Version 17 May 2022

Instructions for Submitting Human Infection with 2019 Novel Coronavirus (COVID-19) Case Notification Data to CDC Using the CSV Template

Purpose: This document describes the procedures for notifying CDC of 2019 Novel Coronavirus (COVID-19) lab-confirmed and probable cases via submission of the CSV reporting template. Please see CSTE 21-ID-01 Guidance, "Update to the standardized surveillance case definition and national notification for 2019 novel coronavirus disease (COVID-19)," for additional details on confirmed and probable case criteria. As additional case information becomes available through investigation activities and other data collection methods, public health reporting jurisdictions should submit the updated data to CDC.

Please note that all dates collected for case notifications transmitted via the CSV template should be formatted MM/DD/YYYY.

For instructions regarding the submission of a CSV file to the CDC's secure access management services (SAMS), please refer to the COVID-19 CSV submission instructions.

Identification Information

Reporting jurisdiction: Enter the reporting jurisdiction where the case was identified. The reporting jurisdiction must be one of the 60 jurisdictions authorized to submit data directly to CDC through the National Notifiable Diseases Surveillance System (NNDSS).

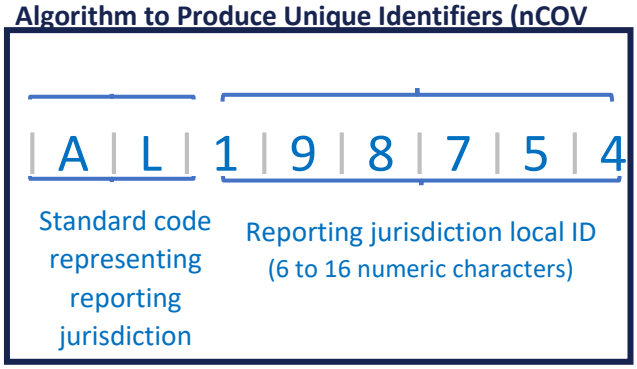
Reporting health department: Enter the name of the health department completing the case report form.

Contact ID: Only fill out this field if a case-patient is a known contact of another probable or confirmed COVID-19 case. Contact IDs are assigned using the original (source) case-patient's nCoV ID followed by a hyphen and a sequential number indicating the order in which the contact was identified (e.g., Confirmed case CA102034567 may have contacts CA102034567-01 and CA98765431 -02). If the person was part of a contact investigation in which CDC was collaborating with state/local health departments, this Contact ID may have been assigned previously. This should be a part of the state or local health departments records; please check with the reporting jurisdiction.

Case state/local ID: Please provide the ID of the case that is used in the reporting jurisdiction's case data system, if it is not the same as the CDC 2019-nCoV ID.

CDC 2019-nCoV ID: Enter the CDC 2019-nCoV ID assigned to the case. Currently, nCoV IDs are determined by the reporting jurisdiction using the algorithm noted below. This may have previously been called a PUI ID. If case information is being updated for a case that was already reported to CDC, do not assign a new 2019-nCoV ID for these individuals. This ID will be used to track information about the case-patient in CDC data systems and **must** be provided on all forms or specimens related to this individual.

Algorithm to Produce Unique Identifiers (nCOV



State	Code
Alabama	AL
Alaska	AK
Arizona	AZ
Arkansas	AR
California	CA
Colorado	CO
Connecticut	CT
Delaware	DE
Florida	FL
Georgia	GA
Hawaii	HI
Idaho	ID
Illinois	IL
Indiana	IN
Iowa	IA
Kansas	KS
Kentucky	KY

State	Code
Louisiana	LA
Maine	ME
Maryland	MD
Massachusetts	MA
Michigan	MI
Minnesota	MN
Mississippi	MS
Missouri	MO
Montana	MT
Nebraska	NE
Nevada	NV
New Hampshire	NH
New Jersey	NJ
New Mexico	NM
New York	NY
North Carolina	NC
North Dakota	ND

State	Code
Ohio	OH
Oklahoma	OK
Oregon	OR
Pennsylvania	PA
Rhode Island	RI
South Carolina	SC
South Dakota	SD
Tennessee	TN
Texas	TX
Utah	UT
Vermont	VT
Virginia	VA
Washington	WA
West Virginia	WV
Wisconsin	WI
Wyoming	WY

Territory/Jurisdiction	Code
American Samoa	AS
District of Columbia	DC
Guam	GU
New York City	NYC
Northern Mariana Islands	MP
Puerto Rico	PR
U.S. Virgin Islands	VI
Federated States of Micronesia	FSM
Republic of Marshall Islands	RMI
Republic of Palau	ROP

!!! Important !!! Do not add special characters, dashes, or white spaces to the nCoV ID. The numeric portion of the ID cannot begin with zero ('0').

NNDSS loc. rec. ID/Case ID: For NNDSS reporters, enter the GenV2 or NETSS patient identifier.

Interviewer Information

Name of interviewer: Enter the last name and first name of the person performing the interview.

Affiliation/Organization: Enter the interviewer's affiliation/organization.

Telephone: Enter the interviewer's telephone number.

Email: Enter the interviewer's email address.

Case Classification and Identification

What is the current status of this person? Select the most appropriate current status; please update this information each time the person's status changes. Please see additional information on the CSTE Guidance (21-ID-01), located here (https://cdn.ymaws.com/www.cste.org/resource/resmgr/ps/ps2021/21-ID-01_COVID-19.pdf), in order to determine whether a case meets confirmed or probable status.

> **If probable, select reason for case classification:** Select one rationale from the three available options. Please see CSTE Interim Guidance, noted in the item above, for more information on these three classification options.

Under what process was the case first identified? Please check all that apply.

- If identified by the *Epi-X* notification of travelers, please provide the DGMQID.
- If other, please specify the mechanism of identification by which this case was identified.

Report date of case to CDC: Enter the date the case-patient was initially reported to CDC as a confirmed or probable case in MM/DD/YYYY format.

Date of first positive specimen collection: Enter the date of this case's first positive specimen collection, regardless of specimen type, in MM/DD/YYYY format.

- If the person tested positive, but the date is unknown, select "Unknown."
- If the person tested negative, is awaiting initial test results, or was never tested, select "N/A."

***MMWR* Year and *MMWR* Week**: Populate the *MMWR* year and week for the case record using the definition for these values as it has been applied by your jurisdiction for routine case reporting for COVID-19 through NNDSS. If COVID-19 case data is not reported through NNDSS, use the definition of these fields as they are reported for other conditions that are routinely sent through NNDSS.

Hospitalization, ICU, and Death Information

Was the patient hospitalized? Select the appropriate response. Select 'Yes" if the patient was hospitalized at any point during the patient's illness with COVID-19.

If yes,

> **Hospital admission date:** If hospitalized, provide date of the first admission in MM/DD/YYYY format.
>
> **Hospital discharge date:** If hospitalized, provide date of the first discharge in MM/DD/YYYY format. If the patient is currently hospitalized, leave the discharge date field blank, and update when a discharge date is available.
>
> **Was a translator required during the case's hospital stay?** Select the appropriate response and specify for which language a translator was needed.

Was the patient admitted to an intensive care unit (ICU)? Select the appropriate response. Select "Yes" if the patient was admitted to an ICU at any point during the patient's illness with COVID-19.

If yes,

> **ICU admission date:** If admitted to the ICU, provide date of the first admission in MM/DD/YYYY format.
>
> **ICU discharge date:** If admitted to the ICU, provide date of the first discharge in MM/DD/YYYY format. If the patient is currently in the ICU, leave the discharge date field blank, and update when a discharge date is available.

Please note that, in consideration of space, only one date for hospitalization (admittance, discharge) and ICU (admittance, discharge) are provided. If additional hospitalizations or ICU stays occur, please provide information on subsequent hospitalizations and ICU stays in the free text field at the end of the form.

Did the patient die as a result of this illness? Select appropriate response.

> **If yes, date of death:** If the individual died, then enter the date of death in MM/DD/YYYY format.

Case Demographics

Date of birth: Enter the case-patient's date of birth in MM/DD/YYYY format. Only enter data in this field if data can be transmitted to CDC per state/local policy.

Age: Enter the case-patient's age at the time of illness onset. Age may be entered in units of years, months, or days.

Age units (year/month/day): Select age units.

State of residence: Please select the case-patient's state of residence (or indicate nonresident status). Residence is typically defined by CSTE as the place of 'usual residence' at the time an infection is acquired.

County of residence: Please enter the individual's county of residence. Residence is typically defined by CSTE as the place of 'usual residence' at the time an infection is acquired. Additional information from CSTE on collecting residence information can be found here: https://cdn.ymaws.com/www.cste.org/resource/resmgr/PS/11-SI-04.pdf

Does this case have any tribal affiliation? If the case is affiliated with any tribe, please select "Yes."

Tribe name(s): If the case has a tribal affiliation, please list all tribe names they are affiliated with.

Enrolled member? Select "Yes" if the case is an enrolled member of any indicated tribe.

Sex (at birth): Select appropriate response.

If female, currently pregnant? If female, select the appropriate response.

Ethnicity: Select appropriate response.

Race: Select all race categories that apply. If other, specify in free text.

Which would best describe where the patient was staying at the time of illness onset? Select appropriate response. If other, specify in free text.

Healthcare Worker Information

Is the patient a health care worker in the United States? Select the appropriate response.

Healthcare personnel (HCP) are defined as all paid and unpaid persons working in health-care settings who have the potential for exposure to patients or to infectious materials, including body substances, contaminated medical supplies and equipment, contaminated environmental surfaces, or contaminated air. HCP might include, but are not limited to, physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, students and trainees, contractual staff not employed by the health-care facility, and persons (e.g., clerical, dietary, environmental services, security, maintenance, administrative, billing, and volunteers) not directly involved in patient care but potentially exposed to infectious agents that can be transmitted to and from HCP and patients.

If yes, what is their occupation (type of job)? Select the appropriate response. For examples of job types, see the above definition of healthcare personnel. If other, specify in free text.

If yes, what is their job setting? Select the appropriate response. Types of workplace settings for healthcare personnel include, but are not limited to, acute care hospitals, long-term acute care hospitals, skilled nursing facilities, nursing homes, assisted living/residential facilities, rehabilitation

facilities, outpatient facilities (e.g., doctor's office, ambulatory surgical centers), dialysis facilities, dental facilities, and home health. If the type of workplace setting is not listed as a checkbox option, specify the job setting in free text.

Exposure Information

In the 14 days prior to illness onset, did the patient have any of the following exposures: Select all exposures that apply. In addition, please provide free text responses if specific exposures are checked, including:

- **Domestic travel (outside state of usual residence)**: Specify all state(s) in which the case might have been exposed.
- **International travel outside of the U.S.**: Specify all countries in which the case might have been exposed.
- **Cruise ship or vessel travel as passenger or crew member**: Specify the name(s) of the ship(s).
- **Workplace**: Select if this workplace was considered critical infrastructure. If yes, specify workplace setting. Please see instructions below for how to collect information on work settings.
- **Animal with confirmed or suspected COVID-19**: Specify the type or species of animal.
- **Other exposures not covered in the existing response options**: Specify the type of exposure in free text.

If the patient had contact with another known COVID-19 case:

What type of contact? Select all that apply based on the type of setting the contact occurred in.

Was this person a U.S. case? Select the appropriate response. If yes, please provide the nCoV ID(s) of the potential source case(s).

Is this case part of an outbreak? Select the appropriate response. If yes, specify outbreak name.

Collecting information on work settings

There are two recommended options for recording the work setting when the patient had a workplace exposure. Whichever option you choose, use only that one option consistently for every case report from your jurisdiction. If you are unsure if a patient's workplace is included in one of the critical infrastructure categories, err on the side of recording the workplace setting variable as instructed below.

Option 1 (preferred): *First, ask and record as text the patient's occupation (type of work; e.g., registered nurse, janitor, cashier, auto mechanic). Second, place a hash (/) after occupation and ask and record as text the patient's industry (employer's type of business; e.g., outpatient facility, water plant, grocery store, trucking company). An example of the result would be "Registered nurse/hospital." Text responses for these two variables can be transmitted to CDC through the National Notifiable Disease Surveillance System (NNDSS), and can be coded to standard classification systems for analysis and reporting using the NIOSH Industry and Occupation Computerized Coding System (NIOCCS; https://wwwn.cdc.gov/nioccs3/). Additional information from CSTE on collecting employment information about COVID-19 cases can be found at the following link: https://cdn.ymaws.com/www.cste.org/resource/resmgr/publications/Guidance_collecting_io_covid.pdf*

Option 2: *Record which category the patient's work setting (industry) fits into based on the list published by the Cybersecurity and Infrastructure Security Agency (CISA);*

https://www.cisa.gov/sites/default/files/publications/Version_3.0_CISA_Guidance_on_Essential_Critical_Infrastructure_Workers_1.pdf):

1. *HEALTHCARE / PUBLIC HEALTH*
2. *LAW ENFORCEMENT, PUBLIC SAFETY, AND OTHER FIRST RESPONDERS (e.g., Federal, state, & local law enforcement; 911 call center employees; Fusion Center employees)*
3. *FOOD AND AGRICULTURE*
4. *ENERGY (e.g., electricity, petroleum, natural gas, nuclear, hydroelectric, renewable)*
5. *WATER AND WASTEWATER*
6. *TRANSPORTATION AND LOGISTICS (e.g., aviation, trucking, mass transit, rail, pipeline, postal and shipping)*
7. *PUBLIC WORKS AND INFRASTRUCTURE SUPPORT SERVICES (e.g., utility system construction; highway, street, and bridge construction; other heavy and civil engineering construction)*
8. *COMMUNICATIONS AND INFORMATION TECHNOLOGY*
9. *OTHER COMMUNITY- OR GOVERNMENT-BASED OPERATIONS AND ESSENTIAL FUNCTIONS (e.g., state and local government agencies, community-based aid agencies)*
10. *CRITICAL MANUFACTURING (e.g., metals, industrial minerals, semiconductors, materials and products needed for medical supply chains and for supply chains associated with other essential services)*
11. *HAZARDOUS MATERIALS*
12. *FINANCIAL SERVICES*
13. *CHEMICAL (e.g., petroleum and coal products manufacturing, pharmaceutical and medicine manufacturing)*
14. *DEFENSE INDUSTRIAL BASE*
15. *COMMERCIAL FACILITIES (e.g., facilities that supply goods or services that support other essential services)*
16. *RESIDENTIAL/SHELTER FACILITIES AND SERVICES*
17. *HYGIENE PRODUCTS AND SERVICES (e.g., janitorial staff and other custodial staff)*

Clinical Course, Symptoms, Past Medical History, and Social History

Collected from: Select “patient interview” or “medical record review.” If both sources were used to collect information on the case report form, please select both response options.

Symptoms present during course of illness: Case-patient’s symptom status related to the entire duration of illness with COVID-19. Select whether the patient experienced any symptoms (symptomatic), did not experience symptoms (asymptomatic), or if symptom status is unknown.

If the case was symptomatic:

> **What was the onset date:** Record symptom onset date in MM/DD/YYYY format. If the case was symptomatic, but onset date of symptoms is unknown, select “unknown symptom onset date.”
>
> **Did the patient’s symptoms resolve:** If the case-patient’s symptoms were resolved at the time of completing or updating this form, list date of symptom resolution in MM/DD/YYYY format. If the patient was still symptomatic at time of form completion, mark “no, still symptomatic.” If symptoms resolved but with an unknown date, mark “symptoms resolved, unknown date.” If unknown if symptoms resolved, select “Unknown if symptoms resolved.” This field should be updated as more information about the cases’ symptom status becomes available or course of illness unfolds.

Did the patient develop pneumonia? Select the appropriate response. Refer to the clinical discharge summary in the patient's medical chart. This should not be from ICD codes. Select ‘unknown’ if missing chart.

Did the patient have acute respiratory distress syndrome? Select appropriate response. Refer to the clinical discharge summary in the patient's medical chart. This should not be from ICD codes. Select "unknown" if missing chart.

Did the patient have an abnormal chest X-ray? Select appropriate response. Select "Yes" if—at any time—the person had an abnormal chest X-ray as part of this illness. Select "unknown" if missing chart. If the chart is not missing, and there is no information on a chest X-ray, select "N/A, no chest X-ray done."

Did the patient have another diagnosis/etiology for their illness? Select appropriate response. Refer to the clinical discharge summary in the patient's medical chart. This should not be from ICD codes. Select "unknown" if missing chart.

Did the patient have an abnormal electrocardiogram (EKG)? Select appropriate response. Refer to the clinical discharge summary in the patient's medical chart. Select "unknown" if missing chart. If the chart is not missing, and there is no information on an EKG, select "N/A, no EKG done."

Did the patient receive mechanical ventilation (MV)/intubation? Select "Yes" if the patient was mechanically ventilated during hospitalization via intubation *or* tracheostomy.

> **If yes, total days with MV (days):** Count the total number of days with mechanical ventilation. Round up to whole number. Select "unknown" if the medical chart is not available.

Did the patient receive extracorporeal membrane oxygenation (ECMO)? Select the appropriate response. Select "unknown" if the medical chart is not available.

If symptomatic, which of the following did the patient experience during their illness? Please select "Yes," "No," or "Unknown" for each specific symptom. Please indicate the symptoms that the case-patient has experienced to date, even if he/she is no longer experiencing these symptoms. All symptoms should have an answer. If other symptoms occurred that are not specified, select "other", and specify symptom(s) in free text.

Did the patient have any underlying medical conditions or risk behaviors? Select the appropriate response based on whether the case-patient has *any* underlying medical conditions or risk behaviors prior to investigation or confirmation of COVID-19. Please provide a response for *each* underlying medical condition and risk behavior. All questions pertain to a *current* or *past* history of the condition. If the specific medical condition or risk behavior is not included in available response options, please specify information about the specific condition or risk behavior in the appropriate free text field.

SARS-CoV-2 Testing

Provide available testing results for the specified test types. If test type is other, specify in the free text field and select the appropriate test result.

Specimens for SARS-CoV-19 Testing

Specimen ID: For each specimen tested for the virus that causes COVID-19, provide the local, state, or jurisdictional specimen ID associated with each specimen.

Whole genome sequencing identifier: For up to two specimens that have been sequenced, list the specimen identifier. The preferred hierarchy for applicable identifiers is as follows:

1. Public repository (e.g., GISAID or NCBI) accession number, if the sequence has been uploaded to a public repository
2. Laboratory accession or other identification number for isolates sent to a CDC-contracted lab for sequencing
3. Local laboratory accession or identification number for isolates sequenced in the local public health laboratory

Lineage: Fill in with the SARS-CoV-2 lineage designation or sub-lineage, if available. Use of the WHO Greek alphabet nomenclature is preferred for variants of concern.

Additional Comments or Notes

Provide any additional comments or notes related to the case-patient's COVID-19 illness, exposures, medical history, or clinical outcomes.

Vaccination History Information

Vaccination history variables included for COVID-19 case notifications consist of standard variables collected across all vaccine preventable diseases (VPDs) and mirror the data elements collected through the NNDSS COVID-19 MMG. Variables and allowed response options are not intended to be COVID-19 specific. Response value sets for some variables may include COVID-19 specific options and will be updated as additional vaccines become available.

Vaccinated (has the case-patient ever received a vaccine against this disease): Please select "Yes," "No," or "Unknown."

Number of doses against this disease received prior to illness onset: Provide the number of doses (0–6). If the dose number is unknown, then select "99."

Date of last vaccine dose against this disease prior to illness onset: Provide the last vaccination date (MM/DD/YYYY) for the COVID-19 vaccine received by this patient.

Was the case-patient vaccinated as recommended by the ACIP: Please select "Yes," "No," or "Unknown." This question is intended to indicate whether a case has received routine or other recommended vaccine doses according to the Advisory Committee on Immunization Practices (ACIP) schedules. To respond to this question for COVID-19, use the ACIP vaccine schedule recommended at the time of case investigation, available online at ACIP COVID-19 Recommendations. Case investigators should consult the jurisdiction's Immunization Program for interpretation of case-specific situations regarding compliance with ACIP recommendations. However, if data is not available to support a "yes" or "no" response, "unknown" should be entered.

Reason Not Vaccinated Per ACIP: Select the appropriate response. To support data interoperability (e.g., message mapping guides, immunization information systems), the list of options for response may contain values for multiple scenarios and conditions, such that not all options would be appropriate in all situations. This is especially true for COVID-19. Also, appropriate valid values may need to be added to the list over time. **Therefore, if the list of response options does not include an appropriate/valid value, jurisdictions should indicate "Other" and specify the value in Vaccine History Comments field**. Jurisdictions are encouraged to apply epidemiologic discretion to respond as most appropriate under jurisdiction-specific guidance/policies. If

data are not available to support selection of one of the specific listed values, responses of "other" or "unknown" should be entered.

Vaccine History Comments: Provide any additional comments or notes related to vaccine history. For example, if Other is selected for Reason Not Vaccinated Per ACIP, please specify.

Vaccination History Repeating Group[a]: Provide all documented doses of COVID-19 vaccines administered. Include each of the pieces of information listed below.

> **Vaccine (Type):** For each documented dose of vaccine, record the type of vaccine administered. Suggested response value set for COVID-19 will be updated as additional vaccines become available.
>
> **Vaccination Date:** For each documented dose of vaccine, please list the date (MM/DD/YYYY) that the vaccine was administered.
>
> **Vaccine Manufacturer**: For each documented dose of vaccine, please provide the company which manufactured the vaccine. Suggested response value set for COVID-19 will be updated as additional vaccines become available.
>
> **Vaccine Lot Number**: For each documented dose of vaccine, please provide the lot number associated with the dose of vaccine.
>
> **National Drug Code:** For each documented dose of vaccine, please provide the NDC from the vaccine's bar code. The National Drug Code (NDC) from the vaccine's bar code can be used to obtain the brand name, type, and manufacturer of the vaccine. If a jurisdiction can capture the NDC and the NDC is provided for a case's vaccine history, the jurisdiction may use the NDC to impute the "Vaccine (Type)" and "Vaccine Manufacturer."
>
> **Vaccine Expiration Date:** For each documented dose of vaccine, please provide the expiration date (MM/DD/YYYY) for the vaccine administered.
>
> **Vaccine Record Identifier:** For each documented dose of vaccine, please provide the vaccine record identifier.
>
> **Vaccine Event Information Source:** For each documented dose of vaccine, please provide the information source for this vaccination record.
>
> **Vaccine Dose Number**: For each documented dose of vaccine, provide the dose number in the series.

Additional Case Identification

Identifying reinfections through the CSV template involves the population of at least two variables, a coded response to flag the repeat infection and a short repeating data element which asks for the case identifier of the previously enumerated case event. The CSV template will allow for two case identifiers to be listed for each new enumerated case. The identifier populated should represent each unique case event for the individual.

Did the patient previously meet the case definition for a probable or confirmed case of SARS-CoV-2?: Please select "Yes," "No," or "Unknown."

If “Yes” is selected, provide the previously submitted case ID associated with the investigation. The case identifier provided should be the case identifier submitted in the cumulative case line list file to CDC. If the primary mode of submitting case surveillance data is through CSV file, populate the “cdc_ncov2019_id,” if it is through NNDSS pathway, populate the “nndss_id” (GenV2 local_record_id or NETSS patient identifier).

[a] While the entire “Vaccination History” repeating group is assigned “highest” priority, some specific elements within the repeating group are of lower priority if the reporting system is not yet linked to an Immunization Information System (IIS). Therefore, the following data elements in this repeating group do not need to be implemented until the jurisdiction can successfully link their surveillance system with an IIS: “Vaccine Lot Number,” “Vaccine Expiration Date,” “National Drug Code (NDC),” and “Vaccination Record Identifier.”