

# Wisconsin's Local Public Health Laboratories



A publication of the Wisconsin Public Health Laboratory Network

## Questions and Answers for Community Leaders

If you have ever wondered what your public health laboratory does to protect your community, this publication will help answer your questions. Want to know more? Call your local laboratory and schedule a visit!



**Q: What do local public health laboratories do?**

**A:** Local public health laboratories offer **testing, referral, interpretation of results and follow**

**up investigations** for many different environmental and human health problems. Health department staff work not just in the laboratory but also in the field **applying science to real life situations.**

Public health laboratory professionals and other health department staff also provide **monitoring programs** in an effort to prevent human exposure to pathogens and chemicals. They see their role as proactive – understanding and monitoring their communities **to detect and prevent health hazards.** This approach distinguishes a public health laboratory from laboratories whose mission is focused only on sample testing.

**Q: What advantages do public health laboratories bring to Wisconsin communities?**

**A:** There are several advantages that a local public health laboratory brings to its community:

- **Monitoring programs that prevent or detect problems early**
- **Quick response** and rapid testing turn around times
- **Professionals that assist in-person** with community education, assessment and sample collection
- **Connections** to other laboratory resources through the Wisconsin Local Public Health Laboratory Network, the Wisconsin State Laboratory of Hygiene, the Department of Natural Resources, the Wisconsin Division of Public Health, the Department of Agriculture, Trade and Consumer Protection, even the Centers for Disease Control and Prevention – to bring state-of-the-art service to your community.



**Q: What specific services do Wisconsin’s local public health laboratories offer?**

**A:** That varies quite a bit. A local laboratory might focus on a specific program such as well water testing, outreach and education. By contrast, the City of Milwaukee Health Department is home to our state’s largest local public health laboratory, and personnel there provide a range of

clinical and environmental services from blood lead testing to communicable disease surveillance. The majority of Wisconsin’s public health laboratories fall somewhere in between those two examples.

But what’s important to note is that **most local public health laboratories offer on-site service, counseling, education and thorough follow-up in addition to the actual laboratory tests.** These services make local public health laboratories unique.

Here are some examples of how public health laboratories have played a role in protecting Wisconsin communities.

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**Schools**



Much of what local public health laboratories do grows out of ongoing protection programs rather than high profile events. As part of a school safety assessment, the Eau Claire City-County Health Department laboratory tested the treated lumber used in a school playground and found it contained arsenic. The school district took quick remedial action and additional local public health laboratory testing confirmed the potential hazard had been eliminated. Throughout this process, the health department worked with the school system to educate the community.

**Real Estate**



About one third of Wisconsin’s residents are served by private water supplies. But routine safety testing of private well water is not required in our state. This becomes a special concern for prospective home buyers. What can they do to assure that they are buying a safe water supply along with a home? The Marathon County Health Department has created a publication to guide home buyers entitled *Buying a House in the Country*. The laboratory processes well water tests upon request and keeps a database of well test histories which is accessible to prospective home buyers.

**Tourism**



Most of us know how important tourism is to Wisconsin’s economic health. But did you know that health department laboratories are partners in assuring healthy tourism? Before the Ironman Triathlon came to Wisconsin, event organizers wanted to assure the safety of entrants who would be swimming in Lake Monona. The Madison Department of Public Health Laboratory completed a series of tests and communicated the results to the organizers, assuring the safety of the swimmers. The estimated economic impact of the Ironman in 2006 was \$2.23 million.

**Q: How many local public health laboratories are there in Wisconsin?**



**A:** In 2006, 13 of Wisconsin’s 93 health jurisdictions (city, county, and city-county health departments) provided laboratory services as part of their local operations. These laboratories often provide services for neighboring jurisdictions so their actual “reach” extends well beyond the 13 areas.

**Q: Why don’t all jurisdictions have public health laboratories?**

**A:** Two reasons – local priorities and sample volume. Some communities have placed a **high priority on quick, thorough and local response to public health problems** such as food and waterborne outbreaks and environmental hazards. These communities support public health laboratory services as a way to assure these protections. And laboratories need **regular test volume** so that personnel can maintain skills necessary to operate effectively and efficiently. That is why some local laboratories cooperate to provide services for neighboring health departments on a fee or contractual basis.

**Q: Why are local public health laboratories needed when commercial laboratories are available?**

**A:** Commercial laboratories play an important role in our communities. These laboratories focus on achieving a test result to meet the needs of their customers as individuals.

Local public health laboratories focus on how test results **affect both the individual and the community.**

A local public health laboratory’s **primary mission is to protect the public** and staff members respond around the clock if there is a public health emergency. They also directly advise and assist health departments and other governmental agencies in prevention, detection and abatement of environmental hazards that threaten communities, and when needed, provide information to enforce laws. Though appropriate protections for individual privacy are assured, the work of public health laboratories is public record.

*To illustrate the difference between public and private laboratory services, let’s pose another question...*

**Q: What does a publicly supported police force offer that a private security firm does not?**

**A:** A private security firm might contract to provide crowd control at a concert. But, if a disturbance occurs on the street outside of the venue, the security firm has no obligation or authority to respond, and would likely incur liability if it did. The public police force however, because it is driven by its charge to protect the public, will engage on the street, in the venue, **anywhere where the need to protect the public presents itself – and at any time of day or night.** That is how a public health laboratory responds.



**Q: Why should a local community either provide or assure laboratory services are provided?**

**A:** Because local laboratories can respond quickly and in person when a community member needs a test, has a question or a crisis. Local

health department personnel know their communities and can translate test results into information for decision making in real time. While they might not be able to provide every test or piece of advice needed, they are connected with those who can, and their **job is to assure that the best laboratory science is brought to bear** in any particular situation.

Here are more examples of the value of public health laboratory services in your community...

## Restaurants



Restaurant closures or food product recalls as a result of outbreaks make the news. But what most people don't understand is the work that goes on *every day* as public health laboratory professionals work with health department sanitarians and business owners to perform microbiological tests to assess food safety and sanitation practices. By doing this routinely, a working relationship is developed and through training, the knowledge of the managers and workers in the establishment increases - all for the benefit of business, customer and community.

## Public Buildings



What does a community do in the case of possible lead contamination in an aging school building? If that community has local public health laboratory capacity, the laboratory staff would work with other public health and community leaders. The team would determine what type of samples should be taken, assure proper sample collection, analyze the samples (or when needed, send for further analysis at another laboratory), and then interpret the results so that informed decisions can be made.

## Beaches and Pools



In communities with active monitoring programs and public health laboratories, beach and pool samples are tested regularly. (Sadly this does not include all Wisconsin communities.) With local laboratories, the samples can be processed on the same day that they are collected, assuring the most accurate and timely results. And health departments do more than testing - they work with the pool or beach manager to identify potential *sources* of pollution with the goal of solving the problem, not just reporting a result. One such success story is that of Racine's North Beach, once a place that was too contaminated for swimming, and now Wisconsin's only "Blue Wave Beach."

**Q: The Wisconsin State Laboratory of Hygiene is one of the best state public health laboratories in the nation. Can't it provide local services?**



**A:** Yes and no. There is no doubt that the WSLH is available to and actively serving all 93 health jurisdictions

and 11 tribal health units in the state. As just one example, WSLH offers an extensive panel of newborn screening tests to **every baby born in Wisconsin**. But, WSLH is a high level laboratory located in Madison and **it relies on local health department partners to be the eyes, ears and hands in each community**. In fact, in times of emergency such as the anthrax crises of 2001, many local public health laboratories assisted in collecting samples which were sent to WSLH for testing, while the Milwaukee Health Department Laboratory provided additional testing support. The WSLH offers technical assistance and training, and is a key referral source for testing requested by local laboratories, but its mission is to serve the whole state and it cannot be “on the scene” and understand a community like a local laboratory can. **There is no substitute for a health department professional who understands and lives in the community they serve.**

**Q: What should citizens be looking for in a local public health laboratory?**

**A:** While there is much variation in local laboratory capacity and services, there are some guidelines that can be applied to all:

**Laboratory certifications** - Granted by regulatory agencies, these certifications require on-site audits and performance evaluation testing. This helps assure competent laboratory staff and results that reflect a high level of confidence.

**Quality assurance** - Local public health laboratories typically incorporate tight quality assurance measures in their practices, and laboratory leaders can share the features of their program with

the public.

**Q: What are some common tests done in public health laboratories and why?**

**A:** The tests done “in house” vary by laboratory but this simple table describes a few **types of tests** that are a common part of public health laboratory practice.

Sample	Tests	Benefit
Public water supplies	Bacteria and metals	Safe drinking water
Private wells	Bacteria, fluoride, nitrate	Safe drinking water
Recreational water	Bacteria	Safe swimming
Groundwater near landfills	Metals, nutrients and general water quality	Prevent and detect leaching into groundwater
Paint chips Drinking water	Lead	Minimizes poisoning risk especially in children
Food	Bacteria	Assures safety and improves sanitation

**Q: What if I want to know more?**

**A:** For general information on public health laboratory science, visit:

- The Association of Public Health Laboratories at [www.aphl.org](http://www.aphl.org)
- The Centers for Disease Control and Prevention’s Division of Laboratory Systems at: [www.phppo.cdc.gov/dls/default.aspx](http://www.phppo.cdc.gov/dls/default.aspx)
- The Wisconsin State Laboratory of Hygiene at: [www.slh.wisc.edu/](http://www.slh.wisc.edu/)

Contact information for Wisconsin’s public health laboratories is listed on the next page.

**Contact your public health laboratory**

- **Brown County Health Dept.** 920-448-6400  
[www.co.brown.wi.us/Health/index.html](http://www.co.brown.wi.us/Health/index.html)
- **Douglas County Dept. of Health and Human Services**  
715-395-1304 [www.douglascountywi.org](http://www.douglascountywi.org)
- **Eau Claire City County Health Dept.** 715-839-4718  
[www.co.eau-claire.wi.us/health/index.htm](http://www.co.eau-claire.wi.us/health/index.htm)
- **Fond du Lac County Health Dept.** 920-929-3085  
[www.co.fond-du-lac.wi.us/Dept/Health/health.html](http://www.co.fond-du-lac.wi.us/Dept/Health/health.html)
- **Kenosha County Division of Health** 262-605-6700  
[www.co.kenosha.wi.us/dhs/Divisions/Health](http://www.co.kenosha.wi.us/dhs/Divisions/Health)
- **LaCrosse County Health Dept.** 608-785-9872  
[www.co.la-crosse.wi.us/Health/index.htm](http://www.co.la-crosse.wi.us/Health/index.htm)
- **Public Health Madison Dane County** 608-266-4821  
[www.publichealthmdc.com](http://www.publichealthmdc.com)
- **Marathon County Health Dept.** 715-261-1900  
[www.co.marathon.wi.us/infosite.asp?dep=20](http://www.co.marathon.wi.us/infosite.asp?dep=20)
- **City of Milwaukee Health Dept.** 414-286-3526  
[www.milwaukee.gov/healthlab](http://www.milwaukee.gov/healthlab)
- **City of Oshkosh Health Services Division** 920-236-5030  
[www.ci.oshkosh.wi.us/Health/Health.htm](http://www.ci.oshkosh.wi.us/Health/Health.htm)
- **City of Racine Health Dept.** 262-636-9201  
[www.cityofracine.org](http://www.cityofracine.org)
- **Rock County Health Dept.** 608-757-5441  
[www.co.rock.wi.us](http://www.co.rock.wi.us)
- **Waukesha County Dept. of Parks and Land Use Environmental Health Division** 262-896-8300  
[www.waukeshacounty.gov/eh](http://www.waukeshacounty.gov/eh)
- **Wisconsin Dept. of Agriculture Trade and Consumer Protection, Food Safety Division** 608-224-4700  
[www.datcp.state.wi.us/core/food/food.jsp](http://www.datcp.state.wi.us/core/food/food.jsp)
- **Wisconsin State Laboratory of Hygiene** 608-262-1293  
[www.slh.wisc.edu](http://www.slh.wisc.edu)

*Funding for this publication was provided by the University of Wisconsin School of Medicine and Public Health from the Wisconsin Partnership Fund for a Healthy Future.*

Return address:

To: