

**IOWA**

COLLEGE OF PUBLIC HEALTH

Leading the **COVID-19 Response**

The College of Public Health has been and continues to be a pivotal source of expertise during the COVID-19 pandemic – advancing research, providing specialized knowledge and technical assistance, engaging students in on-the-ground response, and collaborating with community partners.

The following examples illustrate just a few of the valuable contributions members of the CPH community made to help guide, inform, and protect the University of Iowa campus, the state of Iowa, and the nation as the COVID pandemic ravaged the world.

Advancing Research

Public health investigators have been at the forefront of laboratory research – expanding screening capabilities and operating 24/7 to process the explosive surge in coronavirus tests from across Iowa, developing new methods and technologies to extend the use of personal protective equipment (PPE) – as well as efforts to answer basic questions about disease transmission and workplace protections.

Mike Pentella, clinical professor of epidemiology, directs the State Hygienic Laboratory at the University of Iowa, the state's public health and environmental laboratory. During the pandemic, the lab averaged about 5,000 COVID tests per day, processing individual patient tests from clinics across Iowa, as well as specimens from long-term care facilities and meat packing plants. Results, on average, were processed within 24 hours. The State Hygienic Laboratory is part of the Office of the Vice President for Research.



George Wehby, professor of health management and policy, led a study examining the effects of mask mandates. The research, published in the Journal of Health Affairs, looked at states which required masks in public and estimated that as many as 230,000–450,000 COVID cases were possibly averted by mandating face coverings.

Serving the University

College of Public Health faculty played active roles in the university's COVID mitigation efforts, such as planning for return to campus in Fall 2020, preparation of safety protocols, providing technical expertise to the UI Critical Incident Management Team and campus units on response strategies, including proper building ventilation, guidance on PPE, etc.

As health providers nationwide – including University of Iowa Hospitals and Clinics – struggled to overcome a critical shortage of PPE for frontline health care workers, there was a desperate need for alternative materials and innovative methods to prolong the life of safety equipment. Experts like **Patrick O'Shaughnessy, professor of occupational and environmental health**, played a critical part in evaluating the safety of PPE that had been manufactured from novel components, decontaminated using new technologies, or produced by volunteers.





Engaging Students in Experiential Learning

Public health students are trained to be leaders in their communities and in their workplaces. Often the everyday work of preventing illnesses and injuries goes unrecognized, but during a global pandemic the knowledge and skills that are part of public health education can make all the difference between success and failure. During the COVID pandemic, public health students applied their training and gained invaluable firsthand experience in pandemic response through community-based internships and special projects.

About 45 College of Public Health students helped lead the local coronavirus response while working as contact tracers at Johnson County Public Health. The students gathered information about positive cases from labs and clinics in Johnson County, called the people who tested positive to work out who else may have been infected, then followed up with those potential cases to encourage staying home, social distancing, and watching for COVID symptoms. The tracers also entered detailed data on each case and communicated with area employers to help prevent disease spread in the workplace.

LEARN MORE

Read the full story about CPH student contact tracers, watch a short video, and listen to a student-produced podcast about this unique learning experience.

www.public-health.uiowa.edu/news-items/college-of-public-health-students-trace-covid-19/

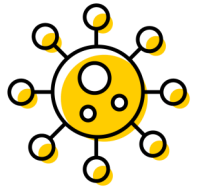
Serving Communities

In normal times, public health promotes and protects the health of people in the communities where they live, work, and play. During a pandemic, public health empowers those communities with critical skills and tools to save lives at a population level. In collaboration with community partners throughout Iowa and across the nation, public health investigators developed innovative responses to protect the health of diverse communities.



Anne Helene Skinstad, professor of community and behavioral health, and her Native Center for Behavioral Health develop programs to support the behavioral health workforce in Native American and Alaska Native communities throughout the United States. In the wake of COVID, which disproportionately impacted native populations, Skinstad's team quickly adapted trainings to virtual format, responding to the concerns of tribal colleagues in areas including addiction, mental health, opioid response, and mental health technical assistance for K-12 schools, as well as new resources for understanding trauma, building resilience, and integrating Native American cultural practices and traditions into Western behavioral health methods.

A team of UI faculty, led by **Joseph Cavanaugh, professor and head of biostatistics**, worked with the Iowa Department of Public Health to analyze data and develop predictive models to help Iowa respond to the COVID pandemic. The team also developed an interactive tool to model the effects social distancing and face masks/shields could have on the future course of the disease in Iowa.



Focusing on the Future

While there are encouraging signs that the grip of COVID-19 is easing in the United States, the pandemic remains a world-wide threat, and the risk of future pandemics requires continued preparedness. Heading off disease variants, addressing inequities in vaccine availability, responding to resistance to public health measures, adapting workplaces to better support worker well-being, and repairing a badly frayed public health infrastructure are among the challenges public health leaders are focused on moving forward.



A CDC-funded project led by **Natoshia Askelson, assistant professor of community and behavioral health**, aims to improve flagging COVID vaccination rates in Iowa's smallest communities. In the yearlong project, researchers will work with 17 Iowa communities to create strategies that overcome barriers and encourage residents to seek the vaccine. "We've only got a year," said Askelson. "And we are in this race against the virus. We have to get people vaccinated before the virus mutates."

To better assess the impact of COVID on the way people live and work, **Diane Rohlman, professor of occupational and environmental health**, and colleagues in the Healthier Workforce Center of the Midwest, conducted a series of surveys that collected data from more than 10,000 University of Iowa employees. Aside from illness, the pandemic affected employee work arrangements, social lives, and psychological states. While final analysis is underway, initial results of the surveys highlight challenges facing certain demographic groups, including younger employees, parents of young children, and onsite clinical workers. These data will be available to guide continuing efforts to support University of Iowa employee well-being.