Ad closed by Google

What can the Biden administration do to stop covid-19 in the US?

HEALTH 14 December 2020

By Cassandra Willyard



President-elect Joe Biden announcing his health care team Susan Walsh/AP/Shutterstock

ALMOST 300,000 people have died of covid-19 in the US, and 200,000 more are expected to succumb to the disease by April. Coronavirus cases are spiking across the nation and hospitals are at or near capacity in many communities.

What can the Biden administration do to stop covid-19 in the US? | New Scientist

US president-elect Joe Biden has outlined a science-based approach to combating coronavirus that is a striking contrast to the actions of his predecessor. President Donald Trump downplayed the severity of the virus and flouted public health recommendations such as wearing a face covering and avoiding large gatherings.

Biden has already assembled a covid-19 advisory board and named a new health secretary, surgeon-general and covid-19 czar. He has also asked Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases and current member of the White House Coronavirus Task Force, to stay on and become his chief medical adviser. That is a relief to Ali Mokdad at the University of Washington in Seattle. These are "smart people who know what they are doing", he says.

Advertisement

Quelling the latest surge of covid-19 won't be easy for Biden's administration, however. "They're going to walk into a raging epidemic, where there's distrust," says Georges Benjamin at the American Public Health Association in Washington DC. "There are still people that don't believe the disease exists."

New Scientist spoke with public health experts, epidemiologists, physicians and social scientists to see how Biden might turn the tide.

Win hearts and minds

Biden's toughest challenge might be persuading the people who didn't vote for him to adopt behaviours that curb the virus's spread, such as wearing masks.

The most basic public health recommendations have become political flashpoints under the Trump administration. "It's not just that they're being silent on the guidelines, it's that they're actively advocating for citizens to violate public health guidelines," says Jay Van Bavel at New York University. His research suggests partisanship is one of the biggest predictors of behaviour. "That, to me, is the hardest part of it to overcome," he says.

During the 2020 campaign, Biden and his advisers adopted public health tactics that they are advocating, but role models won't be enough to convince sceptics. "Winning this war against covid-19 is going to happen [...] one block at a time, one conversation between a trusted school nurse and a parent at a time," says Lindsey Leininger at Dartmouth College in New Hampshire.

Read more: Are children likely to give covid-19 to older relatives at Christmas?

Mandates on masks

One of the best tools to slow the spread of covid-19 has been promoted since fairly early in the pandemic: wearing a face covering. "It is really a pillar of pandemic control," says Monica Gandhi at the University of California, San Francisco. Models developed by researchers at the University of Washington, which project 200,000 extra deaths by 1 April 2020, predict that if 95 per cent of people in the US wore a face covering, it could save 66,000 lives by the same date.

Biden has said he will require masks in federal buildings but won't issue a national mandate on face coverings. Even if he did, it isn't clear if a federal mandate could withstand a legal challenge. Instead he has pledged to persuade leaders in states that don't require masks to enact mandates. And if the governors won't listen? "Then I go to every mayor. I go to every councilman," said Biden in a televised interview on 15 October. "And I go to every local official and say 'mandate the mask'."

Convincing some people in the US to comply will be a tough sell. The decision to wear a face covering has become linked to people's political identities, says Monica Schoch-Spana at Johns Hopkins University in Maryland. Some Trump supporters see requirements to wear masks as infringing their individual rights.

Ramp up testing

Trump has falsely claimed that rising case numbers are only due to more testing. Public health experts argue that expanded testing is key to bringing the pandemic under control, because if people know they are infected, they are more likely to isolate and limit the spread of the virus.

2/7/2021

What can the Biden administration do to stop covid-19 in the US? | New Scientist

The US is currently testing more than 1.5 million people a day. But in many places, tests are still hard to come by and people often have to wait days to get their results. Public health officials recommend that people with symptoms of covid-19, or who have had close contact with someone who has the virus, stay at home, but the longer the wait for results, the more difficult that becomes.

Biden has pledged to double the number of drive-through testing sites – the country currently has about 800. He has also promised to invest in rapid tests. The slower tests, which are the most widely available type in the US, detect even tiny quantities of viral RNA and must be processed in a lab. Most rapid tests detect pieces of viral protein and are less sensitive but offer near immediate results.

Michael Mina at Harvard University has been a vocal advocate for rapid, at-home testing, which is rare in the US. The only covid-19 test approved for home use that gives fast results requires a prescription and costs about \$50. If half the population screened for covid-19 every four days, the pandemic would fizzle out because most contagious individuals would stop spreading the virus unknowingly, Mina argued in Time on 17 November.

Mass testing would also allow for more tactical application of lockdowns and other restrictions, says Ana Bento at Indiana University. Critics have argued that rapid antigen tests aren't sensitive enough to catch every case and come with a risk of false positives, but Gandhi says they could still have an enormous impact. "We're making perfect the enemy of the good," she says.

Read more: Could England have avoided second lockdown by sticking to tiers?

Bolster the supply chain

The pandemic response in the US has been hampered by persistent supply-chain issues. A November report by the US Government Accountability Office (GAO) revealed that as many as half of US states have shortages of rapid point-of-care tests, reagents and testing instruments. Shortages of personal protective equipment haven't been as severe as they were in spring, but some states still have little confidence in their ability to procure nitrile gloves and boot covers. A third of states said in a survey that they were concerned about supplies needed to administer covid-19 vaccines, especially syringes.

Addressing those shortages may require greater use of the Defense Production Act of 1950, says Benjamin. The law gives the president authority to compel companies to produce supplies in an emergency. Trump employed the act to beef up production of medical masks and ventilators in March, but Biden has pledged to use it more aggressively.

Support vaccine roll-out

The Pfizer/BioNTech covid-19 vaccine has been granted US emergency use approval, and Moderna has applied for this for its own vaccine. Vaccination of healthcare workers began on 14 December. Those shots seem to be "effective beyond our wildest dreams", says Gandhi.

But efficacy is only part of the story. "The real driver of whether a vaccination programme really leads to large reductions in the number of cases is the speed at which it's rolled out," says Jason Schwartz at Yale University. How fast the virus is spreading also matters. "If you've got a virus just spreading like wildfire throughout a community, it makes it that much harder for a vaccine to help us turn the page," he says.

It could take months before enough people are vaccinated to meaningfully affect transmission, says Mokdad. Both vaccines require two doses spaced three to four weeks apart, and some worry that people won't return for their second dose.

Although states will be in charge of delivering the vaccine, the federal government has a crucial role. Schwartz says many local and state health departments don't have the financial resources for a huge vaccination campaign. "It's an incredible responsibility that is complicated and costly," he says.

Read more: Doctor's diary: Inside the first covid-19 vaccine clinics

Massage the Message

Nine months into the pandemic, many people are experiencing serious fatigue. "Humans are a social species more than any other primate. It's our natural way of being," Van Bavel says. "This whole pandemic requires us to go against all these elements of human nature that give us joy, connection, mental and physical health."

Controlling the virus requires not just smart policies but widespread behaviour change. That factor is often overlooked, says Schoch-Spana. "When it comes to epidemic management, the last scientists to the table are the social behavioral scientists." She urges Biden to seek out "the best minds of psychology and anthropology and sociology and geography."

Ensuring that people adopt or continue to adhere to health officials' recommendations will require clear and consistent messaging, but also messages tailored to appeal to different groups. "I think public health has to frame epidemic management in non-scientific terms that are meaningful to a wide variety of people," Schoch-Spana says. "For some, it's about economics, plain and simple." For others, it might be about returning to a more familiar way life or being able to worship with their congregation.

Gandhi says that the messaging also needs to be more sympathetic. She would like to see an attempt "to truly understand what is the opposition to masking and to meet people where they are."

Biden's team will also have to combat vaccine hesitancy. The latest Gallup polls shows that 63 per cent of people in the US would be willing to get vaccinated against covid-19. Leininger hopes that number will climb as the public sees healthcare workers lining up to get the vaccine. "When we look at who holds trust right now in this country in terms of being purveyors of medicine and science, it's nurses," she says.

Mokdad is optimistic that the change of administration will have an impact on the spread of coronavirus. "The fact that somebody is willing to listen to science and is willing to wear a mask publicly will make a big difference," he says. But given the significant obstacles Biden faces and the rampant spread of the virus, it's not yet clear how quickly the new administration can curb the outbreak.

"We will get through this historical happening one way or another," Schoch-Spana says. "But it may take a lot of human pain."

Sign up to our free Health Check newsletter for a round-up of all the health and fitness news you need to know, every Saturday

More on these topics: United States coronavirus covid-19