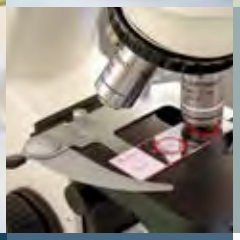
PUBLIC HEALTH LABORATORY ANNUAL REPORT

fiscal year 2015



MDH Minnesota Department *of* Health

table of contents

04 Newborn Screening Program

08 Environmental Laboratory

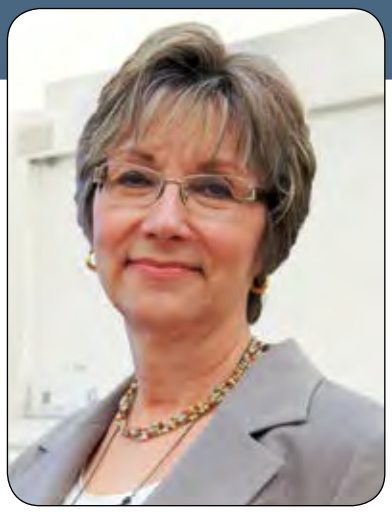
12 Infectious Disease Laboratory

16 Director's Office

18 Emergency Preparedness and Response

22 Laboratory Performance and Budget

message from the director



Dear Reader,

Public health laboratories hold a tradition as pioneers in conducting analyses to protect the health of the public. The first such laboratory in Minnesota was established by Dr. Charles Hewitt in 1873[1]. The lab was created to conduct chemical assessments of food and water and was likely the first state board of health laboratory in the United States. As you will discover from this annual report, the MDH-PHL has come a long way since those early days and some of the methodologies and instrumentation available to us would be unrecognizable to Dr. Hewitt.

During fiscal year 2015 (July 1, 2014 through June 30, 2015), the MDH-PHL utilized numerous advanced technologies to perform hundreds of thousands of analyses to assess the presence of chemical contaminants in environmental and human samples, detect microbial pathogens responsible for infectious disease outbreaks, and identify heritable and congenital disorders in newborns. The laboratory's mission to provide data to assess and improve the health of Minnesotans is a constant that has not changed appreciably since the days of Dr. Hewitt.

Each year brings new opportunities and challenges to the MDH-PHL, some of them undreamed-of, but for which we are nonetheless prepared. Nowhere was that more evident than when I received an email from the Centers for Disease Control and Prevention in August of 2014, asking if the MDH-PHL would be willing to serve as an Ebola testing laboratory. I responded in the affirmative and we were well-prepared when the first case of Ebola surfaced in the U.S. in September of 2014. Never in my wildest imagination did I think that the MDH-PHL would ever be involved in testing for the Ebola virus. However when the need arose, the MDH-PHL, as well as the entire Laboratory Response Network, stepped up to the plate to facilitate a nationwide response to the unanticipated spread of this deadly virus. Even though the threat of Ebola has diminished, it is vital that we maintain and expand the partnerships, systems, and policies that we developed for Ebola so that we can be prepared for whatever infectious disease comes our way, be it naturally occurring or man-made.

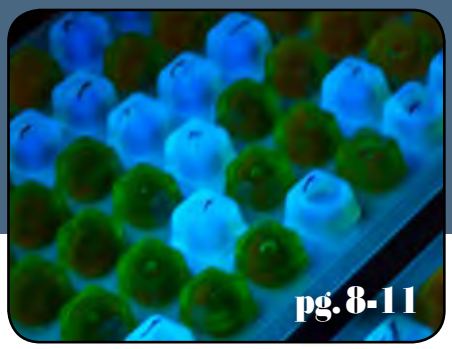
Since 1873, the MDH-PHL has been a resource to the people of Minnesota. As long as there is a need for testing, whether it be related to an emerging environmental contaminant, an infectious disease outbreak, or a new test to improve the outcome for a newborn, the MDH-PHL will continue to be a resource that will function as a trusted and integral component of our public health infrastructure.

Joanne M. Bartkus

Joanne Bartkus, Ph.D.
Public Health Laboratory Director

[1] Freedman, B. (1954). The first State board of health laboratories in the United States. Public Health Reports, 69(9), 867–875.

at a glance...



459

MINNESOTA NEWBORNS IDENTIFIED WITH A DISORDER THROUGH NEWBORN SCREENING

129,161

ENVIRONMENTAL AND BIOMONITORING TESTS PERFORMED TO IDENTIFY TOXIC CHEMICALS

GLOSSARY:

Here are a few acronyms you may find more than once in this report.

Abbr.	Meaning
CDC	Centers for Disease Control and Prevention
MDH	Minnesota Department of Health
PHL	Public Health Laboratory

PHOTO CREDIT

Front cover: Amanda Ellefson, Meghan Pate Photography, Chaco Dunbar, Courtney Demontigny
This spread: Amanda Ellefson, Chaco Dunbar, Meghan Pate Photography, Chaco Dunbar, CDC/Frederick Murphy
Back cover: Meghan Pate Photography, Melissa Hargreaves, Jaime Christensen, Chaco Dunbar

ILLUSTRATIONS

Jessica Cavazos

162,381

TESTS PERFORMED TO IDENTIFY INFECTIOUS DISEASE TRENDS AND OUTBREAKS

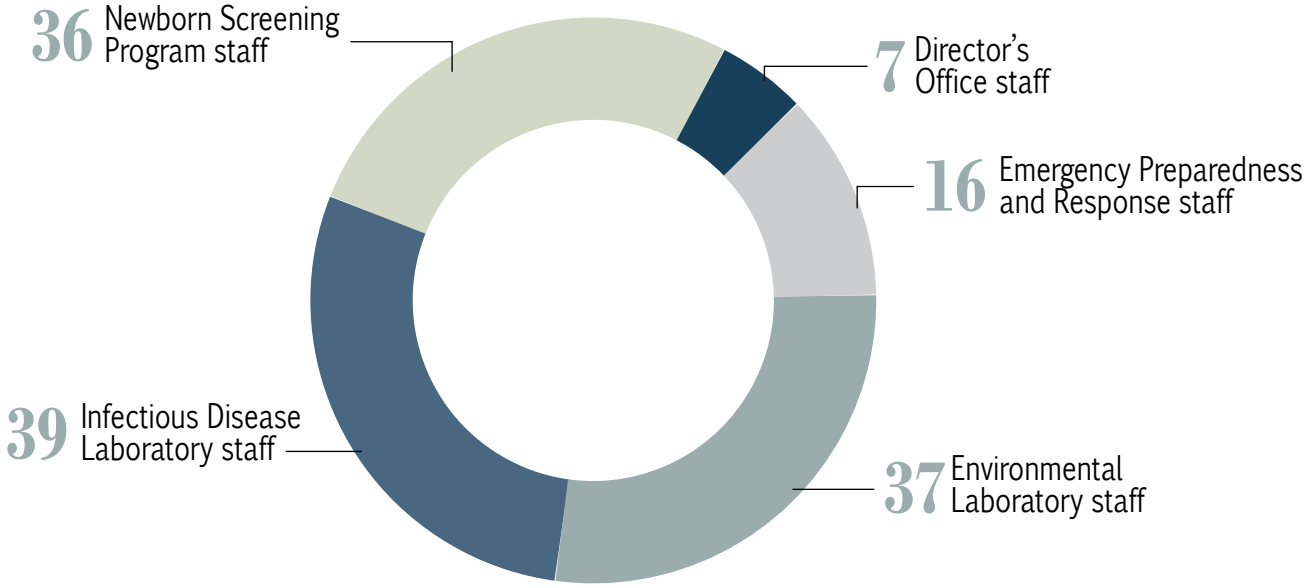
79

ENVIRONMENTAL LABORATORIES ACCREDITED TO THE NATIONAL STANDARD

24

RARE, HIGHLY INFECTIOUS BACTERIA IDENTIFIED WHICH PROMPTED EARLY TREATMENT

PHL staff by program



Does not include contractors.

Newborn Screening Program

The Newborn Screening Program screens infants at birth for over 50 serious disorders, including hearing loss and critical congenital heart disease (CCHD). Newborn screening aims to identify disorders before symptoms appear so that affected infants can receive prompt diagnosis and treatment to prevent serious health problems, developmental delay, or death.

Almost every day, our program identifies an infant with one of these health conditions. For a complete list of the disorders screened for in Minnesota, visit www.health.state.mn.us/newbornscreening/materials/factsheets/disorderpanel.pdf.

PHOTO CREDIT
Newborn Screening Program photos: Meghan Pate Photography

Committed to specimen transit timeliness

A recent article titled *Deadly Delays* published by the *Milwaukee Journal Sentinel* has been a hot topic for newborn screening programs across the nation. The article drew public attention to a specific area in which improvements in newborn screening were needed—timeliness.

Currently, we send our birth hospitals a biannual quality assurance report that provides them with data on how they are doing and how their hospital compares to all Minnesota hospitals. In addition, we track trends and provide more frequent reports for those hospitals that need improvement in specific areas, like timeliness.

Every state tracks timeliness differently and as a result of being state-run, every program in the U.S. differs from one another on when their laboratory is open to receive blood spots that have been collected. Our laboratory is open Monday through Saturday except for some holidays.

National guidelines recommend that blood spots be received by the newborn screening programs within 24 hours of collection but no later than 72 hours after collection.

This fiscal year, we received:
- 57% of samples within 24 hours of collection
- 94% of samples within 72 hours of collection

If we exclude the days we are closed, we received 99% of samples within 72 hours of collection.

Although our hospitals perform well compared to many other state programs, there is room for improvement. With a renewed focus on specimen transit timeliness, we have converted many of our submitters to CampusShip. CampusShip is a UPS service that will help facilitate and track these critical specimen shipments. This conversion was made in April 2015 and is expected to help hospitals meet the goal of transporting specimens to the program within 24 hours of collection.

These improvements demonstrate commitment to improving the process and positive outcomes for Minnesota's newborns.

150

Newborns diagnosed with a disorder detected by blood spot screening*

10

Hospitals began using MNScreen—a secure, direct results reporting system**

309

Newborns had hearing loss detected by hearing screening*

THIS YEAR'S NUMBERS

69,011

BIRTHS REGISTERED

68,404

INFANTS SCREENED

*Data calculated by date sample/result was received

**More hospitals are continually added with completion expected by FY16

Sickle cell trait results—a quality improvement effort to reduce health disparities

A national effort to improve care and address a recognized disparity for patients with sickle cell has led our program to develop a new process for sickle cell trait (SCT) notification. On June 19th, 2015 (World Sickle Cell Day), we began actively notifying parents and providers when a newborn was identified with SCT. Using the input from focus group participants, we created a feasible yet effective plan for active communication of SCT results. Participants came from communities where SCT is most prevalent, and they were encouraged to share their opinions and preferences for the communication of carrier status.

Now SCT results and resources are sent directly to the newborn's parents and primary care provider. With this more active communication, we expect to increase the number of parents and providers aware of a newborn's trait result. Additionally, we expect these efforts to provide the necessary resources and support to facilitate informed conversations between parents and providers about SCT and newborn screening. Plans to expand this to all types of trait results are already underway.

More than 25 years ago, we began screening for sickle cell disease (SCD)—a disease that can cause many disabling symptoms like anemia, severe pain, or even stroke. As part of the screening methods used, we identify newborns who are carriers for this disease and are said to have trait. SCT is the most common type of carrier status. People with trait typically have no symptoms, but they can have children with disease if their partner also has trait. We have communicated SCD results since 1988 but had a more passive approach to trait notification until now.

Prenatally—the best time to educate about newborn screening

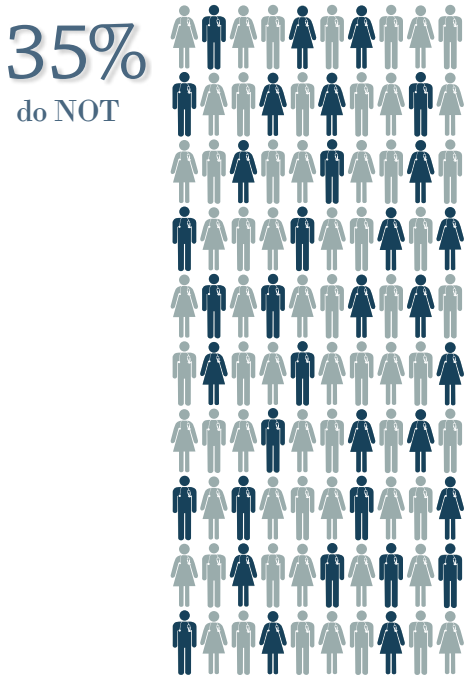
In September 2014, we launched a new prenatal education initiative. In an effort to understand what information and resources are needed to facilitate prenatal education, we needed to assess the current state. Surveys were sent to both prenatal providers and parents who had delivered in Minnesota.

We had over 1,500 responses. While awareness of newborn screening was high among parents, the majority reported learning about it during labor and delivery. Parents clearly preferred to learn about it prenatally, specifically during the third trimester of pregnancy. Prenatal providers who responded reported that education is occurring, but there are a significant number who do not feel informed about newborn screening. This, along with the rest of the data, was used to determine the most appropriate use of staff time in developing new or enhancing current educational materials.

Some of the efforts pursued included enhanced outreach to provider groups, the development of new materials, and the launch of our billboard campaign. All of these efforts focused on encouraging discussions between parents and providers about newborn screening. We also started preparing for a presence at the Minnesota State Fair, which would provide us with an opportunity to raise awareness and provide direct education for the general public.

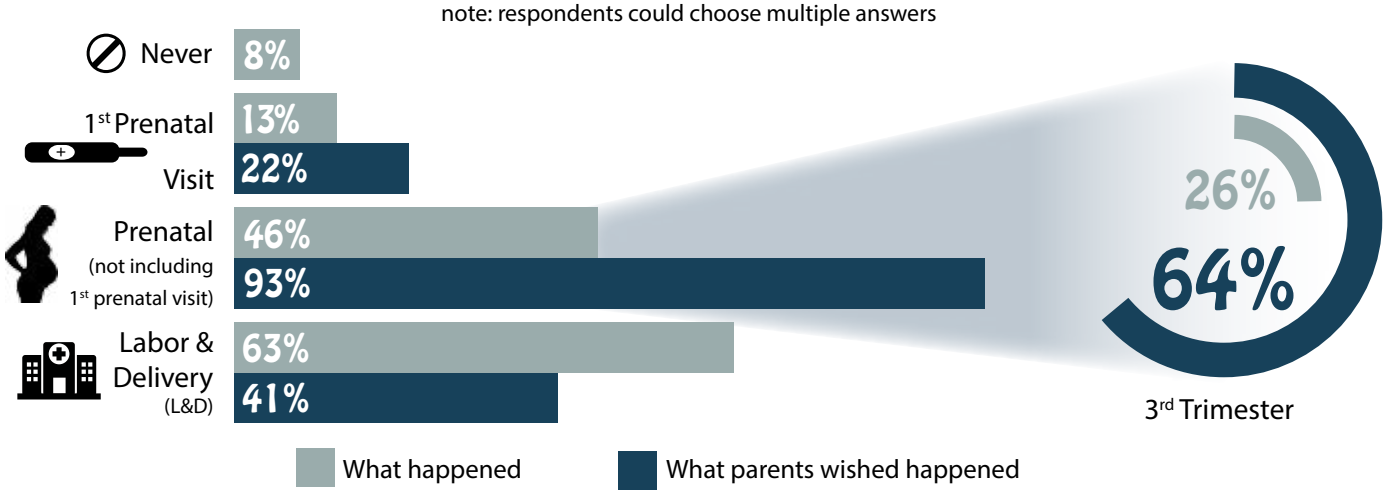
We plan to survey parents again next fiscal year to measure the impact of these efforts.

Q: Do prenatal providers feel informed about newborn screening?



Q: When did parents report receiving information about newborn screening, and when did they indicate they wished they would have received that information?

note: respondents could choose multiple answers



Environmental Laboratory

The Environmental Laboratory protects the environment by performing chemical, bacteriological, and radiological analyses of environmental samples including drinking water, surface water, waste water, air, soil, and hazardous waste. These testing services, which work to keep Minnesotans healthy and safe, are provided to programs at the county, state, and national level. The laboratory also develops new tests for detecting contaminants of emerging concern and measuring human exposure to environmental hazards throughout the state.

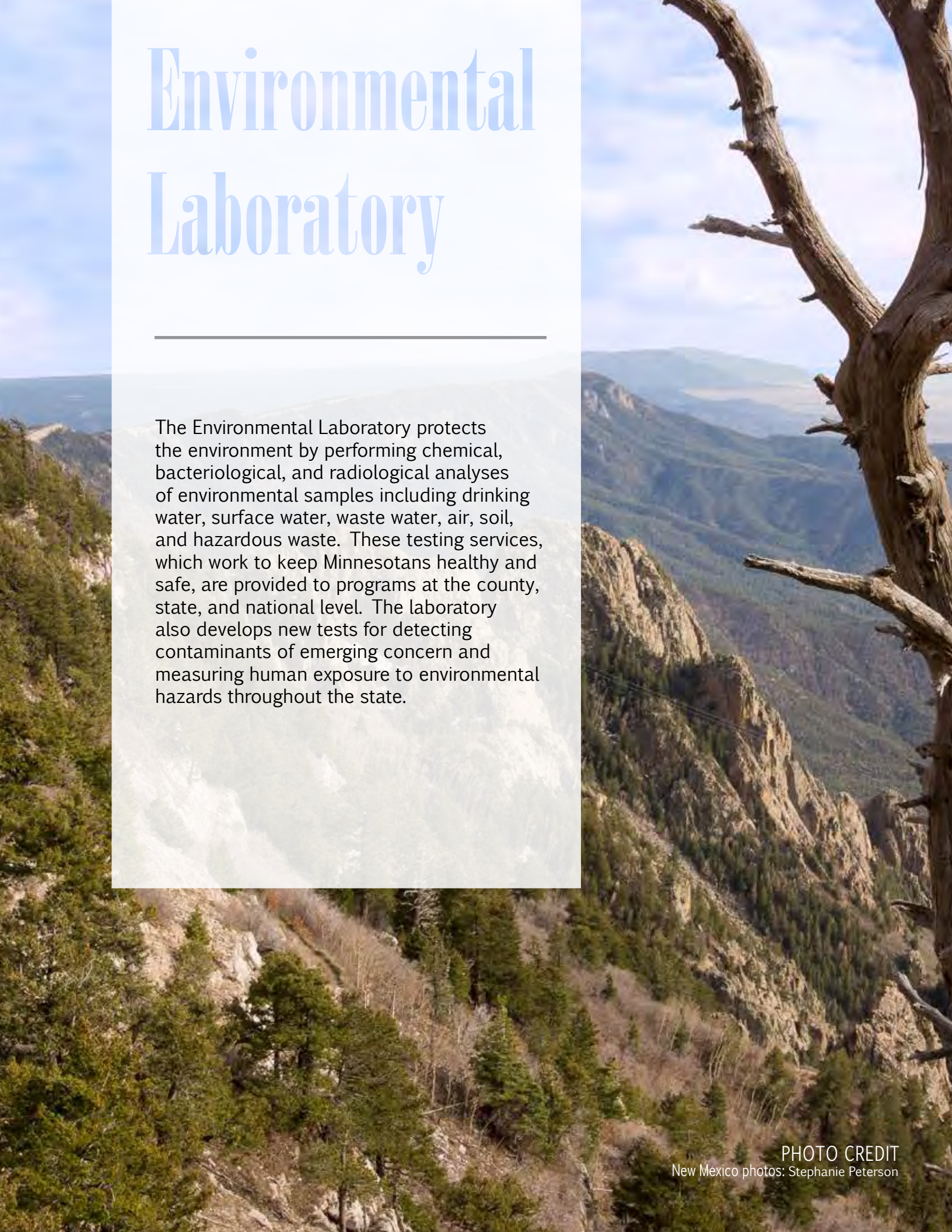


PHOTO CREDIT
New Mexico photos: Stephanie Peterson

Weapons of mass destruction; training in New Mexico

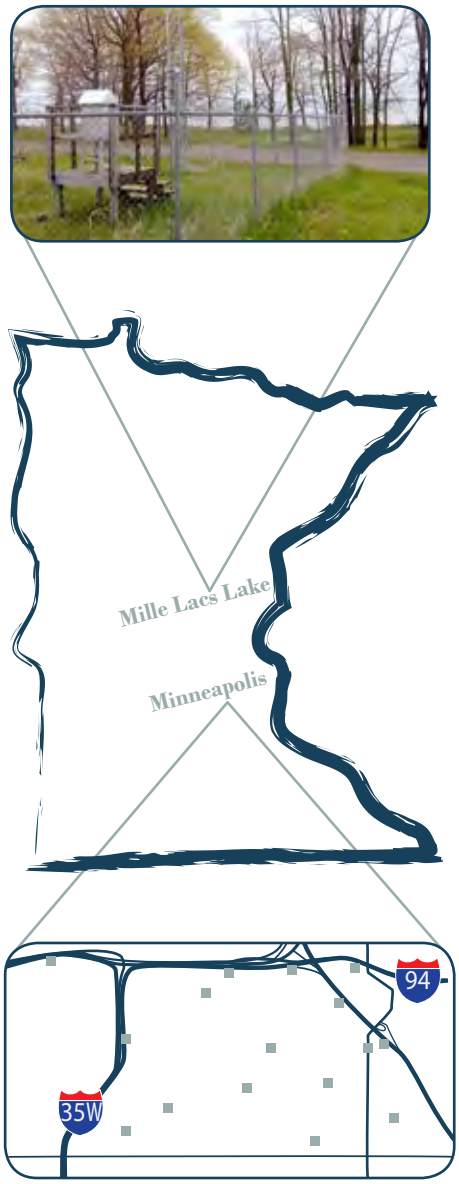
To better prepare for a possible attack using weapons of mass destruction, we participated in a radiological training held at the Kirtland Air Force Base in New Mexico. The military maintains the only field training area that is as close to a real world scenario as possible.

The 55th Weapons of Mass Destruction-Civil Support Team (WMD-CST) is a state resource responsible for responding to many types of threats to the public: radiological, chemical, and biological. In an actual incident, we would receive samples from them for testing. The 55th WMD-CST invited us to the training to foster relationships, receive guidance, strengthen communication, and allow both entities to practice their respective roles in an emergency response situation.

Half of the training was spent in the classroom learning about terrorist organizations, radiological/nuclear weapons, and nuclear power plants. The rest of the time the 55th WMD-CST was put through field exercises to practice using their instrumentation and equipment in unknown radiological situations.

We had an opportunity to learn about emergency response, observe in the field, share knowledge, and better understand the challenges the 55th WMD-CST faces and how we can be a resource for them.

In an emergency situation, accurate and timely information is critical. The training in New Mexico allowed us to gain a broader understanding of the role the 55th WMD-CST provides in a radiological emergency response situation. Furthermore, it was mutually beneficial to have cross-training and have the cooperating teams meet each other before an emergency occurs and understand each other's capabilities to better address a real emergency.



Analyzing toxic emissions—where they are coming from and when to be concerned

Since June 2013, we have partnered with the Minnesota Pollution Control Agency (MPCA) and the Mille Lacs Band of Ojibwe to study PAHs—polycyclic aromatic hydrocarbons.

The purpose of this study is to collect and compare air samples from two distinct areas. One of the areas is a rural neighborhood on Mille Lacs Lake near Onamia. The second area is an urban neighborhood in South Minneapolis.

Our laboratory prepared all the air samplers and will analyze the results to determine the concentration and possible sources of PAHs in the air in these communities. This is the third year of a three-year grant, and we have analyzed approximately 425 air samples for PAHs. In the upcoming fiscal year, we will finish the analysis and process the data.

PAHs are toxic substances that are released into the air from sources such as fires, automobiles, and refineries. Toxicity varies among individual PAHs, but many of them are known to cause health effects, including cancer. Despite the high level of concern, there is relatively little monitoring data on the occurrence of PAHs in the environment in comparison to other air pollutants.

The results of this study will have implications for other urban communities, help identify sources of PAHs, and help inform potential regulations on PAH emissions.

Four Biomonitoring Projects to know about in FY15

Biomonitoring allows us to answer important questions about environmental exposures in Minnesotans. Several projects concluded this past fiscal year while several more began. Collaborating with our public health partners on these important projects enables us to accurately identify at-risk population groups and implement strategies to reduce or eliminate exposures of concern.

1 Perfluorochemicals (PFCs)—a family of manmade chemicals used to make products that resist heat, oil, stains, grease, and water—have been found in Minnesota groundwater. In an effort to track exposure to these chemicals, blood samples from East Metro residents were collected and analyzed three times since 2008. One of the project's goals was to find out how people are exposed to PFCs and whether a public health intervention to reduce exposure from drinking water successfully reduced PFC blood levels. For comparison purposes, this fiscal year, we included a group of new residents who had no previous drinking water exposure.

2 Minnesota Family Environmental Exposure Tracking (MNFEET)—is a study designed to analyze exposures to mercury in pregnant women, children, and disadvantaged communities. Mercury exposures come from foods, personal care products, and the environment. Mercury can be harmful to a newborn's health. We will be measuring exposures to potentially toxic metals like mercury in 600 women and newborns. Participants with high levels of these harmful chemicals will receive additional follow-up and potentially re-testing. No additional follow-up is pursued on participants with normal levels. We will utilize what we learn to help prevent future exposures.

3 Fish are Important for Superior Health (FISH)—most fish are healthy to eat and rich in omega-3 fatty acids but some fish can contain contaminants like mercury that can harm human health—especially the development of children and fetuses. To evaluate the risks and benefits of eating fish, we have measured mercury and fatty acids in blood from 600 women of childbearing age who live in northern Minnesota. After mercury exposure interventions were implemented, select participants had their blood analyzed again to evaluate the effectiveness of the interventions. The goal of this project was to reduce mercury exposure in women of childbearing age while maintaining healthy levels of omega-3 fatty acids.

4 Firefighter's Exposure to Toxic Particulates—firefighters are exposed to a broad range of toxic chemicals from fire smoke. We asked firefighters from ten Minnesota fire departments to wear personal sampling pumps during firefighting operations to assess their exposure to toxic compounds. Samples were analyzed for a broad range of semi-volatile compounds and toxic elements. While exposure to a number of compounds was identified, no exposure limits were reached. Because the risk of multiple chemical exposures at lower levels is unknown, continued use of respiratory protection during firefighting operations remains important.

Infectious Disease Laboratory

The Infectious Disease Laboratory is composed of four laboratory units: emergency preparedness and response, microbiology, molecular epidemiology, and virology. Throughout the year, we detect and identify a variety of bacteria, viruses, parasites, and fungi that make Minnesotans sick. Clinical laboratories throughout the state are required to submit specific organisms for our lab to provide diagnostic, characterization, and surveillance services that are not otherwise available in Minnesota.

PHOTO CREDITS

Bacteria on blood agar plate: Courtney Demontigny

Importance of Identifying Viruses Using Both Classic and Molecular Techniques

From August 1 to October 22, 2014, Minnesota experienced an outbreak of a strain of virus causing severe illness, especially in children with asthma. We used both classic (culture) and new (molecular) techniques to detect which strain was to blame.

In order to identify viruses, we use the classic technique of growing viruses in culture to rule out specific viruses readily and cheaply. When certain viruses cannot be determined using classical methods, we use molecular techniques to determine the specific virus.

For this particular outbreak, we tested 595 specimens for enterovirus—a family of viruses that can cause respiratory infections (e.g., "the common cold"), rashes, and even paralysis (e.g., polio). After using both culture and molecular techniques, we were able to determine that 15 of the specimens had a specific enterovirus called EV-D68. This virus has not caused large-scale outbreaks previously, but several other states reported multiple cases of severe respiratory illness from EV-D68 around the same time.

Being able to use both techniques to identify viruses enhances our surveillance and allows us to better provide guidance to our health care partners on preventive measures to keep others from becoming ill.

Minnesota was one of the 1st states to track CRE

Testing for antibiotic resistant bacteria

The rapid emergence of multi-drug resistant bacteria is a growing problem worldwide, fueled by increased and often inappropriate use of antibiotics. One example is carbapenem-resistant *Enterobacteriaceae* (CRE)—a group of bacteria that have developed antibiotic resistance and can spread rapidly.

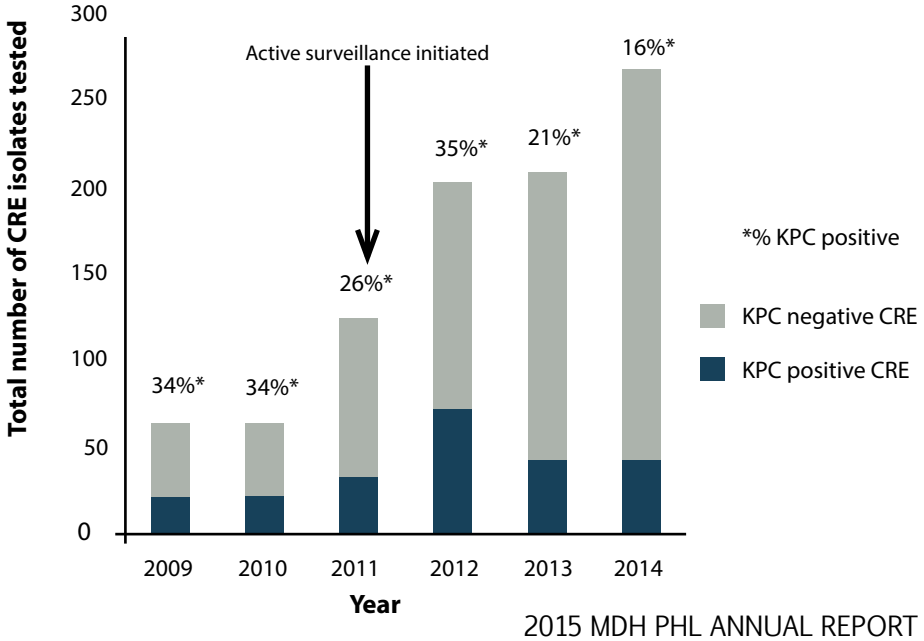
CRE can cause hospital-acquired infections with a high death rate. CRE can be difficult to treat because the bacteria have developed resistance to most or all commonly prescribed antibiotics.

Rapid detection of CRE is essential so proper infection control procedures can be initiated to stop the spread of these bacteria. We perform weekly testing on specimens with suspected CRE and have been tracking it since 2009.

While CRE are present in Minnesota, they have not yet spread as extensively as in other parts of the country. A strong surveillance program, cutting-edge laboratory testing capabilities, and excellent partnerships with clinical laboratories throughout the state have allowed us and our partners in epidemiology to stay ahead of these bacteria.

KLEBSIELLA PNEUMONIAE CARBAPENEMASE (KPC)

An enzyme that prevents certain antibiotics from killing CRE.

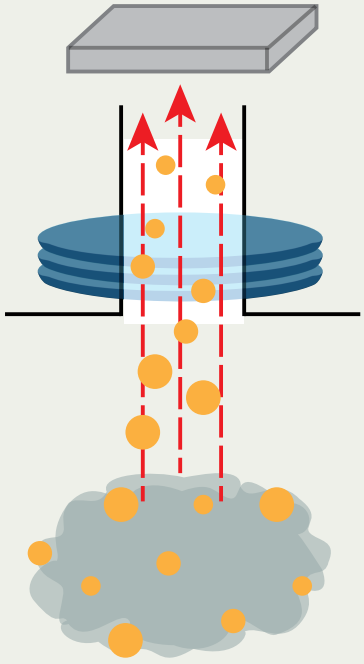


How does MALDI-TOF MS work?

FINISH

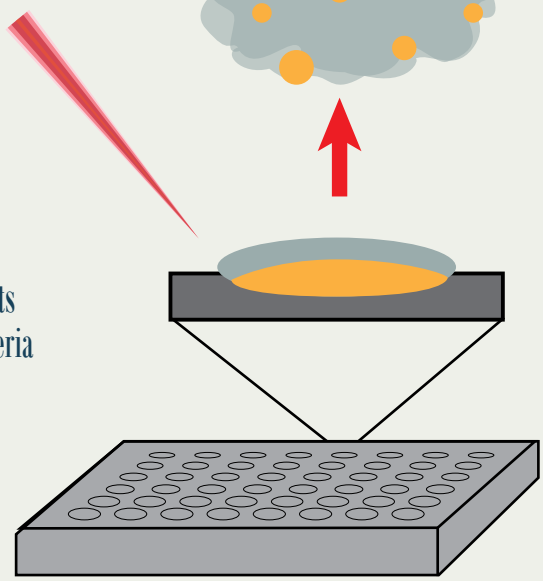
The graph is matched against a library of known samples—much like a fingerprint

A detector measures each collision and produces a graph, or spectrum, for analysis



The proteins travel up a tube with an electrostatic field

A UV laser hits a single spot on the plate, which vaporizes the proteins



A plate with 48 spots is loaded with bacteria

START

<1 hr

turnaround time using MALDI-TOF

>72 hrs

turnaround time using classical methods

New equipment that is faster and more accurate

This fiscal year, we purchased new technology for our laboratory—Matrix Assisted Laser Desorption/Ionization-Time of Flight Mass Spectrometry (MALDI-TOF MS). MALDI-TOF MS saves money and shortens turnaround time for identifying many microorganisms, resulting in more efficient workflows and timelier results.

MALDI-TOF MS is an emerging technology that is replacing other more labor- and time-intensive methods. Although it will not replace classical methods completely, MALDI-TOF MS is more accurate at identifying certain organisms that have been historically difficult to tell apart using classical testing methods.

We expect new uses of this technology over the next few years will result in additional cost savings and reduced turnaround time for other areas of our laboratory.

Director's Office

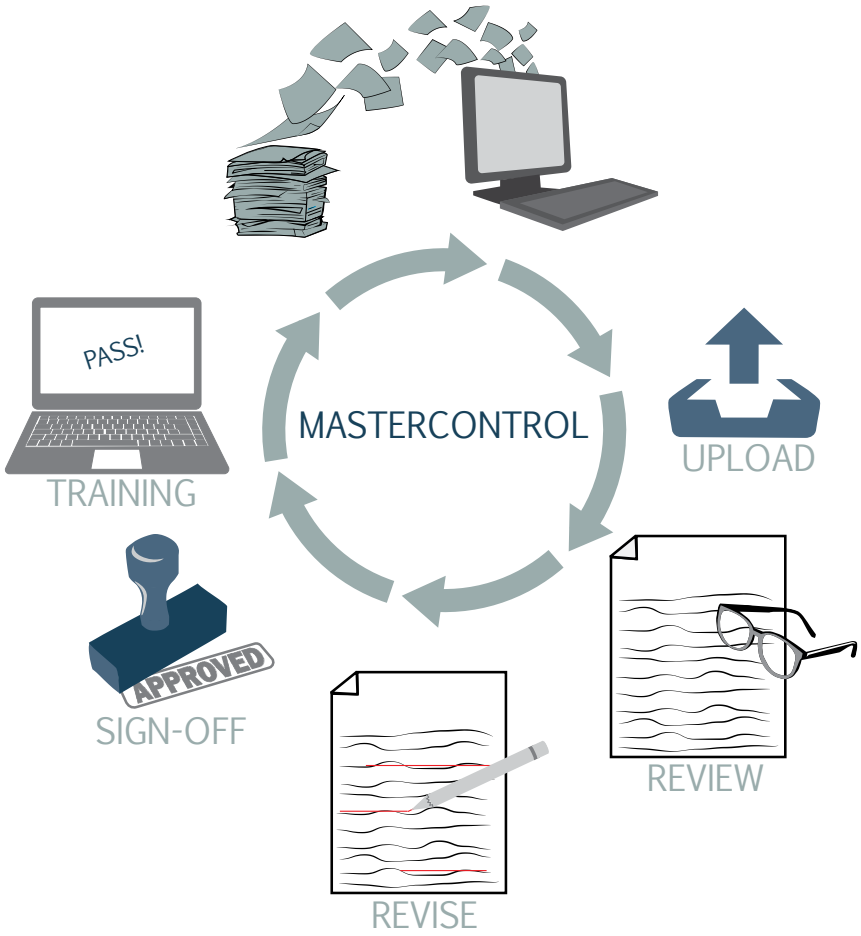
The Director's Office provides documentation, training, and analytic support for division projects. The goals of the office are to align our division work with strategic goals, support collaboration among division sections and programs, and streamline division processes and procedures. In addition to managing and housing the Minnesota Environmental Laboratory Accreditation Program (MNELAP), staff are also responsible for general administration and reporting, records management, audits, training, and the website for the division.

Photo credit
Photo: Chaco Dunbar

MasterControl improves quality and timeliness

MasterControl helps keep the continuity of laboratory testing even during an emergency. After a ceiling leak damaged a piece of equipment, PHL staff received a replacement. Prior to using the replacement for clinical testing, validation studies and director sign-off are required. The director was out of the office the day validation studies were complete, but thanks to MasterControl she was able to securely login and sign-off that the new equipment met testing specifications. Because of MasterControl, five out of the six patient results received that week could be reported out in a timely manner and further delays were avoided.

MasterControl is a web-based program that provides a centralized location for managing documents, trainings, and audits, to name a few. Since implementation in October 2014, MasterControl has improved the quality of testing at PHL by automating the delivery and tracking of staff trainings. This ensures that staff are able to perform their duties with quality, effectiveness, and timeliness.



Ensuring safety of medical cannabis

Legislation passed in 2014 made it legal for Minnesotans to obtain medical cannabis to treat certain serious conditions. Minnesota will eventually have eight cannabis patient centers statewide. The medical cannabis produced from these centers must be analyzed for composition and purity to ensure its safety for patients. A number of laboratories applied to perform this analysis. Our MNELAP and the MDH Office of Medical Cannabis reviewed applicants by performing rigorous inspection and verification of testing methods and operating procedures. Only two laboratories received approval to test medical cannabis: Aspen Research Corporation and Legend Technical Services, Inc.

Because we treat medical cannabis in Minnesota as medicine, it is vital to the safety of our patients that lab testing and results be conducted with reliability. The partnership between the medical cannabis office and the MDH lab has been key to a successful program launch and the ongoing safety of these products.

-Michelle Larson
Director of the MDH Office of Medical Cannabis

Emergency Preparedness and Response

As an active member of the CDC Laboratory Response Network, the Emergency Preparedness and Response Unit trains clinical microbiology laboratories on identification, notification, and referral of potential agents of bioterrorism. Our staff members perform analytical testing and provide training to sentinel laboratories—clinical laboratories on the front lines of disease detection—and first responders.

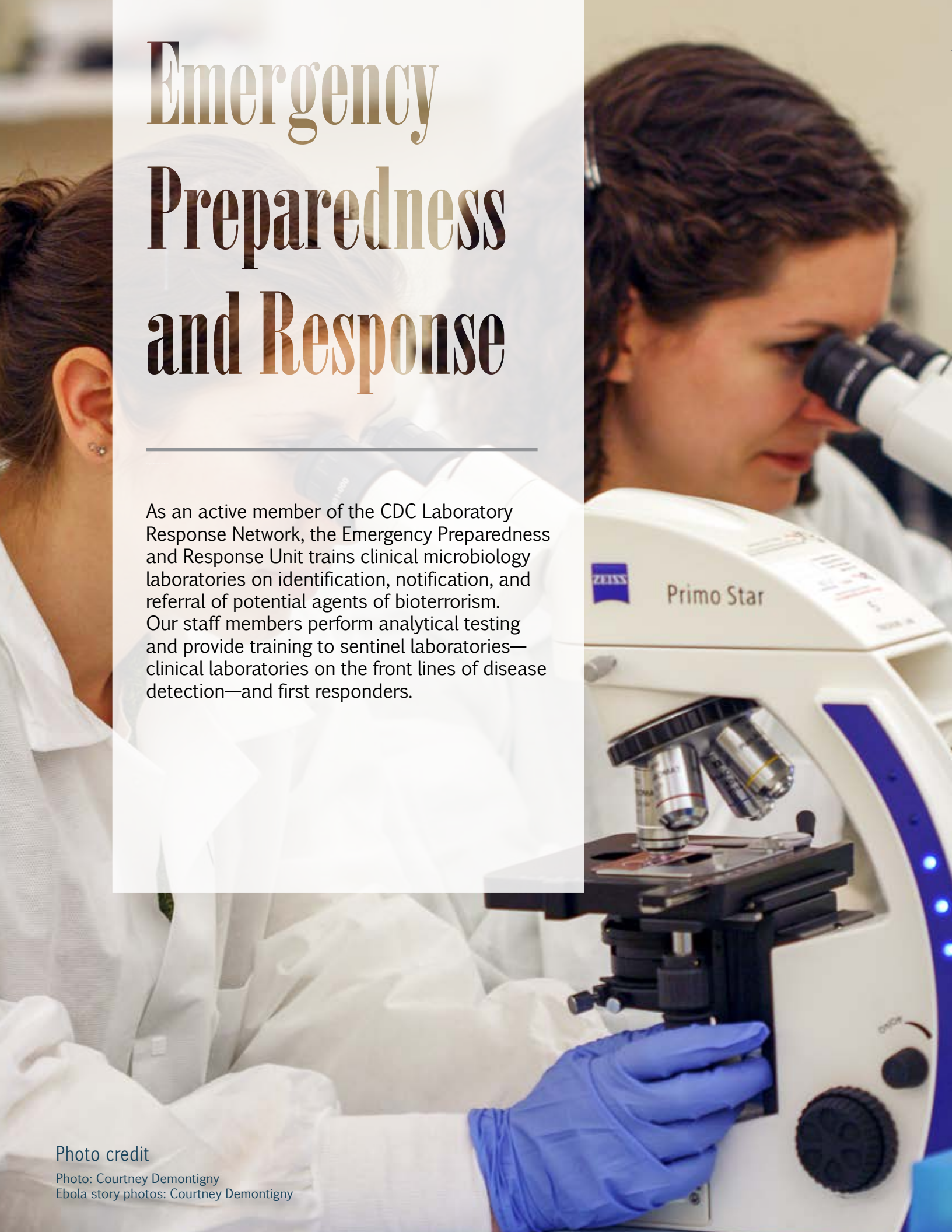


Photo credit

Photo: Courtney Demontigny
Ebola story photos: Courtney Demontigny

Preparing Minnesota for Ebola

When a traveler from West Africa came to visit his family in Dallas, the threat of Ebola virus in the U.S. became a reality. On September 28, 2014, the traveler became the first case of Ebola diagnosed in the United States. Two nursing staff exposed to his bodily fluids subsequently contracted the Ebola virus. This event put the whole nation on edge and emphasized the need to have testing available and prepare hospitals and laboratories in Minnesota for a potential case.

Planning efforts began in earnest in July of 2014. Staff from MDH and CDC provided outreach to four Ebola assessment and treatment hospitals to help them prepare to receive a patient. Specifically, we were able to help address issues related to worker safety. In addition, 292 people were enrolled in Minnesota's traveler monitoring program, and we tested four patients for Ebola virus. All tested negative.

Even though the Ebola virus never found its way to Minnesota, the events surrounding this outbreak revealed many gaps in biosafety. Going forward, we will focus on assisting clinical laboratories in their training, policy development, risk assessment, and mitigation strategies. Updating current biosafety guidelines and practices is a top priority. In this way, we can take the lessons learned from the Ebola epidemic and apply them to future global disease threats.

Identifying an intentional food contamination

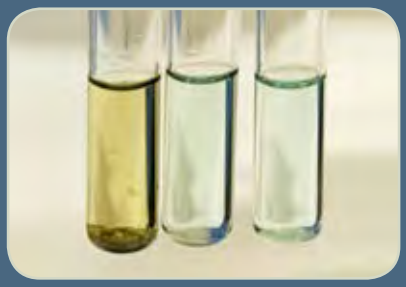
A man allegedly poured a water bottle over prepared food at a local grocery store, and we were able to identify from a sample of cheesy potatoes that it had been contaminated with Venlafaxine—a prescription anti-depressant drug.

The man reportedly walked into the grocery store with a spray bottle. Once inside, he walked to the self-serve hot food line, unscrewed the top of the bottle, and proceeded to pour its contents into a cheesy potato dish. He then stirred the substance into the food. A customer at the store witnessed the man perform this action and confronted him. After a brief interaction, the man left the store. The customer told employees at the store what she witnessed, and they pulled the dish from the food line.

Law enforcement responded to the incident and collected a sample from the cheesy potato dish. This sample was delivered to us for analysis. Upon receipt, it was apparent that several white spheres were present on the potatoes. We were able to identify that one of these spheres was Venlafaxine.

Following completion of a variety of tests, we provided a report to the law enforcement agencies investigating this case. The investigators used our report in developing the search warrant on the suspect. They specifically identified Venlafaxine in the search warrant as a substance that they were searching for. Investigators entered the apartment of the man identified from the security footage seizing an empty bottle of Venlafaxine and one bottle a quarter full. The police apprehended the suspect.

The nature of this crime highlights the need for these close interactions between the Public Health Laboratory and law enforcement. Had this individual used an even more toxic substance and had gone undetected, the action may have resulted in enormous damage to public health.



1

Training each year

101

Sentinel laboratories—clinical labs on the front lines of disease detection—in the MLS

51

Alerts providing information and guidance on a variety of topics this FY15

The 3 Cs of MLS

COMMUNICATION

COLLABORATION

COORDINATION

In 2001, we created the Minnesota Laboratory System (MLS). The MLS is a sustainable system that enables communication, collaboration, and coordination with the sentinel labs—clinical labs on the front lines of disease detection.

With the Ebola outbreak this fiscal year, the MLS was vital in ensuring that our sentinel labs had up-to-date information and guidance on responding to this new disease. We sent out laboratory guidance and held statewide conference calls for MLS sentinel labs to ask questions. When a facility did have a patient that needed Ebola testing, we were in direct communication with them and helped to safely transport the sample to us to test.

We provide the sentinel labs with the proper tools and resources to detect and respond to any rare disease cases. Unusual cases like Brucellosis—a bacterial infection that spreads from animals to people via unpasteurized dairy products—have been identified by our sentinel labs and then sent to us for confirmation.

We are able to support and sustain the MLS by holding annual trainings. These trainings provide sentinel labs with an opportunity to see and work with unusual organisms. Sentinel labs use the materials from our courses to help recognize when they may have one of these unusual organisms.

Without the MLS and the ability of our sentinel labs to identify rare organisms, Minnesota residents could be put at risk for significant health issues in the event of a pandemic, new disease, or even a bioterrorism attack.

Laboratory Performance and Budget

Every year, we strive for excellence through improved quality assurance, cutting-edge research and analysis, and public impact. This section highlights a few of our recognized achievements this year and our division budget.

In fiscal year 2015, our division operated on a budget of $20.77 million. For more information about our budget this year, please contact our Director's Office staff. Our contact information is located on the back of this report.

PHOTO CREDIT
Photo: Patti Constant
Assistant Division Director photo: Chaco Dunbar

awards

Agency Achievement Award—Presented by the Governor's Office based on the merits of four nominated projects. One of the four MDH projects selected for recognition in this achievement award was a PHL project, titled "Streamlining the flu testing process - faster results, zero mistakes".

Dan Hammersley, Dave Boxrud, Sara Vetter, Jennifer Palm, Jason Wotton
Not pictured above: Chris Brueske—project sponsor

PHL Staff Star Honors Award:

Anita Glennen

Kaitlin Houlihan

Bridget Roby

The MDH Star Honors Program allows staff members to formally recognize colleagues at all levels for their exceptional accomplishments and outstanding contributions which are models of public service. A limited number of Star Honors are awarded each

Public Health Laboratory, awarded for Innovative Collaborations with First Responder Communities from the Laboratory Response Network.

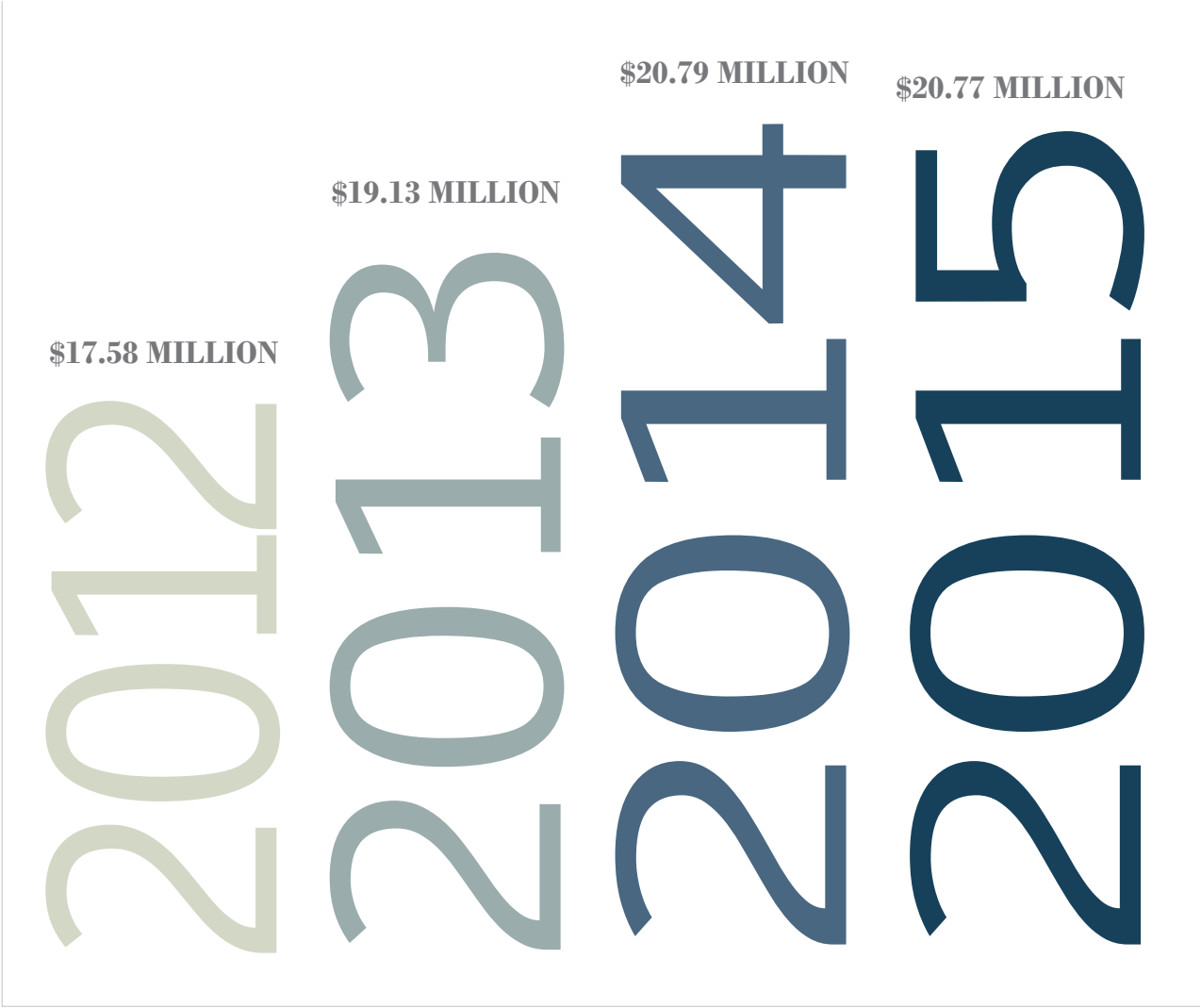
Maureen Sullivan, emergency preparedness and response supervisor in the Infectious Disease Laboratory, received an Excellence in Leadership Award from the Laboratory Response Network.

Meet Myra Kunas—the new Assistant Division Director

Myra received both a B.S. in biology and a B.A. in math from Winona State University and then received her M.S. in earth and ecosystems science from Tulane University. After several years in private industry at a Chicago-area environmental lab, Myra was in search of an opportunity to both serve the greater good and get back to her adopted home of Minnesota. A past internship with the Minnesota DNR led her to MDH.

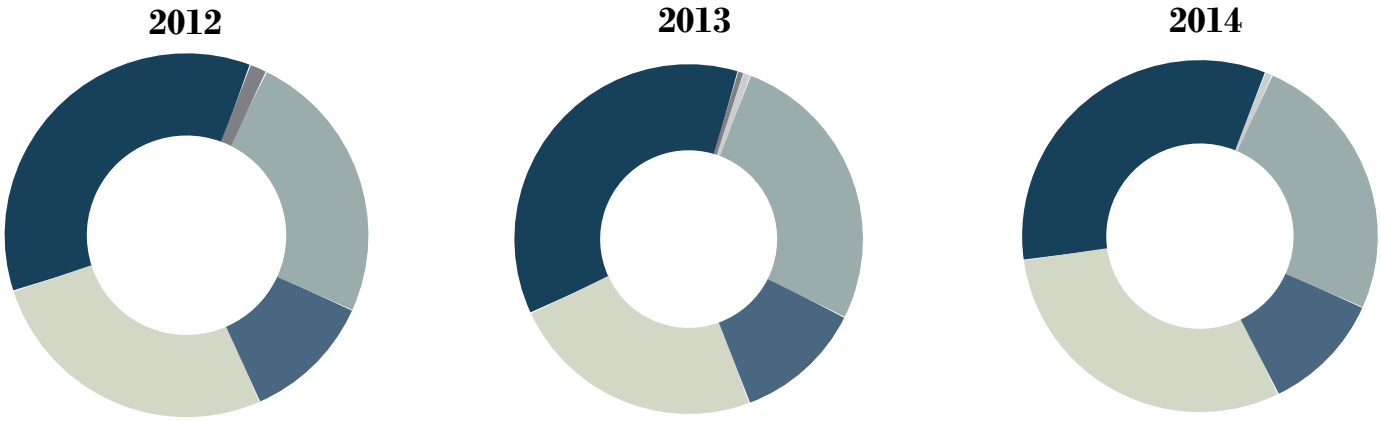
Myra has been with MDH for eight years and was first hired as a project coordinator for the Environmental Laboratory. Her strengths were quickly realized—less than two years later she became supervisor of the Operations Unit. After completing the Emerging Leaders Institute program in April 2015, Myra was ready for a new challenge both professionally and personally as the new MDH Assistant Division Director. She is excited to apply her skills in new areas while serving the people of the state she loves.

PHL BUDGETS

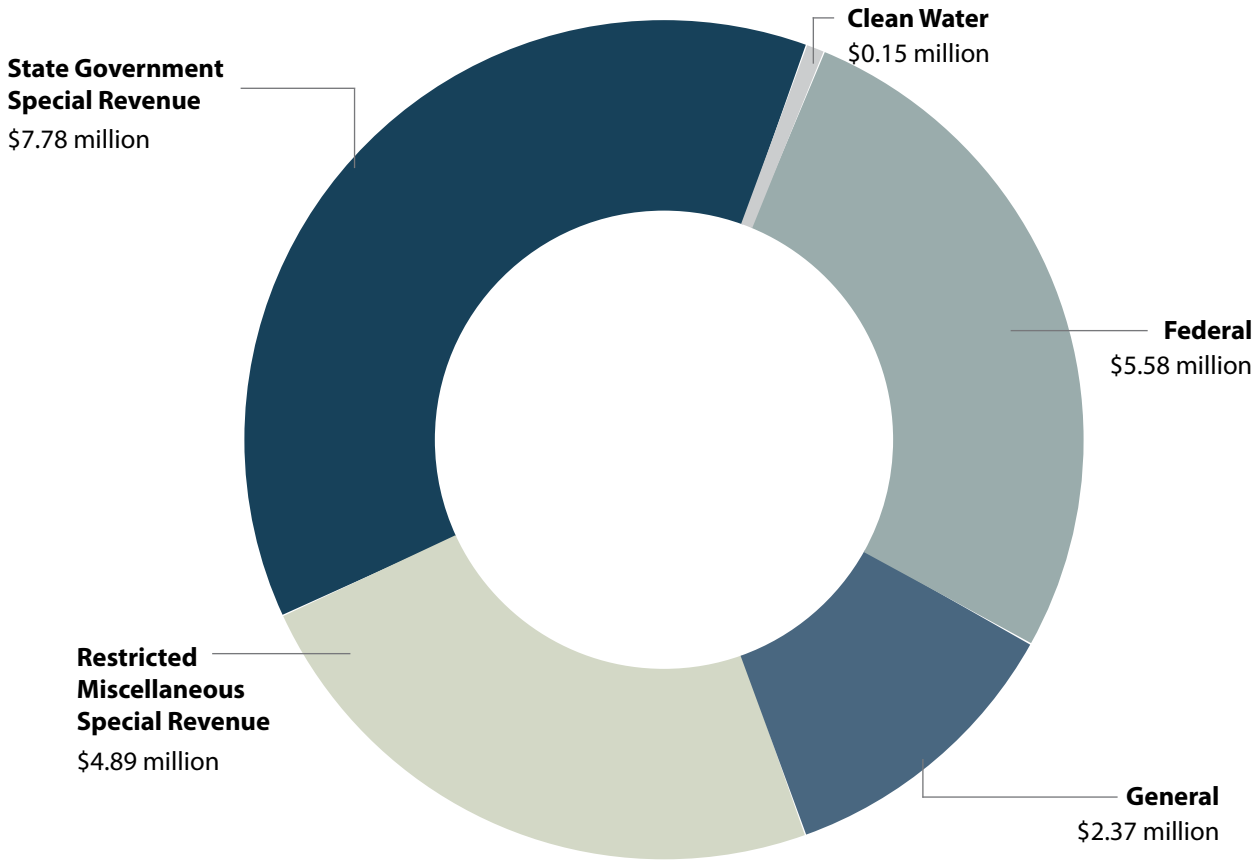


For past annual reports and budgets, visit: www.health.state.mn.us/divs/phl/pastreports.html
For a description of fund categories, visit: www.health.state.mn.us/divs/phl/funds.html

budget breakdown by fund categories



2015



MINNESOTA DEPARTMENT OF HEALTH
PUBLIC HEALTH LABORATORY

mail PO Box 64899
St. Paul, MN 55164-0899

visitor 601 Robert Street North
St. Paul, MN 55155-2531

phone 651.201.5200

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