This document provides user tips for the Contact Tracing Workforce Estimator (CT Estimator). The CT Estimator is a tool for state and local leaders to prepare for COVID-19 contact tracing in order to safely reopen and protect the health of communities.

Users can adjust several workload and capacity variables according to the circumstances and needs of their location and set the daily cases at the county or state level to plan for future CT workforce needs.

**Tool Navigation**

- Read more information on the CT Estimator by clicking on **About the Map**. Re-clicking on About the Map will close the information box.
- The **Results Panel** at the bottom of the map provides more detailed information on CT needs – CTs needed at the set baseline; CTs needed based on 14-day case counts for case interviews, contact notification, and contact follow-ups; number of CTs needed (the larger of CTs at set baseline or CTs needed based on 14-day case counts); CTs needed per 100,000; and number of CT supervisors needed - and the daily COVID-19 case counts from JHU CSSE.
- Hovering over a state will provide COVID caseloads, CT demands, and population demographics for that state. Clicking on a state will bring up a map of that state’s counties and the Results Panel will provide more detailed state-level CTs needed and COVID-19 daily case counts. Alaska, Hawaii, and Puerto Rico are available by clicking links in the upper right of the map.
- Hovering over a county will provide COVID caseloads, CT demands, population demographics, and local health departments (if available) for that county. Clicking on a county will change the Results Panel to reflect data on that county.
- Hovering over a blue dot will provide information on the local health department.
- Click on **Tribal Nations** under Map View to view Tribal Areas (source: Census Bureau). COVID-19 caseloads are not available for Tribal Areas, however, selecting **Adjust Daily Case per Tribal Area** under Set COVID Case Count allows the use the calculator to estimate CT workforce needs.
- To zoom in on an area on the Tribal Nations map, click and drag a box over the area.
- **Blue** dots on the Tribal Nations map represent Indian Health Service facilities. **Orange** dots represent National Indian Health Board members.
- To return to the national map, re-click on the selected county.
Preset Workload and CT Work Capacity Parameters

Preset case contacts and CT work capacity (e.g. the number of case interviews, contact notifications, and contact follow-ups a CT can conduct daily) were set according to available data and expert opinion. The preset parameters assume number of case contacts with social distancing and work capacity to include some social needs evaluation and case management.

- **Baseline CTs per 100,000 Population** – Preset to 15 CTs per 100,000 (recommended level by NACCHO for non-emergency situations). The baseline CTs per 100,000 population can be adjusted.

- **Contact Per Case** – Preset to number of contacts with social distancing in place, preset to 10 contacts per case. Experts advise that the number of contacts are 10 with social distancing and increase to 19 without social distancing. In some places, contacts may even be less than five with stay-at-home orders.

- **Case Interview, Contact Notification, and Contact Follow-Up Daily Caseloads** – The number of cases/contacts a single CT can complete daily. Presets reflect some social needs assessment and case management. Various factors can affect daily caseloads. For example, communities with increased social and case management needs may need to spend more time with each case/contact and be able to complete fewer cases interviews, contact notifications and follow-ups per day. Communities with increased technology adoption may be able to complete more.

- **% Contact Follow-Up** – The percent of contacts receiving follow-up.

- **Follow-Up Frequency (per week)** – The number of follow-ups per week. For example, the preset frequency of 7 per week would equal daily follow-up.

- **CT Supervisors** – The number of supervisors needed per 10 CTs. This is preset to 1 supervisor to 10 CTs but can be adjusted.

More information on CT workload and work capacity can be found in the CT Estimator Brief. Resolve to Save Lives also provides a Contact Tracing Staffing Calculator that provides additional variables to determine local CT needs.

Set COVID Case Counts

The CT Estimator uses a baseline of CTs per 100,000 population and increases the number of CTs, as needed, to contact trace the 14-day number of new COVID-19 cases for each county over the course of a week (JHU CSSE).

However, users can override the 14-day case counts and set daily cases per state or county.

- To **Set COVID Case Counts**, click on the drop down menu and select either Adjust Daily Case per State or Adjust Daily Case per County and then enter the number of daily cases in the box that appears below.

- To assist you in determining number of cases per state or county, hovering over a state provides the average daily COVID-19 cases for that state based on the 14-day case
counts. Hovering over a county provides the average daily COVID-19 cases for that county.

- Adjusting the **Daily Case per State** will set the daily case counts for all states to your entry. Each state’s daily case count will be distributed to counties based on the relative county population.

- Adjusting the **Daily Case per County** will set the daily case counts for all counties to your entry.

**Data Spreadsheet**

- Data and calculations for all counties is downloadable in excel format by clicking on the [CT Estimator Data](#) link above the map.

- The excel workbook also allows for user inputs in fields that are marked in green. The spreadsheet labeled **Calculator** allows for state and county level adjustments. Data for all counties is available on the spreadsheet labeled **20200504** (CT Estimator updates will be provided based on new COVID-19 case data and added as new spreadsheets to the excel file labeled by date).

- Spreadsheets are locked to prevent unintentional editing. However, spreadsheets can be unprotected using password: 123.

- An **International Version of the Tool** is also available for download that allows countries and localities to enter in their own jurisdiction information, including population and COVID-19 case counts, and override case counts with average daily case counts.