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## February 28, 2021





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This report provides highlights of a weekly survey of practices regarding the mitigation of the spread of COVID-19 in the U.S. during the second half of February 2021 along with comparisons to prior half-month time periods. The survey asks about the degree to which the respondents perceive that people in their community are following 21 common mitigation practices. The responses are separated by state and compared to state level statistics regarding the level of COVID-19 infections from the Johns Hopkins COVID database for the same time period.

## Executive Summary

For the second consecutive half month a decrease was observed in community mitigation compliance across the country. In the second half of February from average compliance was 62.4% compared to 62.8% in the first half of the month, according to observations from 803 individuals from all 50 states. At the same time, new COVID-19 infections again fell sharply with 1.0 million new cases for late February compared to 1.5 million in the first half of the month and 2.7 million in the last half of January. The downward trend continues but the decrease is smaller.

Additional findings from the second half of January:

- ❖ Compliance for the top five mitigation practices is slipping. Only one of the mitigations have compliance over 75% and four of the five had significant declines in compliance percentages.
- ❖ Of the twenty-six states where we have significant data from this week, the worst three (Iowa, Virginia and Florida) had average compliance in the low-50's, with Florida repeating in the bottom three with 54% average compliance.
- ❖ Only two states among the twenty-six with significant data that had average mitigation compliance over 70% - Massachusetts and Maryland. California was able to maintain the improvement in mitigation that was achieved in the first half of February in response to their horrific experiences with infections in December and early January.

The full set of mitigations surveyed are included in the appendix to this report.

It is now estimated that immunities from vaccination total 16% of the population, while immunities from people who have been infected and recovered are over 8%, with the vaccinated group growing much faster than the recovered/immune group. But there seems to be a race between the vaccine impact, new strains of COVID and reduced compliance to determine the near-term course of the pandemic.

## Mitigation Practices - National

Average percentage compliance with 21 COVID-19 mitigation strategies that are surveyed was 62.4% in the second half of February, down from 62.8% in the first half of the month and back to the level last seen in November. For the half-month, only one of the twenty-one mitigations practices had average compliance above 75%, four had average compliance below 50% and sixteen had average compliance between 50% and 75%.

Nationally the weighted average of compliance with these mitigations has stayed in a very tight range a low of 62.3% in late November to a high of 63.1 for late January. When mitigations are broken out into practices within states and regions of states, there is a far greater variance in mitigations as respondents observe the results of individual states implementing changes in COVID mitigations and Individuals react to their personal perceptions of the level of COVID danger.

### Survey Details

Collects information from volunteers on perceptions of community compliance with 21 COVID Mitigation strategies. Participants answer between 0% and 100% that they see the strategy in use in their area. Participants are asked to fill out survey every week.

### CHANGING MITIGATIONS

Throughout the past eight weeks, the six mitigations that our observers say have the highest average compliance have remained the same (with “Quarantine people with positive tests” shifting in and out of the Top 5). Results from the last four periods are presented below:

Top Five Mitigations	Jan 1-15	Jan 16-31	Feb 1-14	Feb 15-28
Special protection in hospitals areas that treat COVID patients	82%	84%	85%	79%
Visitors to senior living facilities to be restricted	77%	81%	82%	75%
Wearing a Mask in Public	72%	72%	72%	72%
Hairdresser and barber to be open with restrictions	73%	73%	75%	71%
Restaurants to have reduced seating	75%	75%	75%	70%

In the second half of February four of these five practices had drops in compliance of 3% to 7%. The top mitigants have had an average compliance of 75% to 76% for the last two months. That average dropped to 73% this period. This trend helps to create the slower improvement in Infection Level that will be discussed below.

Mitigation practices with the largest change are compared below.

Mitigations with Largest Change	Feb 1 - 14	Feb 15 - 28	Change
Get antibody testing to detect prior infection	35%	44%	10%
Visitors to senior living facilities to be restricted	82%	75%	-7%
Special protection in hospitals areas that treat COVID patients	85%	79%	-6%
Know Local level of COVID infections	54%	60%	6%
Quarantine people with positive tests	74%	68%	-6%

There is a story with each of the above practices. “Antibody Testing” had the largest change in the first half of January in the opposite direction and even with the 10% improvement still remains below 50%. The next two reflect areas (nursing homes and hospitals) where early vaccination efforts were focused and lower restrictions may be happening because of the success of the vaccination efforts. The increased community awareness of “Local level of COVID infections” may be heightened interest in meeting targets for reopening of various activities.

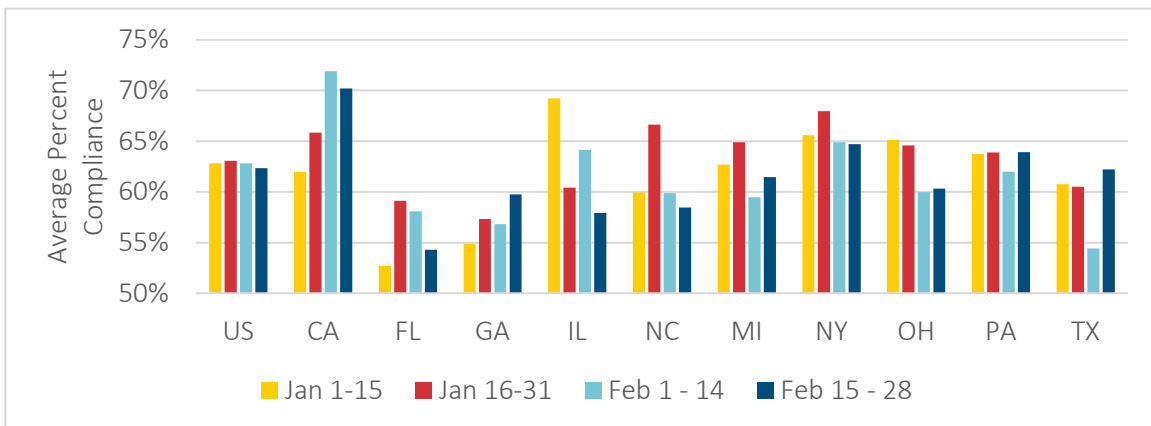
### Mitigation Practices – State Level

#### Weighting Basis

Weighting is based on average compliance in states where COVID was under control during September.

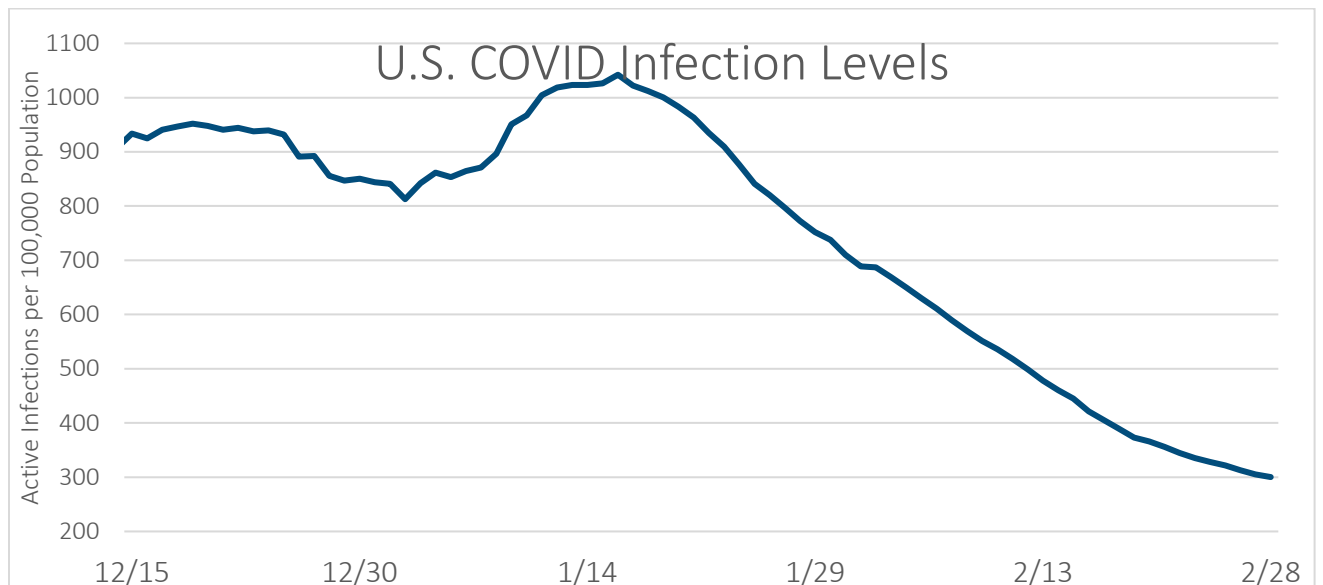
For the second half of February, the survey had a credible number of responses from 26 states. The states from that group with the highest compliance were Massachusetts (75%), Maryland (71%), California (70%), and Colorado (70%). The states with the lowest compliance were Iowa (53%), Virginia (53%) and Florida (54%).

Focusing in on the ten most populous states, there is quite a bit of variability of compliance over the past two months, some of which is likely driven by the variety of opinions from the observers.



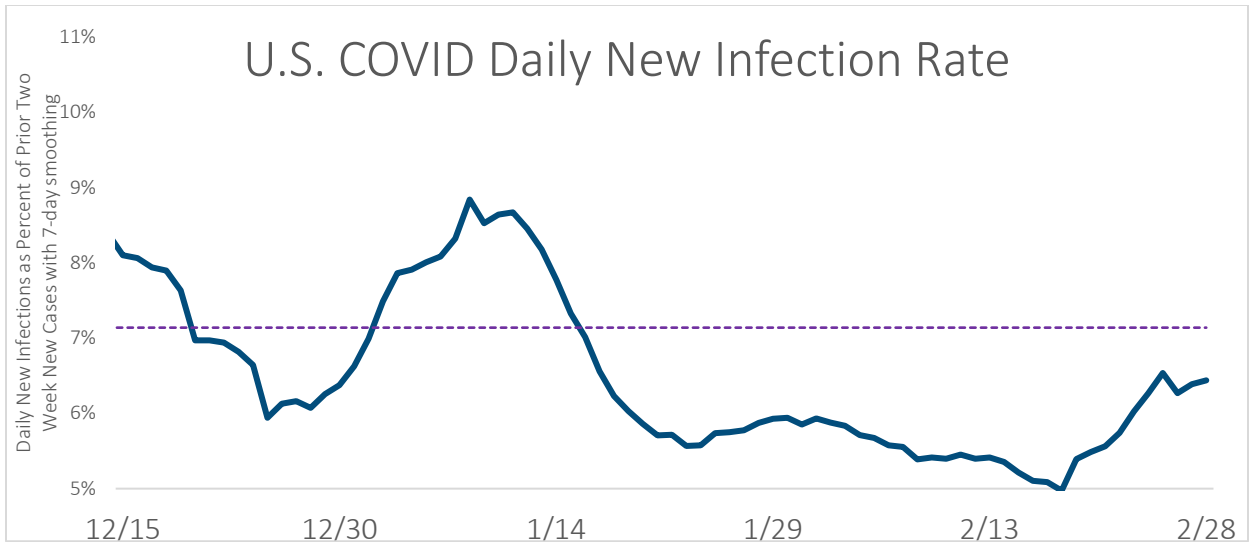
California had been experiencing very high Infection Levels and the governor had reimposed severe restrictions continues with high mitigation compliance and lower Infection Level will be shown below. However, five of the other nine states show decreases in compliance in late February. Texas had a large increase in compliance that will likely show up in future Infection Level there.

### COVID-19 Spread of Infections – National

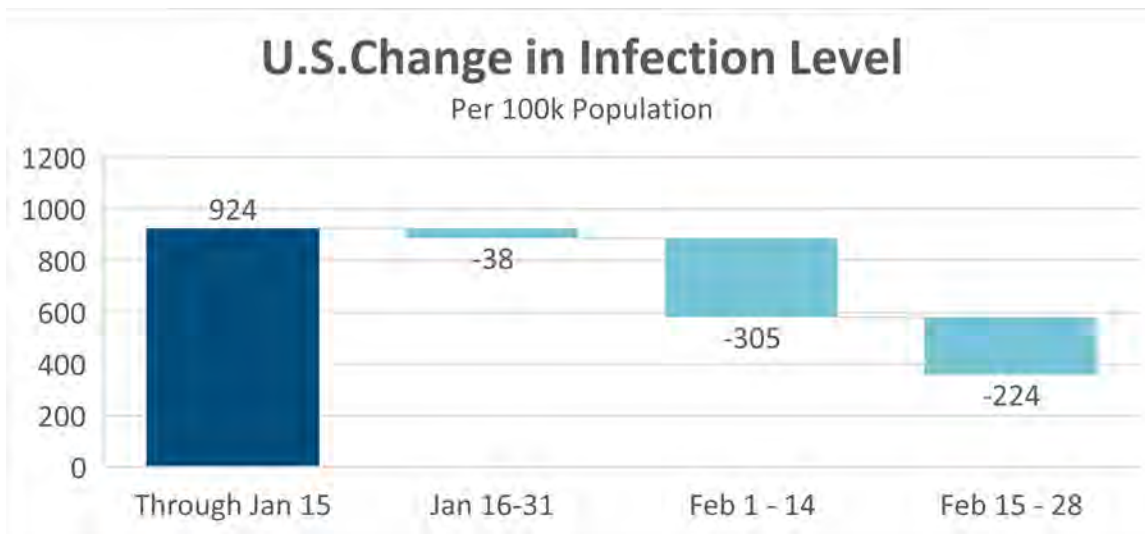


There were 1.0 million new cases of COVID-19 reported in the first half of February. This is down from 2.6 million reported in the second half of January and 3.6 million in the first half of that month. The reported infection level has now fallen well below the point where it was in early December. The end of the holiday season as well as reactions to the surge in cases has had a major impact here. However, the infection level is still more than twice where it stood over the summer of 2020.

**Infection Level**  
is the number of active infections per 100,000 people.



The rate of new infections was been holding steady around 6% for about a month. But starting on February 22, when Iowa made a major upwards correction in their reported infection numbers an upward trend has prevailed. The New Infection rate is being pulled upwards by the new, more infectious strains of COVID, downwards by the vaccinations and upwards by the loosening mitigation compliance noted above.



The infection level was increasing through mid-January. In late January, that growth stopped and in February, significant decreases were recorded. But the decrease of 224 in the second half of February was less than 75% the 305 drop in the first half of the month.

## Mitigations Levels over Time

The following charts provide a perspective on the relative compliance levels of all 21 mitigations with each other as well as the trends over the past two months.





## Impact of Immunities

The vaccination programs are moving forward fairly rapidly. An estimate of the potential impact of immunity gained from vaccinations and from recoveries from COVID infections shows that at this time, the impact of immunities on the spread of COVID is reaching a significant level.

	2/14/21	2/28/21	Increase
Reported Recovered Immune	25.5 M	27.0 M	+1.5 M
Vaccinated Immune	27.2 M	37.7 M	+10.5 M
Total Immune	52.7 M	64.7 M	+12.0 M
Pct of Population	16.2%	19.8%	+3.6%
Est. Impact on NIR	-1.0%	-1.6%	-0.6%
New Infections (1 week)	0.7 M	0.5 M	-0.2 M
Est. Reduction of New Infections	-0.1 M	-0.1 M	0

While the national average total percent immune is shown above to be 19.8%, at the state level, immune percentage ranges from a high of 28% in North Dakota to a low of 15% in Vermont. These differences are mostly driven by the different levels of recovered immune people in the states with a lesser range of vaccinated immune.

Please note that these calculations are estimates based upon average reported efficacy of the vaccines and an assumption that people with immunity would face an average level of exposure to COVID infection. In addition, no adjustments were made to these figures to reflect the exact timing of the onset of immunity from vaccinations which varies by type of vaccine or the fact that some recovered immune people are getting vaccinated.

In addition, these calculations are based upon Reported Infections. Because COVID infections result in a very wide range of individual responses from largely symptom free to severe respiratory distress leading to hospitalization and death, there are thought to be many cases that go unreported. The CDC conducted a study of the seroprevalence of COVID antibodies in blood drawn for a variety of medical tests. Results from that study show that unreported infections may be as high as 80% of the reported infections. If that were true, the Total Immune level estimated above could be as much as 25% higher than the above estimate.

## Acknowledgments

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## Note on Mitigation Compliance Observations

The COVID mitigation information is collected via a SurveyMonkey survey. In that survey, observers are asked to say what they are seeing in their community regarding the percentage compliance with 21 specific mitigation activities. The observers are volunteers who were either recruited personally by the project team or who responded to a variety of solicitations for observers via Twitter, Facebook, LinkedIn, and SurveyMonkey. This data is subject to self-selection and other biases. No adjustments have been made to the data that we have collected in order to respond to possible biases. Observations are aggregated and the average of multiple views are treated as true information about the mitigation activity in a state. The variance of the responses in a state has been examined and targets are set for a higher number of responses in states where there is a higher variance of responses.

## Appendix List of Mitigations under Study

- Wearing a mask in public
- Maintaining social distance
- Staying at home
- Restaurants to have reduced seating
- Businesses to be closed – work from home only
- Hairdresser and barber to be open with restrictions
- Visitors to senior living facilities to be restricted
- Commonly touched surfaces to be sanitized
- Special protection in hospitals areas that treat COVID patients
- Get tested for active virus
- Get antibody testing to detect prior infection
- Quarantine people who have been in close contact with people with positive tests
- Quarantine people with positive tests
- Quarantine travelers from higher infection places
- Limit large gatherings of people
- Local level of COVID infections
- Statewide targets for reducing COVID spread
- Local approach to limiting COVID spread
- Colleges are closed or holding only remote classes
- Schools (K-12) are closed or holding only remote classes
- Violations of COVID restrictions result in fines or police enforcement

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