

Despite methodological differences, estimates from both surveys converge within a similar range and align with prior modeled estimates. This triangulation increases confidence in the extent of Long COVID burden in Washington. These complementary approaches show how combined surveillance efforts can provide a more comprehensive picture of emerging and complex conditions.

Methodological differences help explain the variation between the estimates produced by the two data sources. HPS provides point-in-time estimates based on relatively smaller sample sizes but is fielded frequently, allowing for assessment of short-term changes and temporal trends in reported Long COVID symptoms. In contrast, BRFSS aggregates data collected over an entire year using larger sample sizes. This produces more stable estimates that support detailed demographic analyses but may obscure seasonal or short-term variation. The surveys also differ by mode of data collection. Online-only surveys may underrepresent populations with limited internet access, while phone-based surveys may underrepresent younger adults, some racial and ethnic minority groups, and LGBTQ+ populations. Considered together, these complementary approaches provide a broader perspective on Long COVID burden, though results should be interpreted cautiously when compared side by side.

Conclusions

Long COVID remains a significant public health challenge in Washington. It affects hundreds of thousands of residents, the majority of whom experience limitations in their daily life and activities. Even though survey questions about Long COVID have been removed from HPS and BRFSS as of 2025, these survey data remain the best available way to estimate the burden of Long COVID in the absence of a standardized, comprehensive surveillance system that incorporates provider-based reporting.

The differences across available data sources highlight the need for developing standardized, reliable, and meaningful metrics for Long COVID surveillance. The Washington State Department of Health Long COVID Surveillance Epidemiology team is advocating for the inclusion of Long COVID questions in public health surveys. We are also exploring opportunities to conduct Long COVID surveillance using clinical, administrative, and claims data already collected at the state level. Strengthening and standardizing Long COVID surveillance is critical to understanding who is affected, reducing health disparities, guiding resource planning, and preparing for long-term social and economic impacts of Long COVID.

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