

ASU opens new doors to health research in northern Arizona

Collaboration with TGen North to strengthen public health research, data analysis and community partnerships across state

By Richard Harth, ASU News
June 25, 2026

When it comes to public health concerns facing Arizonans, there are often more questions than easy answers.

What health risks do dust storms pose? How can heat-related deaths be reduced? Which communities are most affected by measles, avian flu, valley fever or mosquito-borne diseases, and how can health officials respond before those threats spread?

The [ASU Health Observatory](#) was created to help Arizonans navigate public health risks that can look very different depending on where people live.

Now, that effort is expanding in northern Arizona, where the ASU Health Observatory and [TGen North](#) are joining forces to accelerate health research and innovation. The collaboration brings TGen North's Pathogen Intelligence Center into the Health Observatory, combining expertise in population health, infectious disease research and community partnerships with ASU Health's broader mission to improve health outcomes across Arizona.

Under the collaboration, TGen North will continue its work in immuno-oncology, while the Pathogen Intelligence Center carries forward the pathogen and environmental analysis work that has been central to TGen North's public health mission.

Reading Arizona's health signals

"The goal of the Health Observatory is to transform health data into health knowledge," said [Dave Engelthaler](#), executive director of the observatory. "We generate a lot of health data and work with resources from the state health department, Medicaid services, hospitals, health care facilities and others, and use advanced analytical tools, modeling and AI to generate new health knowledge."

For northern Arizona communities, the collaboration is intended to open new doors to advanced health research while supporting precision health and more data-driven approaches to care. It also

creates new opportunities for student training and workforce development, while giving the Health Observatory a Flagstaff presence that can deepen its work with local communities and health care partners.

The Health Observatory draws on data from many sources, including electronic medical records, genomic sequencing, air quality and insurance coverage. Its work is designed to support public health officials, health care providers, elected leaders, researchers and Arizona communities with information they can use.

That mission is especially important in a state where health risks can vary sharply by region. Rural and tribal communities may face distinct challenges, from limited access to care to gaps in timely public health information.

Pathogen intelligence for public health

Based in Flagstaff, the Pathogen Intelligence Center brings a long-standing public health resource into the ASU Health Observatory. Engelthaler, who spent nearly 20 years at TGen and helped build TGen North, said the center has worked closely with public health agencies and community partners in Arizona and beyond, using genetic tools to understand how diseases emerge, spread and affect different populations.

“What we built at TGen North is a translational research unit for public health,” Engelthaler said. “We’ve been building genomic epidemiology, One Health¹ and infectious disease resources for the state of Arizona. We’ve worked on numerous outbreaks over the years, locally, nationally and internationally, and really moved the needle on using genomics and DNA for disease investigations.”

That work will be led by Crystal Hepp, a Flagstaff-based researcher affiliated with TGen North and Northern Arizona University, who is joining the Health Observatory as director of One Health Sciences.

Building a statewide health network

By integrating the Pathogen Intelligence Center into the ASU Health Observatory, ASU aims to connect laboratory capacity, epidemiology, data science and public communication in a more coordinated statewide effort.

The work will also build on existing partnerships with [Northern Arizona University](#) and [Northern Arizona Healthcare](#), helping accelerate research and attract additional investment focused on improving health outcomes for all residents, including rural and tribal communities that have often been underserved.

For Engelthaler, one of the central challenges is not simply producing more information, but making sure health information is understandable, trusted and useful.

“During the COVID pandemic, you saw dashboards everywhere,” Engelthaler said. “Graphs and figures are useful for some people, but not for everyone. They don’t always provide context for where people are coming from or what their needs are. We’re transforming that information into

knowledge and getting it to people in ways that make sense to them.”

That need for context extends from familiar Arizona concerns, such as [extreme heat](#) and valley fever, to national and global outbreaks like [measles](#) and Ebola — where alarming headlines can leave residents unsure what the real risk is closer to home.

That approach could include web-based tools that help residents understand local disease risk, community presentations that bring public health knowledge directly to people where they live, and immersive experiences that use ASU’s visualization capabilities. Engelthaler said the Health Observatory is also exploring ways to share health information in large-format settings, including giving public presentations at the [Arizona Science Center](#).

The aim is to give Arizona communities the kind of trusted health knowledge they need before, during and after public health threats emerge.

More about the project

Other key members of the Health Observatory team include [Rebecca Sunenshine](#), the Observatory’s medical director, who leads applied health care and population health work. [Tim Lant](#), senior health data scientist and director of data analytics and coordination, brings expertise in mathematical epidemiology and infectious disease modeling. [Vel Murugan](#) brings expertise in clinical testing and diagnostics, and will direct the Health Observatory’s [Clinical Health Intelligence Lab](#).

This story originally appeared on [ASU News](#).

¹ One Health is an approach that recognizes the links among human health, animals and the environment. It is especially relevant to work on infectious diseases that can move among people, animals, insects and changing landscapes.

Main image



Dave Engelthaler, executive director of the ASU Health Observatory, is helping lead a new collaboration with TGen North that brings the Pathogen Intelligence Center into the observatory, expanding ASU's capacity for public health research, pathogen intelligence and community health partnerships across Arizona. Graphic by Jason Drees/ASU