

Measure Specification: NHSN COVID-19 Vaccination Coverage

Updated August 2021

Background

CDC currently collects data that are voluntarily reported on COVID-19 (Severe Acute Respiratory Syndrome Coronavirus-2) vaccination coverage among healthcare personnel (HCP) through the National Healthcare Safety Network (NHSN).

The [NHSN Healthcare Personnel COVID-19 Vaccination Cumulative Summary Module](#) was developed to help guide the public health emergency response to the COVID-19 pandemic.

As the pandemic phase of the COVID-19 epidemic wanes and public health vaccination priorities shift from emergency response to measurement for ensuring the safety of patients and healthcare workers, CDC intends to align NHSN COVID-19 vaccination coverage surveillance with the National Quality Forum (NQF)-endorsed quality measure for annual [influenza vaccination coverage among Healthcare Personnel](#) (NQF #0431), which is collected through the [NHSN Healthcare Personnel Influenza Vaccination Module¹](#).

Measure Title

COVID-19 Vaccination Coverage among Healthcare Personnel

Measure Description

Percentage of healthcare personnel (HCP) who receive a complete COVID-19 vaccination course

Measure Type

Process

Measure-specific Web Page

<https://www.cdc.gov/nhsn/hps/weekly-covid-vac/index.html>

¹ NHSN COVID-19 Vaccination Coverage Among Healthcare Personnel was discussed at the National Quality Forum (NQF) Measure Applications Partnership (MAP) Coordinating Committee Follow-Up Web meeting on March 15, 2021.

Data Dictionary, Code Table, or Value Sets

The table of instructions for data collection use for HCP in long-term care facilities (<https://www.cdc.gov/nhsn/forms/instr/57.220-toi-508.pdf>) and HCP in non-long-term care facilities (<https://www.cdc.gov/nhsn/forms/instr/57.219-toi-508.pdf>) during the pandemic phase of the COVID-19 epidemic are available.

Data Collection

The data collection instrument for use for HCP in long-term care facilities (<https://www.cdc.gov/nhsn/forms/57.219-p.pdf>) and HCP in non-long-term Care facilities (<https://www.cdc.gov/nhsn/forms/57.220-p.pdf>) during the pandemic phase of the COVID-19 epidemic are available.

Numerator Statement

Cumulative number of HCP eligible to work in the hospital or facility for at least one day during the reporting period and who received a complete vaccination course against SARS-CoV-2.

Numerator Details

A completed vaccination course may require 1 or more doses depending on the specific vaccine used. Vaccination coverage is defined as a measure of the estimated percentage of people in a sample or population who received a specific vaccine or vaccines.

Denominator Statement

Number of HCP eligible to work in the healthcare facility for at least one day during the reporting period, excluding persons with contraindications to SARS-CoV-2 vaccination.

Denominator Details

Denominator data are to be collected for three required categories of HCP and can also be collected for a fourth optional category:

1. Employees (required): This includes all persons receiving a direct paycheck from the reporting facility (i.e., on the facility's payroll), regardless of clinical responsibility or patient contact.

2. Licensed independent practitioners (LIPs) (required): This includes physicians (MD, DO), advanced practice nurses, and physician assistants who are affiliated with the reporting facility, but are not directly employed by it (i.e., they do not receive a paycheck from the facility), regardless of clinical responsibility or patient contact. Post-residency fellows are also included in this category if they are not on the facility's payroll.
3. Adult students/trainees and volunteers (required): This includes medical, nursing, or other health professional students, interns, medical residents, or volunteers aged 18 or older who are affiliated with the healthcare facility, but are not directly employed by it (i.e., they do not receive a paycheck from the facility), regardless of clinical responsibility or patient contact.
4. Other contract personnel (optional): Contract personnel are defined as persons providing care, treatment, or services at the facility through a contract who do not fall into any of the other - denominator categories.

Denominator Exclusions

HCP in the denominator who were determined to have a medical contraindication or condition specified by Food and Drug Administration (FDA) labeling or authorization, [CDC](#) or [Advisory Committee on Immunization Practices \(ACIP\)](#) recommendations.

HCP can provide verbal statements for medical contraindications to (and declination of) the vaccine.

Denominator Exclusion Details

The denominator for this measure excludes HCP with documented contraindications to COVID-19 vaccine. As of March 2021, CDC considers [contraindications](#) to vaccination with COVID-19 vaccines to be:

- Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a component of the COVID-19 vaccine
- Immediate allergic reaction of any severity to a previous dose or known (diagnosed) allergy to a component of the vaccine

Stratification Information

This measure is not stratified.

Risk Adjustment

No risk adjustment

Type of score

Rate/proportion

Interpretation of Score

Better quality = higher score

Calculation Algorithm/Measure Logic

During the pandemic phase of COVID-19, vaccination coverage collected weekly guided emergency response activities. In the transition phase, the measure can be reported one week a month with a rate calculated for a quarter (reported rate for each week divided by 3), which is the reported numerator divided by the denominator (less exclusions) for a particular week. Facilities report for one week per month (self-selected week). For facilities that report more than one week per month, the last week of the reporting month will be used.

Sampling

Measure is not based on a sample.

Data Source

Data sources for this measure may include:

- Claims
- Electronic Health Data
- Electronic Health Records
- Management Data (e.g., occupational health records)
- Paper Medical Records
- Instrument-Based Data
- Immunization tracking

Level of Analysis

Facility

Care Setting

Inpatient/Hospital; Post-Acute Care; Other - Long-Term Care; Ambulatory Care; Outpatient Services