

COVID-19 and occupational disease surveillance in the United States

Collegium Ramazzini

October 23, 2020

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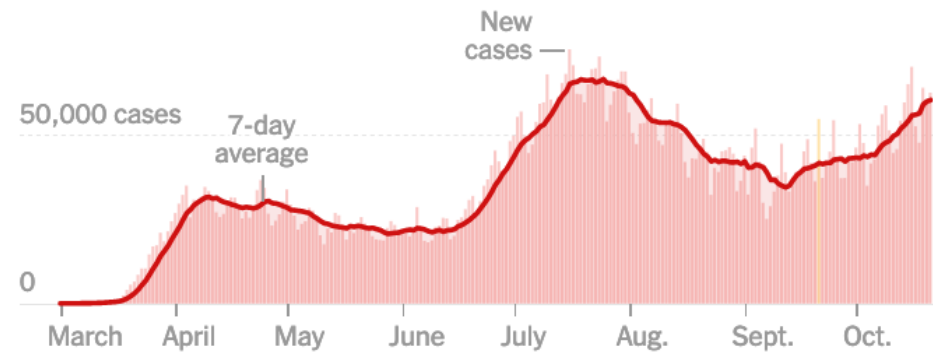
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Covid in the U.S.: Latest Map and Case Count

By The New York Times Updated October 22, 2020, 9:43 A.M. E.T.

[Leer en español](#)



	TOTAL REPORTED	ON OCT. 21	14-DAY CHANGE
Cases	8.3 million+	62,751	+32% →
Deaths	222,157	1,170	+9% →

Source: NY Times

<https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html>

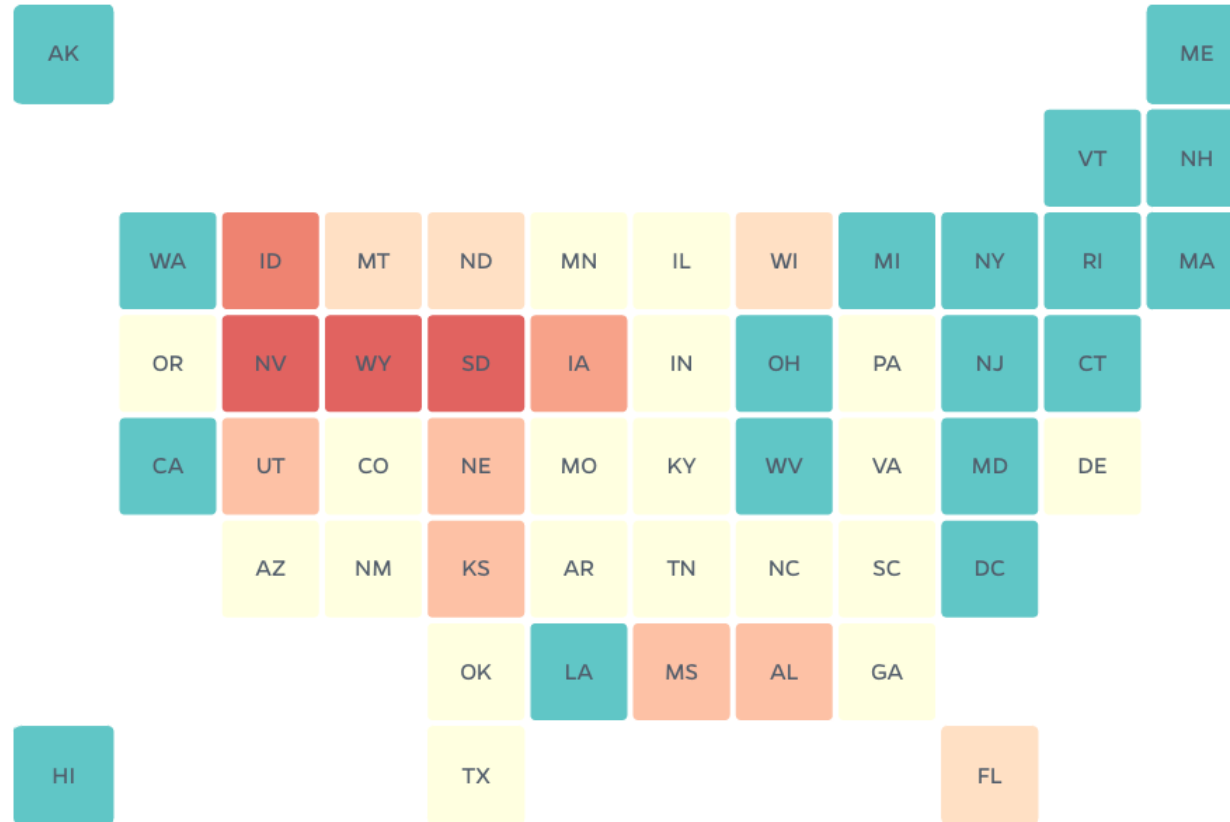
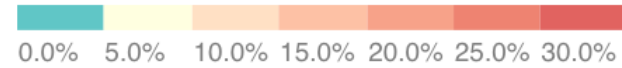
Percent of new tests that are positive

Display a different dataset

Percent positive

Map View

Overview



Source: Johns Hopkins Coronavirus Resource Center

<https://coronavirus.jhu.edu/data>

Weekly change percent positive

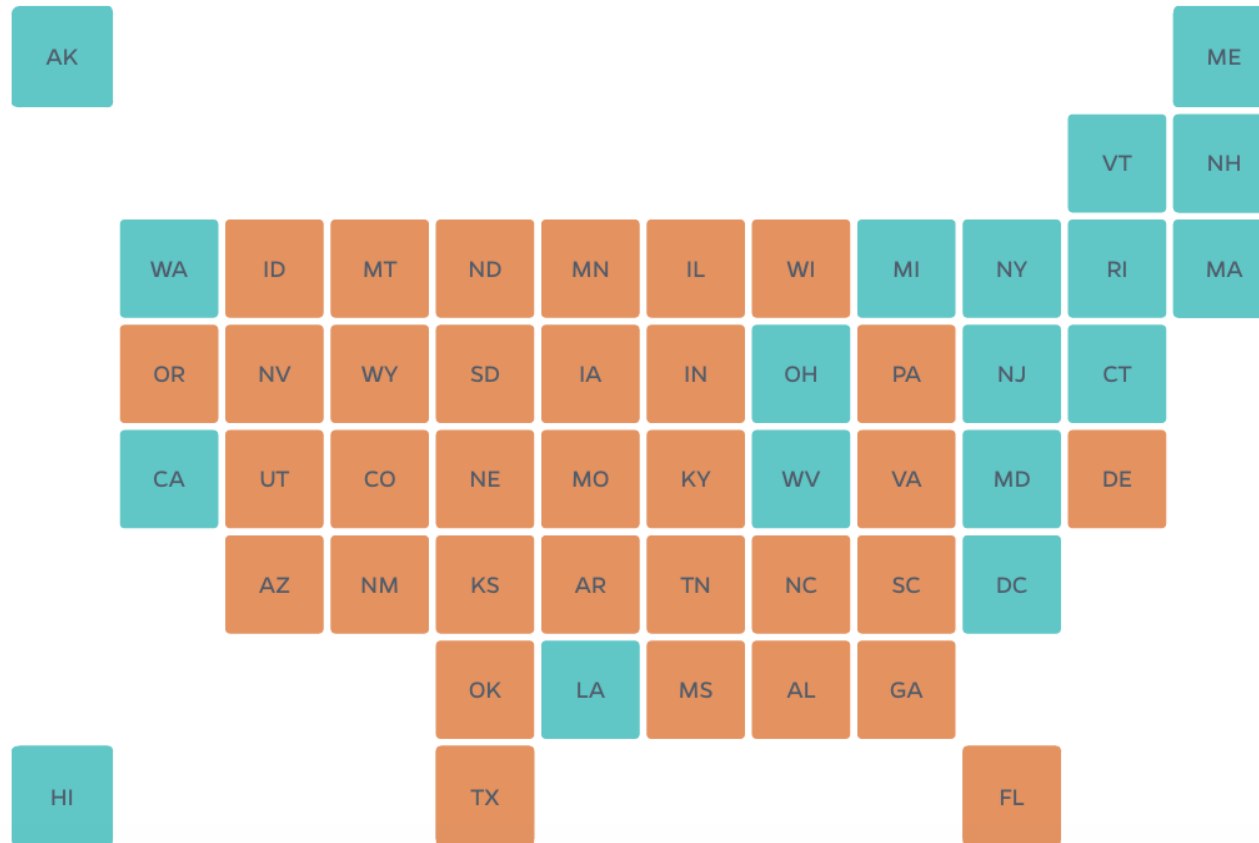
Display a different dataset

Weekly change percent positive ▼

Map View

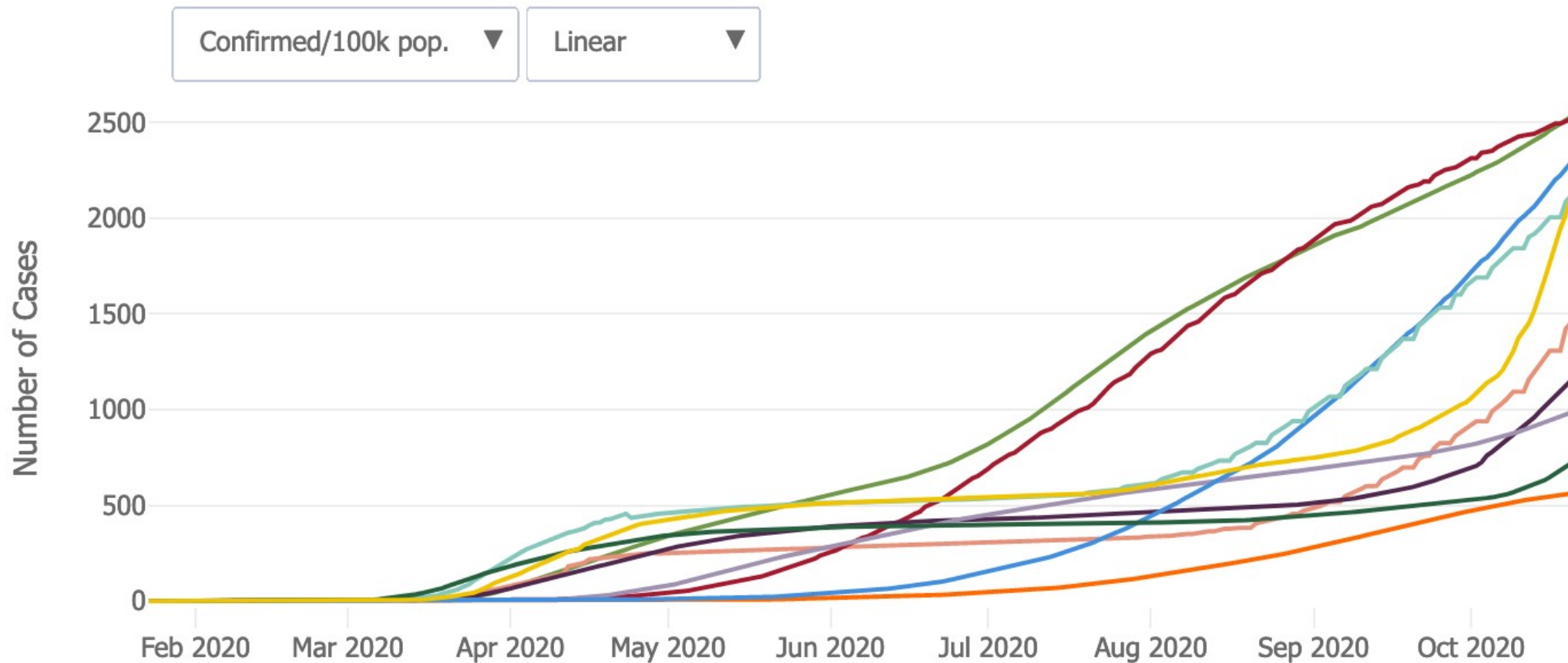
Overview

■ INCREASING ■ DECREASING ■ NO CHANGE



Source: Johns Hopkins Coronavirus Resource Center

<https://coronavirus.jhu.edu/data>

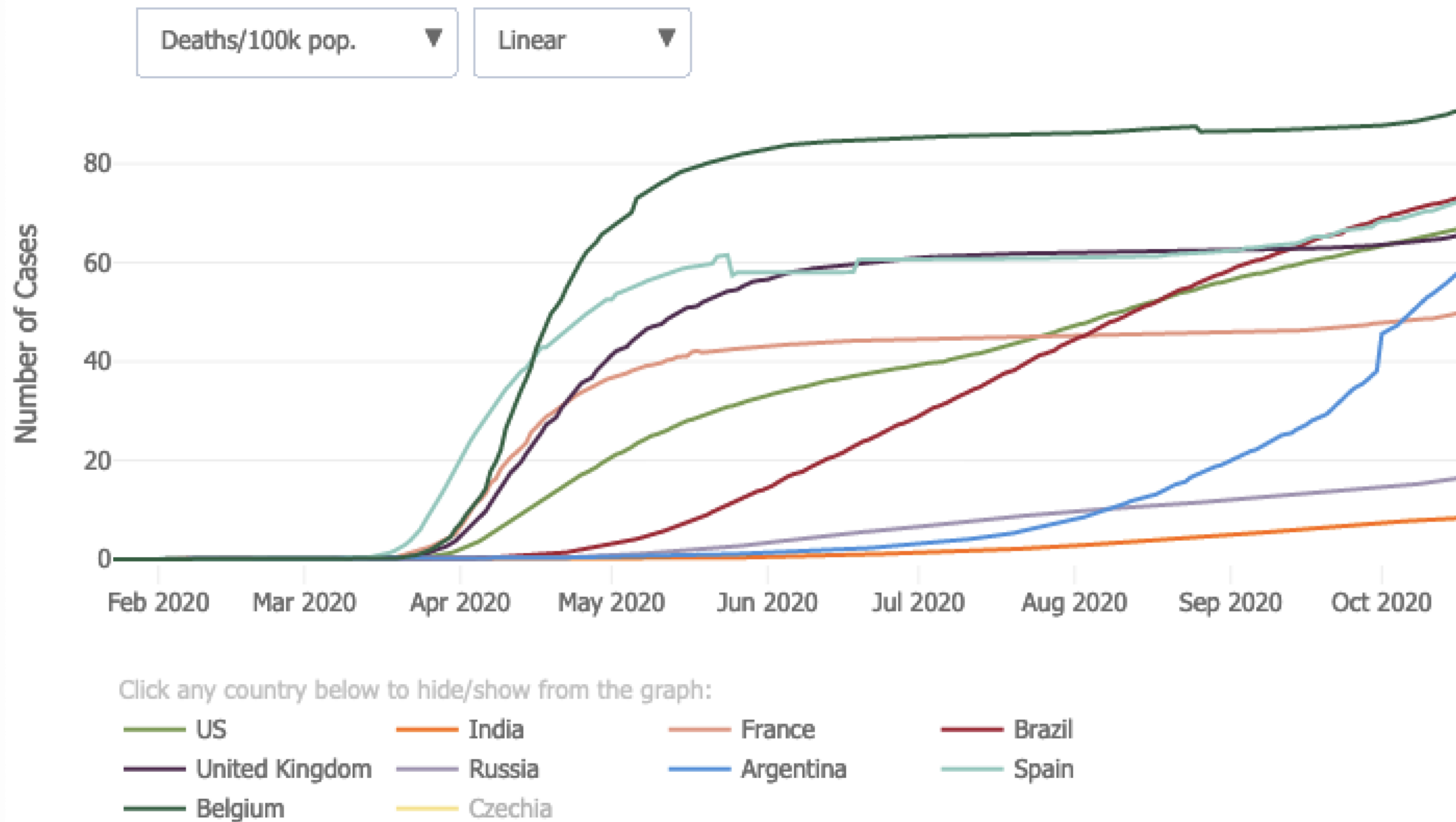


Click any country below to hide/show from the graph:

- | | | | |
|----------------|---------|-----------|--------|
| US | India | France | Brazil |
| United Kingdom | Russia | Argentina | Spain |
| Italy | Belgium | | |

Source: Johns Hopkins Coronavirus Resource Center

<https://coronavirus.jhu.edu/data>



Source: Johns Hopkins Coronavirus Resource Center
<https://coronavirus.jhu.edu/data>

COVID-19: Cases and Death by Race/Ethnicity

Data as of October 11, 2020.

Overview

Trends

Data Tables

Race/Ethnicity

Long-Term Care

Select Race/Ethnicity

Hispanic

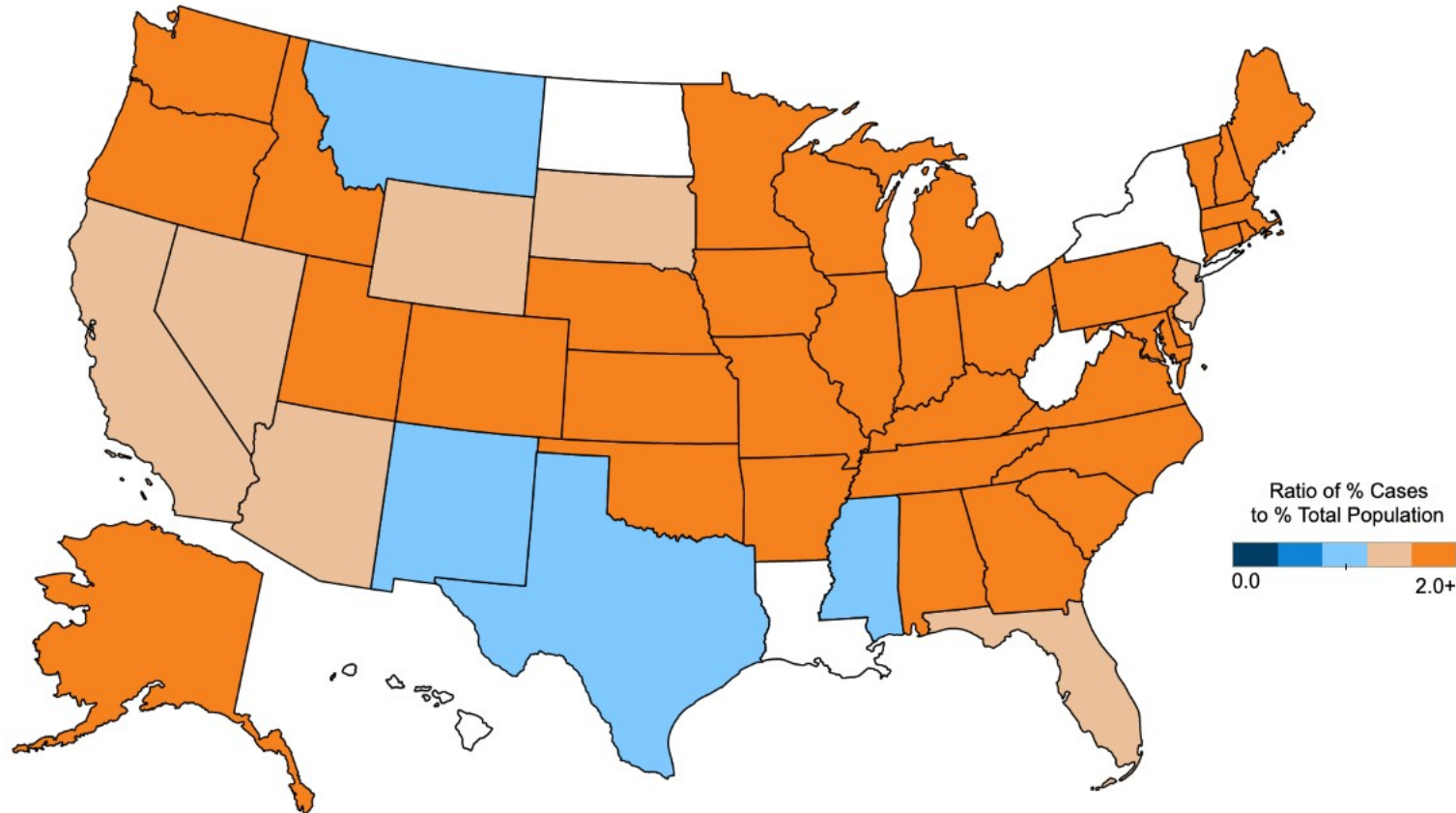
Select Metric

Cases

Select View

Map

Table



Source: Kaiser Family Foundation

<https://www.kff.org/health-costs/issue-brief/state-data-and-policy-actions-to-address-coronavirus/#long-term-care-cases-deaths>



Elmhurst Hospital – NY City, March 23, 2020

CDC COVID Data Tracker

Maps, charts, and data provided by the CDC

Case Trends ▾ Laboratory ▾ Community Impact ▾ **Unique Populations ▾** COVID-19 Home

Healthcare Personnel [Pandemic Vulnerability Index](#) [Correctional Facilities](#) [Underlying Medical Conditions](#)

Cases & Deaths among Healthcare Personnel

Data were collected from 6,022,292 people, but healthcare personnel status was only available for 1,451,776 (24.11%) people.
For the 182,936 cases of COVID-19 among healthcare personnel, death status was only available for 134,039 (73.27%).

CDC | Updated: Oct 18 2020 12:25 PM



CASES AMONG HCP

182,936

DEATHS AMONG HCP

758

Source: CDC

<https://covid.cdc.gov/covid-data-tracker/#health-care-personnel>

Healthcare Worker Information

Is the patient a health care worker in the United States? ☐ Yes ☐ No ☐ Unknown

If yes, what is their occupation (type of job)?

☐ Physician ☐ Respiratory therapist ☐ Other, specify: _____
☐ Nurse ☐ Environmental services ☐ Unknown

If yes, what is their job setting?

☐ Hospital ☐ Rehabilitation facility ☐ Other, specify: _____
☐ Long-term care facility ☐ Nursing home/assisted living facility ☐ Unknown

Exposure Information

In the 14 days prior to illness onset, did the patient have any of the following exposures (check all that apply):

☐ Domestic travel (outside state of normal residence). Specify state(s): _____

☐ International travel. Specify country(s): _____

☐ Cruise ship or vessel travel as passenger or crew member. Specify name of ship: _____

☐ Workplace

If yes, is the workplace critical infrastructure (e.g., healthcare setting, grocery store)?

☐ Yes, specify workplace setting: _____ ☐ No ☐ Unknown

☐ Airport/airplane

☐ Adult congregate living facility (nursing, assisted living, or long-term care facility)

☐ School/university/childcare center

☐ Correctional facility

☐ Community event/mass gathering

☐ Animal with confirmed or suspected COVID-19. Specify animal: _____

☐ Other exposures, specify: _____

☐ Unknown exposures in the 14 days prior to illness onset

☐ Contact with a known COVID-19 case (probable or confirmed)

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

What type of contact?

☐ Household contact

☐ Community-associated contact

☐ Healthcare-associated contact (patient, visitor, or healthcare worker)

Was this person a U.S. case?

☐ Yes, nCoV ID(s) _____, _____, _____

☐ No, this person was an international case and contact occurred abroad

☐ Unknown if U.S. or international case

Is this case part of an outbreak?

☐ Yes, specify outbreak name: _____ ☐ No ☐ Unknown

Hughes et al: MMWR September 25, 2020

February 12 – July 16

2,633,585 U.S. COVID-19 cases

HCP status on 571,708 (22%)

100,481 (18%) identified as HCP

641 deaths

Lost on the frontline

Hundreds of US healthcare workers have died fighting Covid-19. We count them and investigate why.

A partnership between



the Guardian and Kaiser
Health News

[ABOUT](#) [KEY FINDINGS](#) [OUR REPORTING](#) [METHODOLOGY](#) [SUBMIT A NAME](#)



1319

US healthcare worker deaths are under
investigation by the Guardian and KHN.

Did they have to die?



Source: The Guardian

<https://www.theguardian.com/us-news/ng-interactive/2020/aug/11/lost-on-the-frontline-covid-19-coronavirus-us-healthcare-workers-deaths-database>

Resident Cases and Deaths

TOTAL COVID-19 CONFIRMED CASES

252,939

TOTAL COVID-19 SUSPECTED CASES

143,848

TOTAL COVID-19 DEATHS

59,626

Source: CMS data through 10/4/20

<https://data.cms.gov/stories/s/COVID-19-Nursing-Home-Data/bkwz-xpvg/>

COVID-19: Long-Term Care Facilities

Overview

Trends

Data Tables

Race/Ethnicity

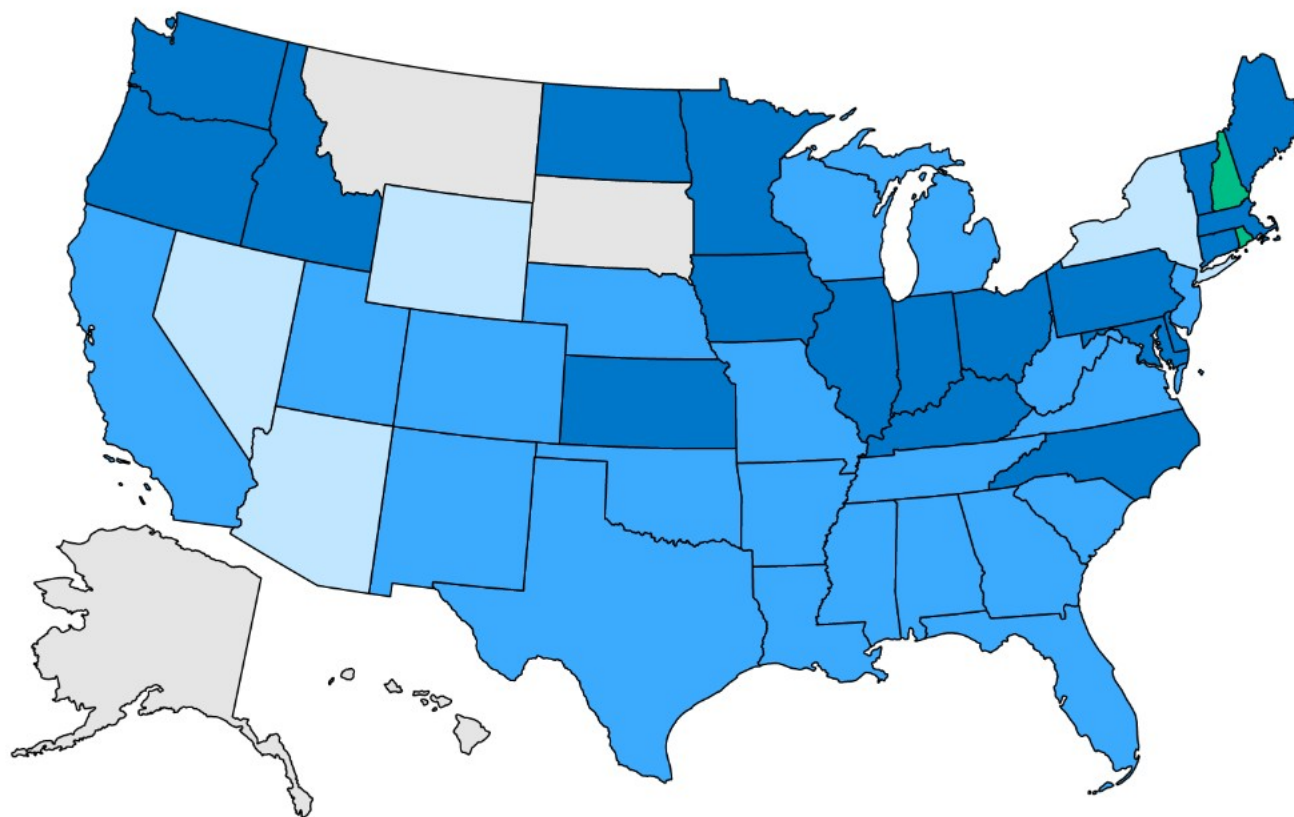
Long-Term Care

Select View:

Map

Weekly Trends

Table



United States Totals:

Facilities with
Known Cases: **20,720**

Cases: **537,446**

Deaths: **84,136**

LTC Cases
as a Share of
Total Cases: **8%**

LTC Deaths
as a Share of
Total Deaths: **40%**

LTC Facility Deaths as a Share of Total State Deaths

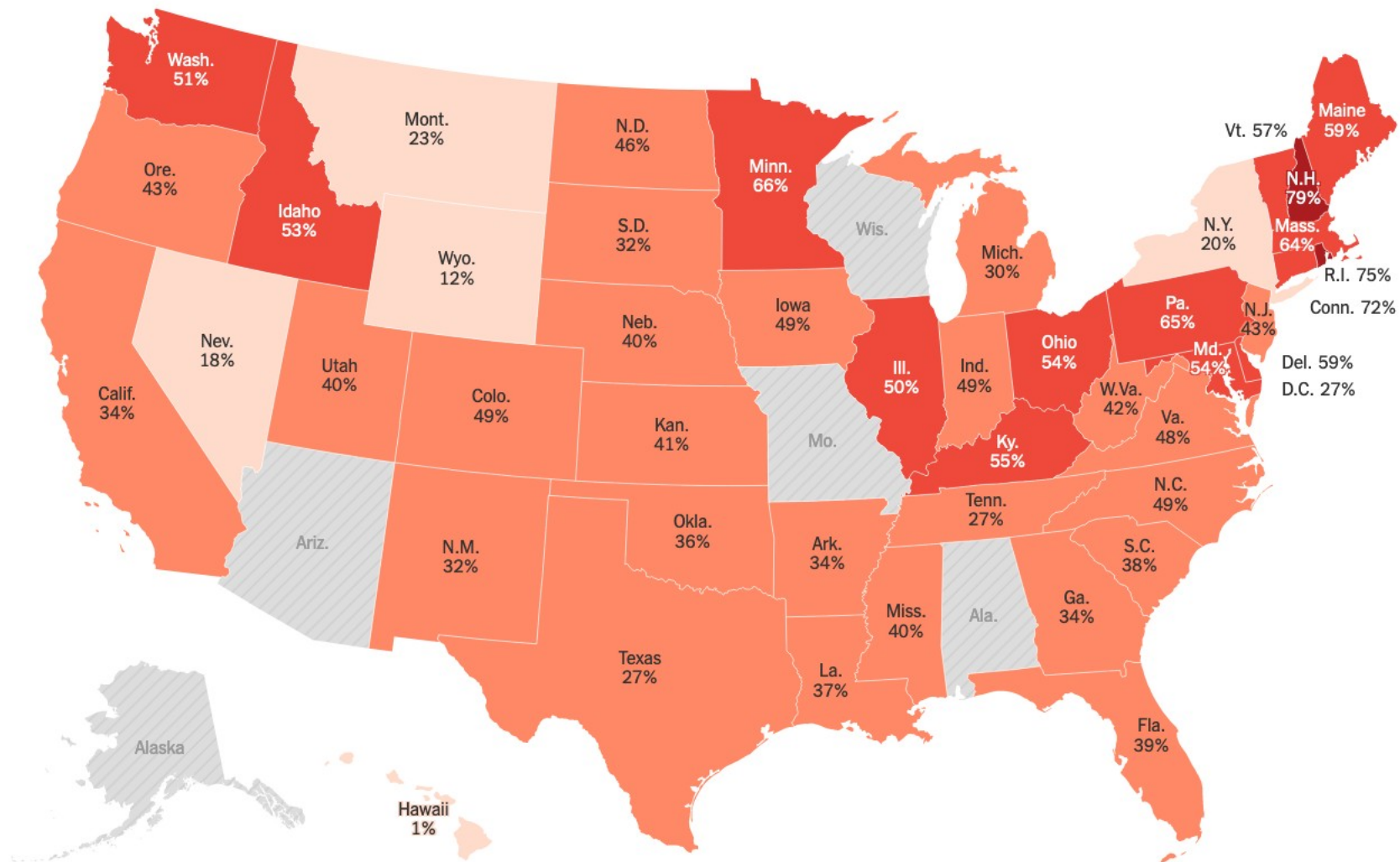
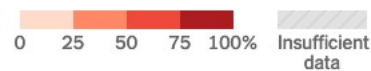
- Less than 25%
- 25%-49%
- 50%-74%
- Greater than or Equal to 75%
- Data Unavailable in State

Source: Kaiser Family Foundation

<https://www.kff.org/health-costs/issue-brief/state-data-and-policy-actions-to-address-coronavirus/#long-term-care-cases-deaths>

In 15 states, at least half of deaths are linked to nursing homes.

Share of state's deaths linked to long-term care facilities

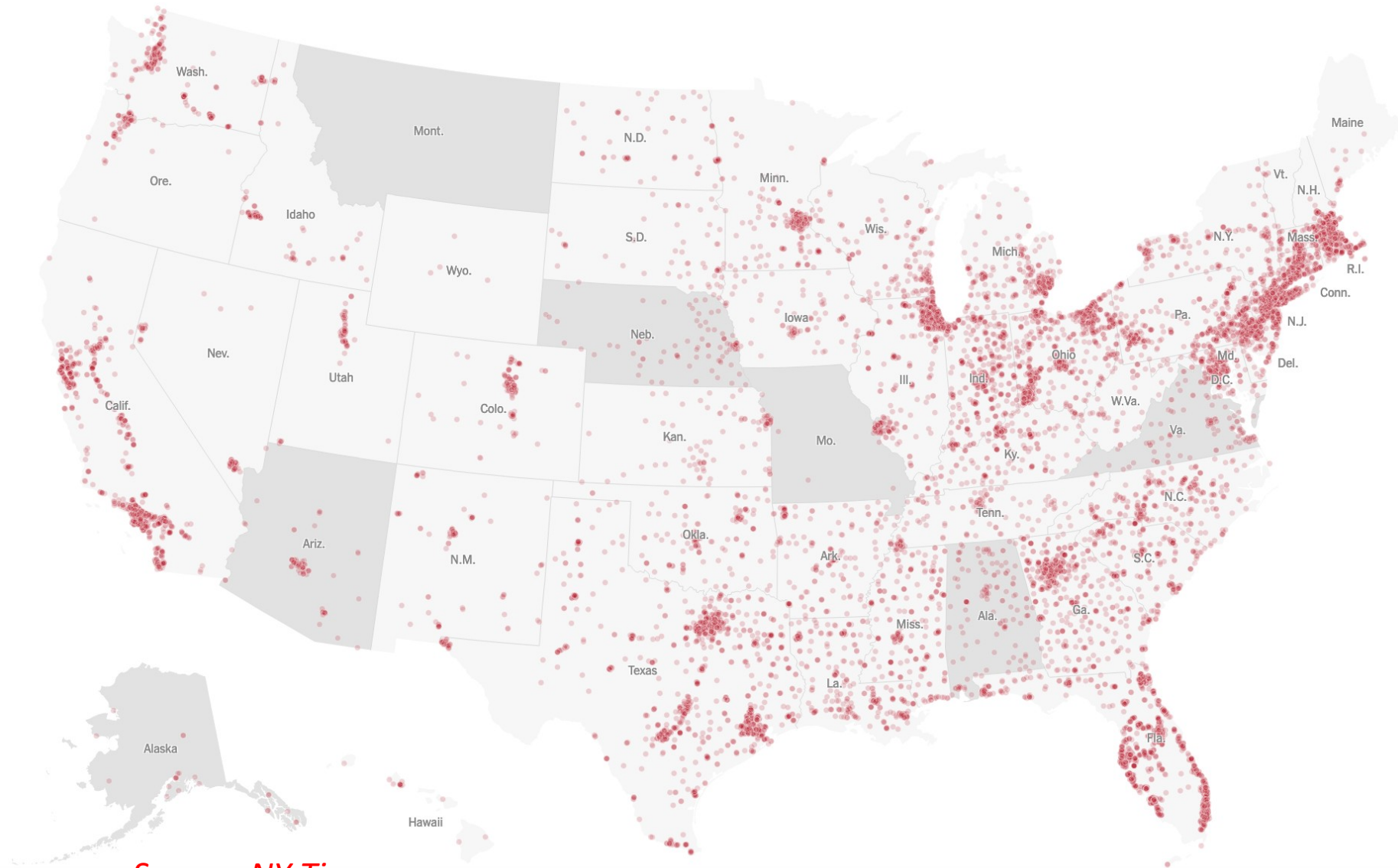


Source: NY Times

<https://www.nytimes.com/interactive/2020/us/coronavirus-nursing-homes.html>

There are at least 21,000 long-term care facilities with one or more coronavirus case

States that provide some facility data States that provide no facility data



Source: NY Times

<https://www.nytimes.com/interactive/2020/us/coronavirus-nursing-homes.html>



Exclusive: Nearly Half of U.S. Nursing Homes Have Staff Infected With COVID-19

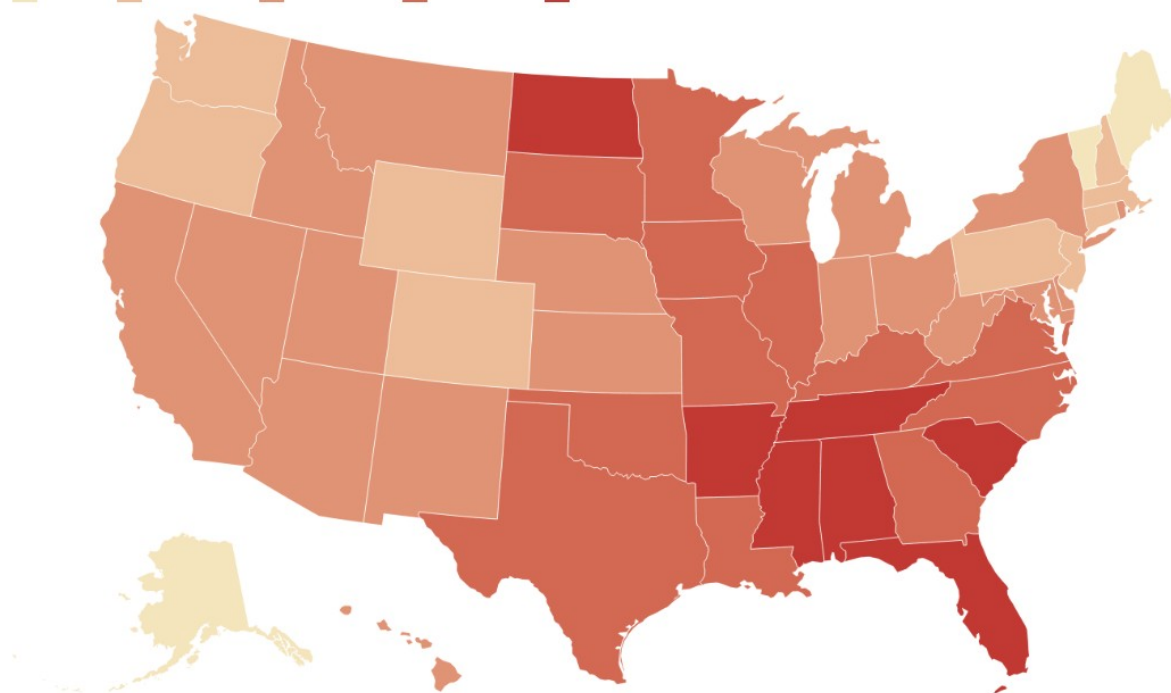
An AARP analysis also finds a quarter of facilities are short on workers and PPE

by Emily Paulin, **AARP**, October 14, 2020 | Comments: 2

Nursing Homes With COVID-19 Infections Among Staff

Percentage of nursing homes reporting one or more confirmed COVID-19 infections among staff between Aug. 24 and Sept. 20.

< 20% 20%–34% 34%–48% 48%–62% ≥ 62%



ADVERTISEMENT

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Source: American Association of Retired Persons

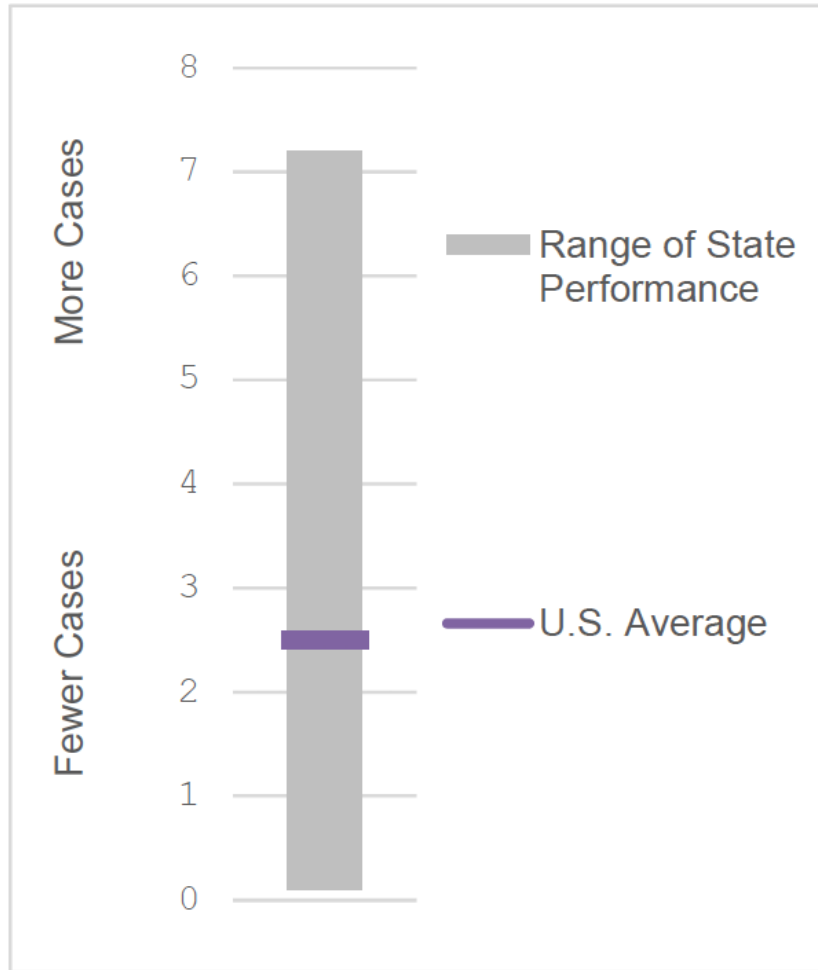
<https://www.aarp.org/caregiving/health/info-2020/nursing-home-covid-ppe-staff-shortages.html>

Staff COVID Cases & Deaths				
	YES	NO	Low State	High State
Nursing homes with confirmed staff cases (4 weeks ending 9/20/20)	48.3%	51.7%	5.7%	75.6%
Confirmed staff cases (4 weeks ending 9/20/20)	26,945			
Rate per 100 residents	2.5			
Confirmed staff cases (total since 6/1/20)	132,303			
% of all Covid cases in state *	2.7%			
Nursing home staff Covid deaths (4 weeks ending 9/20/20)	107			
Rate per 10,000 residents	1.0			
% of all Covid deaths in state *	0.5%			
Nursing home staff Covid deaths (total since 6/1/20)	541			
% of all Covid deaths in state *	0.6%			

Source: AARP Nursing Home COVID-19 Dashboard

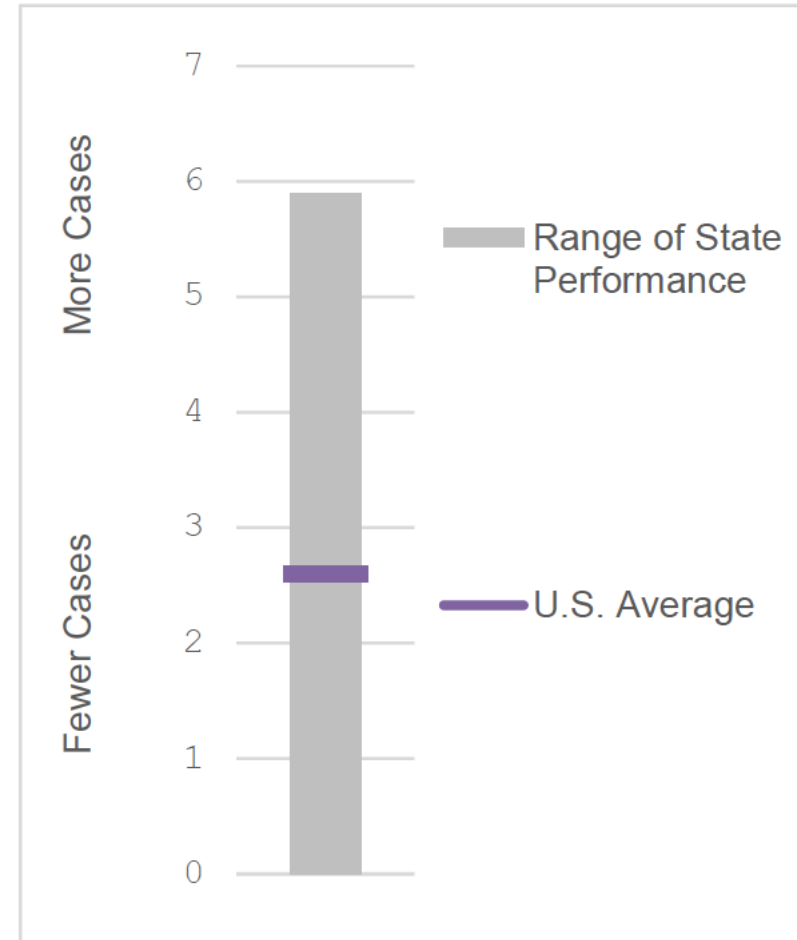
<https://www.aarp.org/ppi/issues/caregiving/info-2020/nursing-home-covid-dashboard.html>

Staff COVID-19 Cases (COVID-19 cases per 100 residents)



In the last month (4 weeks ending 9/20/20) in the United States there were 2.5 nursing home staff cases per 100 residents

Nursing Home Resident Cases (COVID-19 cases per 100 residents)

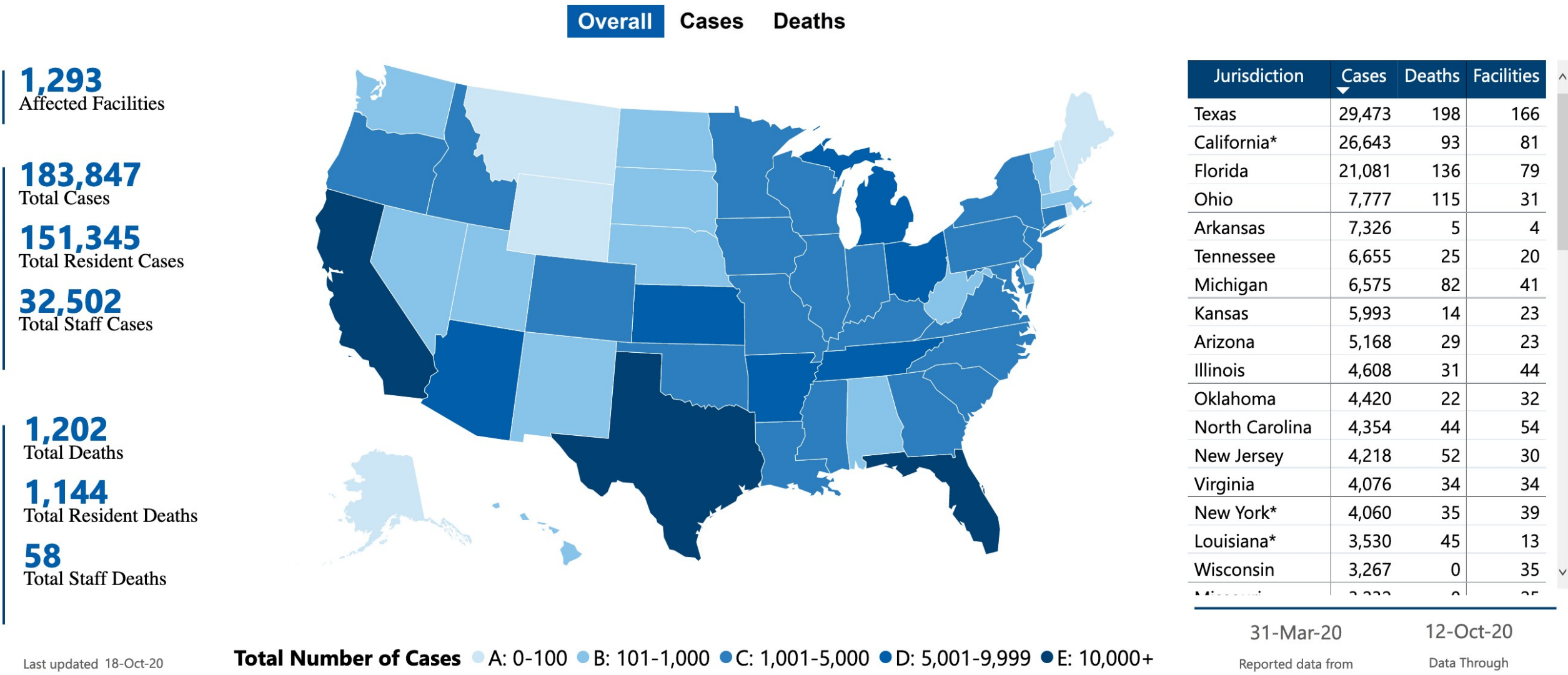


In the last month (4 weeks ending 9/20/20) in the United States there were 2.6 COVID-19 cases per 100 nursing home residents

Source: AARP Nursing Home COVID-19 Dashboard

<https://www.aarp.org/ppi/issues/caregiving/info-2020/nursing-home-covid-dashboard.html>

Confirmed COVID-19 Cases and Deaths in US Correctional and Detention Facilities By State



	CASES	LOCATION
Avenal State Prison	3,246	Avenal, Calif.
San Quentin State Prison	2,539	San Quentin, Calif.
Marion Correctional Institution	2,453	Marion, Ohio
Pickaway Correctional Institution	1,796	Scioto Township, Ohio
California Rehabilitation Center prison	1,787	Norco, Calif.
California Institution for Men	1,653	Chino, Calif.
Chuckawalla Valley State Prison	1,508	Blythe, Calif.
Columbia Correctional Institution	1,460	Lake City, Fla.
North County jail	1,435	Castaic, Calif.
Folsom prison	1,424	Represa, Calif.

7 of 10 top US prison outbreaks have been in California
15,334 inmate positives, 71 deaths
4,089 staff positives, 10 deaths

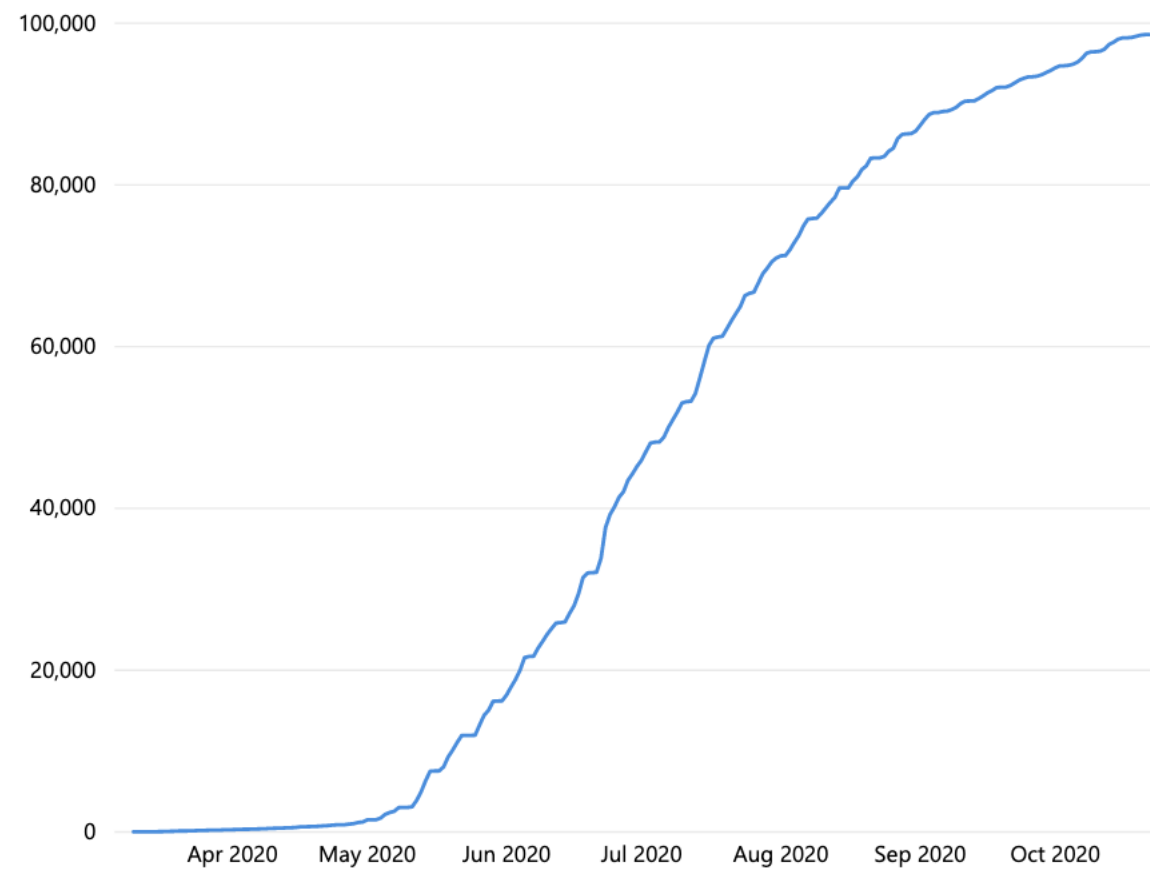
Source: NY Times, CDCR tracking

<https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html>

<https://www.cdcr.ca.gov/covid19/population-status-tracking/>

CUMULATIVE PATIENTS TESTED*: **98,642**

PER 1,000



CDCR

820.4

CALIFORNIA

435.0

UNITED STATES

385.3

*** Note: Patients are only considered 'tested' once COVID-19 results have returned.
This may cause a 2-3 day delay in testing counts.**

Data Last Updated: Oct 22 2020 1:48PM

Source: CDCR tracking

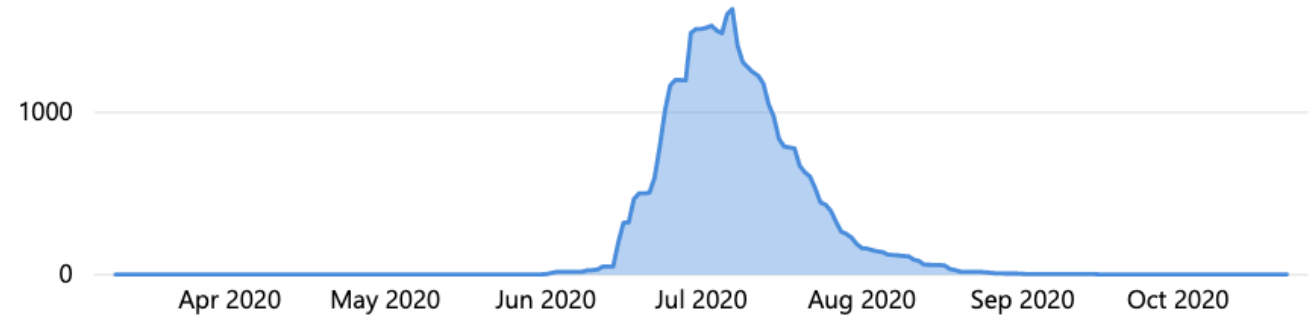
<https://www.cdcr.ca.gov/covid19/population-status-tracking/>



CONFIRMED CASES: Cumulative Count

NEW IN LAST 14 DAYS	ACTIVE		RESOLVED	DEATHS
	CUSTODY	RELEASED		
1	1	58	2,152	28

ACTIVE CASES IN CUSTODY



*Patients who resolved, died, or released before they resolved are not included in graph above.
Active case count by date may be delayed 2-3 days while awaiting test results.

Source: CDCR tracking

<https://www.cdcr.ca.gov/covid19/population-status-tracking/>



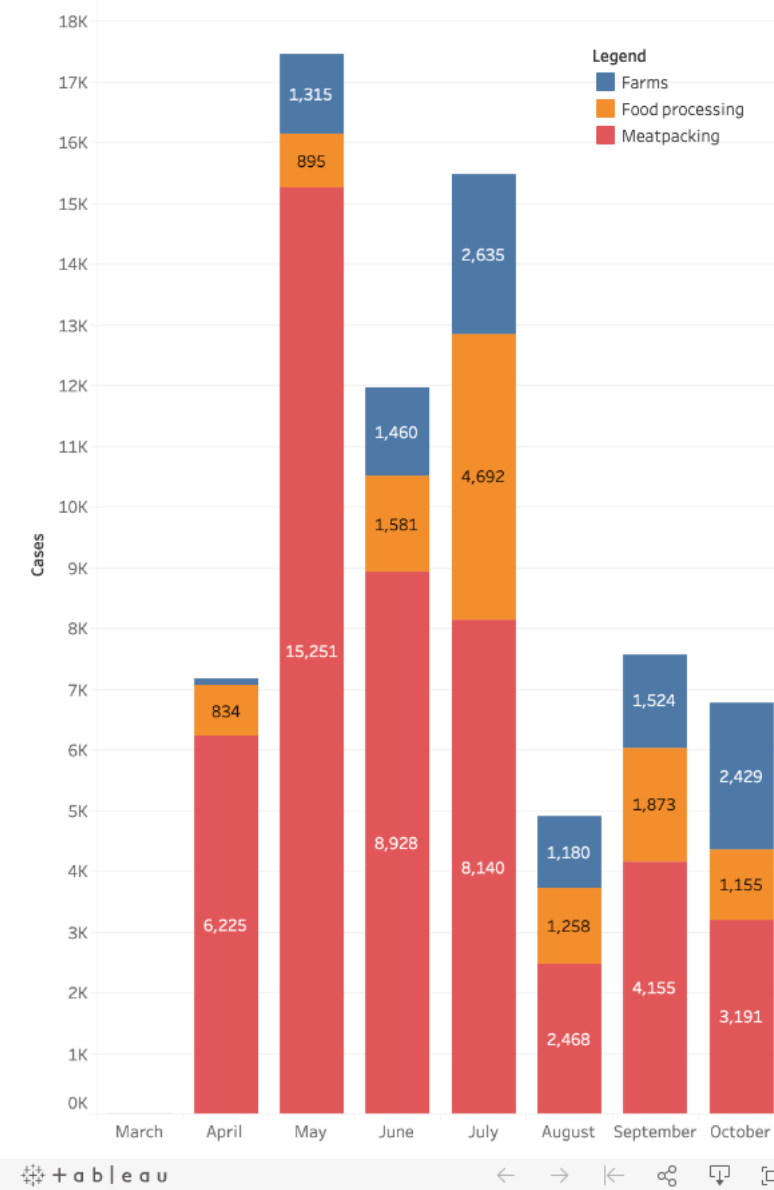
Could the food system face a new Covid-19 wave?

By Leah Douglas, October 21, 2020

At least 71,000 worker cases and 321 deaths linked to nearly 1,400 Covid-19 outbreaks at meatpacking facilities, food plants and farms.

Source: Food and Environment Reporting Network
<https://thefern.org/>

Number of cases reported per month by sector



A California Chicken Plant Just Had the Deadliest Meatpacking Outbreak Yet

Following months of warnings, a Foster Farms plant closed after at least 392 workers tested positive and 8 died.

 **TOM PHILPOTT**
Reporter
[Bio](#) | [Follow](#)

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On Sept. 3, 2020, people gathered for a candlelight vigil to honor the eight lives lost and hundreds of families impacted by a COVID-19 outbreak at Foster Farms' plant in Livingston, Calif. **Andrew Kuhn/The Merced Sun-Star via AP**



Source: Mother Jones
<https://www.motherjones.com/food/2020/09/foster-farms-covid-livingston-death-outbreak-osh-safety-masks-infection-poultry-workers/>

National occupational COVID data surveillance using other systems

- Behavioral Risk Factor Survey: High prevalence of underlying medical conditions among essential workers (Silver et al
<https://www.cdc.gov/mmwr/volumes/69/wr/mm6938a3.htm>
- Current Population Survey: increases in absenteeism in essential worker groups (Groenewold et al
https://www.cdc.gov/mmwr/volumes/69/wr/mm6927a1.htm?s_cid=mm6927a1_w

COVID-19 worker surveillance – recommendations for a comprehensive system

- Require reporting of occupation and industry on case report forms
- Increase State and local capacity for contact tracing and investigation
- Mandate workplace outbreak reporting by employers
- Perform targeted surveillance testing of essential workers
- Enact national OSHA regulation for COVID-19
- Expand national fatality census program to include COVID-19

