



Contact Tracing

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In the ongoing effort to combat the COVID-19 pandemic, public health departments nationwide have turned to contact tracing to curb the disease's spread. To this end, Wisconsin has seen significant efforts in recent months to increase its contact tracing capacity. This issue brief provides a background on contact tracing and its role in public health. Additionally, it discusses Wisconsin's recent efforts to increase contact tracing capacity and examines state statutes and rules pertinent to contact tracing. It also explores the use of smartphone applications as a tool to assist contact tracing and considers issues related to patient privacy during contact tracings.

BACKGROUND

Although it has received significant attention in the current pandemic, contact tracing is not a strategy novel to COVID-19. Indeed, contact tracing has been used against diverse communicable diseases, including tuberculosis, Ebola, and various sexually transmitted diseases. Contact tracing can serve a range of different public health objectives. First, it interrupts the transmission of disease by finding potentially infected individuals and urging them to self-isolate. Contact tracing also provides a channel through which public health departments may inform potentially infected individuals about testing and treatment options. Finally, information collected through contact tracing provides insights into the epidemiology of a disease, illuminating factors that may influence the disease's spread.

While contact tracing is a capable public health tool, it is generally most effective when the number of active cases is relatively low, such as during the early or waning stages of an outbreak. If the active caseload is too high, it may no longer be efficient to pursue contact tracing for all infected individuals.

CONTACT TRACING IN WISCONSIN

In Wisconsin, contact tracing for COVID-19 begins with the identification of an infected person through a positive test, processed by one of over 60 labs currently operating in the state.¹ These positive test results are reported to the [Wisconsin Electronic Disease Surveillance System](#), a web-based system used by labs, healthcare providers, and public health departments to facilitate disease reporting and surveillance. This system allows labs and healthcare providers to share limited information with local public health departments, such as the name of an infected individual and where they reside. With this information, a local public health department launches a case investigation, consisting of an interview with an infected individual. A positive COVID-19 test may also trigger a [facility-wide public health investigation](#), particularly when multiple cases are found for a shared working or living space.

During an individual case investigation, public health staff work with a person to help him or her recall people he or she was in close physical contact with while infectious.² A contact tracer then reaches out to these close contacts, informs them of their exposure, asks about symptoms, and urges self-isolation for two weeks. Contact tracers must protect patient privacy by not disclosing the identity of an infected person to these contacts.

While most contact tracing in Wisconsin is performed by local public health departments, the Department of Health Services' (DHS) contact tracing team is available when local capacity is surpassed. On May 19, 2020, Governor Evers [announced](#) \$75 million in Coronavirus Aid, Relief, and Economic Security (CARES) Act funding for contact tracing. Of this \$75 million, up to \$50 million is available to local and tribal public health departments to hire staff for disease investigation and contact tracing.

The [Badger Bounce Back](#) plan established a goal of adding 1,000 additional contact tracers statewide.³ This goal incorporates contact tracers at both the state and local level, as well as staff reassigned from

different roles to assist with contact tracing. As of June 8, 2020, DHS reports that 480 contact tracers have been added at the state level.⁴ By June 15, 2020, an additional 106 DHS LTE hires are slated to begin work as contact tracers. DHS indicates that the agency will work with local and tribal public health departments to track the addition of contact tracers at the local level.

RELEVANT STATUTES AND RULES

Neither Wisconsin statutes nor administrative rules provide specific guidelines for contact tracing. However, [s. 252.05, Stats.](#), establishes general reporting requirements for communicable disease cases (though it does not explicitly mandate identification of close contacts). [Section DHS 145.05, Wis. Adm. Code](#), establishes requirements for local health officers regarding the investigation and control of communicable diseases. Among these requirements, the rule requires local health officers to ascertain “all sources of infection and exposure to an infection” whenever a case or suspected case of infection is identified.⁵

Certain privacy protections related to contact tracing are provided under federal law through the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule. Under this rule and state privacy laws, HIPAA-covered entities may disclose patient information to public health agencies. Disclosures of health information are permitted when there is a good faith belief that the disclosure is necessary to protect public health. However, the information disclosed is limited to what is deemed the “minimum necessary.” While HIPAA does not directly govern the re-disclosure of patient health information by a non-covered entity (e.g. a local public health department), [s. 146.82\(5\)\(c\), Stats.](#), provides that such an entity may re-disclose information for the same purpose for which the information was initially received.

USE OF MOBILE TECHNOLOGY

Smartphone applications are emerging worldwide as a tool to assist contact tracing efforts. These applications may be based on a variety of technologies, including Bluetooth and location tracking. While Bluetooth-based applications do not collect location data, they rely upon the exchange of anonymous identifier beacon keys between phones in proximity with one another. These anonymous keys remain on a user’s phone until that user reports that they were infected with COVID-19. The phone then uploads its collected data on other phones’ keys to a server, triggering an alert to other users regarding their exposure to COVID-19.

In contrast to Bluetooth-based applications, other contact tracing applications may rely on location tracking via GPS, cell towers, or Wi-Fi. While this location tracking may help to identify specific locations where exposures occurred, this method raises additional privacy concerns. Though applications generally rely on user consent to collect and share data, various proposals have been introduced in Congress to address privacy concerns related to contact tracing applications.⁶

While a number of states have contact tracing applications, Wisconsin has yet to employ this technology. However, DHS is currently reviewing various smartphone applications to assist its contact tracing efforts.

¹ As of June 10, 2020, DHS reported 63 labs that were processing COVID-19 tests. Current lab testing capacity may be found on the DHS [website](#).

² For COVID-19, the Center for Disease Control [defines](#) “close contact” as any person who was within six feet of an infected person for at least 15 minutes, in the period from 48 hours before symptom emerged until the time when the infected person was isolated.

³ The National Association of County & City Health Officials (NACCHO) released a [statement](#) estimating that 30 contact tracers per 100,000 people would be required to respond to the COVID-19 pandemic. This would equate to approximately 1,750 contact tracers in Wisconsin. In non-emergency situations, NACCHO has estimated a need for 15 tracers per 100,000 people (approximately 870 contact tracers for Wisconsin).

⁴ Approximately 100 of these contact tracers are LTE hires while the remainder are reassigned state employees. The overall number of contact tracers may fluctuate as some reassigned employees return to their normal roles.

⁵ In addition to these provisions, the authority to conduct contact tracing may be linked to DHS’ broad responsibilities established under [s. 250.03\(1\)\(L\), Stats.](#)

⁶ Further information on these proposals and digital contact tracing may be found in a [brief](#) published by the Congressional Research Service.