The purpose of this update is to share publicly available data and trends related to the novel coronavirus (COVID-19) pandemic in Indian Country. The NCAI Policy Research Center reviews updates on public sites in the early morning each day and records available data. The data shared in this update represents what has been shared publicly by the sources described below, and the NCAI Policy Research Center is not analyzing the primary sources of data. This update represents data posted at the time of viewing, and data may change during the course of the day or may otherwise need to be updated. Starting 6/8/2021, this report will replace the previous three reports published weekly on Thursdays and will summarize data in one report.

In reviewing this data, it is important to understand that current COVID-19 data is likely an underestimate of the actual data due to current lack of adequate testing availability, underreporting to IHS by tribes and urban Indian health programs, and underreporting of American Indian/Alaska Native race in the data. Tribal nations are encouraged to conduct their own surveillance locally in partnership with local, county, state and federal agencies.

Coronavirus (COVID-19) Cases

The total number of cases of COVID-19 is tracked daily by the Centers for Disease Control and Prevention (CDC) as they receive case reports from state and territorial health departments. They also post numbers of cases by states and territories and display case numbers on a map that shows a gradient of the number of cases in states across the country. The CDC webpage COVID Data Tracker for COVID Cases, Deaths, and Testing in the U.S. can now be found at: https://covid.cdc.gov/covid-data-tracker/#cases_casesper100klast7days.

The NCAI Policy Research Center checks this CDC webpage daily in the early morning and tracks the total cases in the U.S. reported each day. In addition, the NCAI Policy Research Center also compares CDC case numbers with the Johns Hopkins Coronavirus Resource Center COVID-19 Dashboard at https://coronavirus.jhu.edu/map.html. The total U.S. cases of COVID-19 based on these two webpages from March 23, 2020 to present are displayed in Figure 1.
Figure 1. National COVID-19 Cases from March 23, 2020

Figure 2 is the CDC graph of trends in the daily number of new cases of COVID-19 in the U.S., which shows the number of new cases per day appears to be about 150,000 cases per day, with a 7-day average of about 135,000 cases per day, illustrating a possible decreasing trend but cases are still at a high daily level.

Figure 2. Daily Trends in Number of COVID-19 Cases in the United States Reported to CDC
**Total COVID-19 Cases in Indian Country**

The primary public source of federal data on COVID-19 cases in American Indians and Alaska Natives (AI/ANs) is the Indian Health Service (IHS) Coronavirus (COVID-19) website located at the following link: [https://www.ihs.gov/coronavirus/](https://www.ihs.gov/coronavirus/). This website used to publish case counts each day but now publishes weekly counts of COVID-19 cases overall and for each IHS Area on Mondays. The data is displayed in a table that lists the number of individuals tested, positive COVID-19 tests, and negative COVID-19 tests overall and for each IHS Area.

Since March 23, 2020, the NCAI Policy Research Center has tracked daily counts of total COVID-19 cases each day from the IHS Coronavirus webpage. Now that IHS is only publishing COVID-19 cases once a week, Figure 3 will show the weekly trends starting 6/8/2021. Total COVID-19 cases from IHS data continue to increase.

**Figure 3: Indian Health Service (IHS) COVID-19 Cases from March 23, 2020**

![Number of COVID-19 Cases - IHS Since March 23, 2020](image)

**New Cases Per Day**

In addition to tracking the total cumulative count of COVID-19 cases, another useful way to track COVID-19 cases is the number of new cases per day. Tracking new cases per day helps determine the daily impact on the healthcare system and also helps determine if the number of cases is increasing or decreasing over time. One of the criteria cited by the White House...
Coronavirus Task Force to use in determining whether to reopen is seeing at least a 14-day decline in new cases per day. This type of data is useful since the graph of total cumulative cases, as shown above, will never decrease; it will just level off, rather than decline. Figure 4 displays IHS new cases reported each day since March 25, 2020 and each week since 6/7/2021. The overall trend is an average of 830 new cases per day for the past week, which is reported here since IHS only publishes case counts each week. The average new cases per day is the total each week divided by the days included in that total (this week there was 7 days from the past public data). The average new cases per day for the prior week was about the same as the average new cases overall this week. The format of the graph is changed to a bar graph to better illustrate the weekly results.

Figure 4: IHS COVID-19 New Cases Reported Each Day since March 25, 2020

New Cases by IHS Area

The IHS Coronavirus (COVID-19) webpage also tracks COVID-19 cases by IHS Area. The IHS now only posts weekly counts on their webpage. Figure 5 displays IHS COVID-19 new cases by IHS Area since the prior week and Figure 6 displays the percent increase in cases since the prior week. Tribal Epidemiology Centers also track cases by IHS Area and some track cases by Tribal Nation. This week, the data reveal that cases overall have decreased slightly overall and in some areas IHS Areas. The last ten weeks results are displayed in three different graphs showing the overall IHS results and results for each IHS Area.
Figure 5: Indian Health Service COVID-19 Cases by Area – New Cases Since Prior Week
Figure 6. Indian Health Service COVID-19 Cases by Area – Percent Increase in Cases Since Prior Week

Percent Increase in COVID-19 Cases
IHS Areas - Past week
September 12, 2021

- Alaska: 0.6%
- Albuquerque: 1.5%
- Billings: 2.3%
- California: 0.8%
- Great Falls: 3.8%
- Nashville: 2.1%
- Navajo: 2.8%
- Oklahoma City: 1.9%
- Phoenix: 0.9%
- Portland: 2.5%
- Tucson: Overall IHS: 4.3%
Other Coronavirus (COVID-19) Data

COVID-19 Deaths

The number of COVID-19 deaths is reported by states to the CDC’s National Center for Health Statistics (NCHS) National Vital Statistics System (NVSS). Weekly updates are provided on deaths by race and ethnicity with weighted population distributions to enable accurate comparisons among racial and ethnic groups. Data on deaths is complicated especially during this pandemic where the actual cause of death and race/ethnicity may be inaccurately reported or unknown. Prior to the pandemic there was well known evidence that AI/AN death rates are significantly underreported.

The CDC NCHS provides a table at https://data.cdc.gov/NCHS/Deaths-involving-coronavirus-disease-2019-COVID-19/ks3g-spdg with counts of deaths involving COVID-19 by race/ethnicity. The CDC data on COVID-19 deaths are reported weekly for deaths starting from 01/01/2020 by ICD-10 codes for COVID-19, and other related conditions (pneumonia, and influenza). The CDC data is 1-8 weeks or more behind actual deaths due to delays in receiving death certificate information from states.

NVSS also reports the percent distribution of deaths for major race and ethnic groups at this webpage: https://www.cdc.gov/nchs/nvss/vsrr/covid19/health_disparities.htm. The reporting compares the percent distribution of deaths by race/ethnicity with the weighted population distributions in the geographic locations where outbreaks are occurring for each state.

The counting of deaths due to COVID-19 is complicated by the lack of available testing and sometimes unknown COVID-19 status at the time of death, and death certificates listing other diagnoses as the cause of death, such as pneumonia or influenza, when the COVID-19 status of the individual may or may not be a cause of the death, known, or recorded. Also, AI/AN race is undercounted on death certificates in regular circumstances by 20-30 percent in some estimates.

Considering all these limitations, we post weekly updates on death counts for AI/ANs for the ICD-10 codes reported by CDC in Table 1 below, but with all the cautions listed above. These numbers are likely underestimates of the true number of deaths from COVID-19 in Indian Country.

Note that the right most column in Table 1 is total deaths from all causes for AI/ANs for reference, and not a sum of the data in the table. Numbers in each column should not be combined with other columns since COVID-19 status is unknown for pneumonia or influenza related deaths if the COVID-19 ICD-10 code is not also included on the individual’s death certificate. Table 1 illustrates that COVID-19 deaths for AI/ANs are at least equal to 7,161 deaths but are likely greater in number if COVID-19 contributed to the deaths with a cause of death listed on the death certificate from other ICD-10 codes.
Table 1. CDC Data on Deaths from COVID-19 and Other Related Conditions for American Indians and Alaska Natives (02/01/20 – 09/04/21, reported on 09/08/21)

<table>
<thead>
<tr>
<th>ICD-10 codes</th>
<th>COVID-19 deaths</th>
<th>Pneumonia deaths</th>
<th>Pneumonia and COVID-19 deaths</th>
<th>Influenza deaths</th>
<th>Pneumonia, influenza or COVID-19 deaths</th>
<th>Total deaths, all causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic American Indians or Alaska Natives</td>
<td>7,161</td>
<td>6,060</td>
<td>4,078</td>
<td>102</td>
<td>9,240</td>
<td>39,883</td>
</tr>
</tbody>
</table>

Last week COVID-19 deaths = 7,075 (+86)

IHS COVID-19 Vaccination Data

The CDC established a COVID Data Tracker on its website that now includes data on COVID-19 vaccinations in the United States at: [https://covid.cdc.gov/covid-data-tracker/#vaccinations](https://covid.cdc.gov/covid-data-tracker/#vaccinations). The data includes total doses of vaccine distributed, administered, and the number of people receiving one or more doses and two doses for the United States overall and for federal entities such as IHS. As of 3/9/2021, CDC stopped publishing detailed data on the COVID Data Tracker map for IHS but the full dataset can still be downloaded and reviewed.

The CDC also publishes data on the number and percent of people receiving one or more doses and those receiving two doses as a percent of the total population and as a percent of the total population 18 years and older. Both numbers are helpful; the former gives a sense of progress towards “herd immunity” for the entire population, and the latter provides information about vaccine administration in the population currently eligible for the COVID-19 vaccines.

Figures 7 and 8 illustrates percent results for IHS and the overall US on the most recent day and the trend since February 22, 2021. The data show that the percent of population receiving one or more doses and two doses is lower for IHS than the overall US, both the US and IHS are still far below the percent needed to achieve herd immunity, and the trend for vaccination is barely increasing overall for IHS even though some individual Tribal Nations have very high rates of vaccination in their local communities.
Figure 7. COVID-19 Vaccinations – Percent of Total Population Receiving One or More Doses vs. Two Doses – IHS and US

Data on CDC COVID-19 Vaccinations in the US from website: https://covid.cdc.gov/covid-data-tracker/#vaccinations. The red dotted line on the graph represents the percent that may be needed to achieve herd immunity per public health experts.

Figure 8. COVID-19 Vaccinations – Percent of Total Population Receiving One or More Doses vs. Two Doses – IHS since February 22, 2021
Measuring COVID-19 Impact

The impact of the COVID-19 pandemic on AI/ANs overall and in tribal communities can be measured by total cumulative cases over time, total new cases per day, total hospitalizations, percent positive tests, and total positive antibody tests, the latter of which may indicate whether individuals have been previously infected with COVID-19. Current data are likely underestimates due to current insufficient availability of testing and likely underreporting of AI/AN race. States or IHS Areas that have rising cases and a rising percent positive test result are likely true increases in cases and the increase is likely not just due to increased testing.

Tribal nations are encouraged to keep in close communication with their local city, county, and state public health departments and the IHS and CDC for the latest data, guidelines, and recommendations. IHS Area Offices have regular situation summaries that include additional data. Tribal Epidemiology Centers are also a great resource for regional data, but states need to share data with them since they are also designated public health authorities. The NCAI COVID-19 website includes a resource section for trusted sources of information and guidelines on COVID-19.

Resources


Indian Health Service (IHS) Coronavirus (COVID-19) website: https://www.ihs.gov/coronavirus/

Tribal Epidemiology Centers: https://tribalepicenters.org/


NCAI COVID-19 Situation Summary documents: http://www.ncai.org/Covid-19/resources-for-indian-country/other-resources


Questions: NCAI Policy Research Center – email: research@ncai.org; website: http://www.ncai.org/prc