Mid Michigan District Health Department

2017 Board of Health Annual Report



The Technology Issue

We are Public Health!



Our Values (what we feel is important)

We empower our staff to seek out new ideas and methods in order to improve health in our communities. We apply the principles of continuous quality improvement to achieve efficiency and quality customer service. Our newly-adopted "I CARE" values help us reach our goal.

Our Vision (our inspiration)

Advancing innovative solutions to achieve healthier outcomes.

Our Mission (our purpose)

We take action to protect, maintain and improve the health of our community.



Administrative Staff



Melissa Bowerman B.S. Administrative Services Division Director



Liz Braddock M.S., R.S. Environmental Health Division Director



Marcus Cheatham Ph.D. Health Officer



Jennifer Morse M.D., M.P.H., FAAFP Medical Director



Andrea Tabor R.N., B.S.N., M.P.H. Community Health and Education Division Director

Health Officer's Message



In 2017 Mid-Michigan District Health Department took a big step in the right direction by launching two new systems that will really improve our efficiency and customer service.

Today people expect to be able to shop, manage their money and interact with their doctor on their smart phone. Sadly, they do not often expect agencies of local government to be on-line.

In 2017, Mid-Michigan District Health Department (MMDHD) took a big step in the right direction by launching two new systems—one for community health and education and one for environmental health—that will really improve our efficiency and customer service. In the article on page 5, Liz Braddock, Director of Environmental Health, discusses the powerful features of Hedgehog, our new environmental health software. The next time one of our sanitarians helps you get a new well or septic system or a restaurant license they will have a tablet with Hedgehog in their hands. In the article on page 7, Andrea Tabor, Director of Community Health and Education, writes about our new electronic health record, called Patagonia, which features a patient portal like the one many doctors offer their patients so you can manage your own personal health information.

In the article on page 12, we discuss the Community Health Assessments the Health Department conducts periodically together with community partners to understand the things that are killing us and making us sick. We dive into the question "Where do the data we use for these assessments come from?" In fact, most of the data are easily publicly available. We look at nearly a dozen websites where lots of different government health statistics, mapping tools, investigations of sites of pollution and more can be found. We know many people in our communities are very concerned about health and we want to make sure you know how to access this information as well.

One question you may ask is how we managed to make these technology investments. Careful budgeting and planning has allowed us to make these purchases with the limited resources we have. Over time, we have been able to save money from unexpected funding and budget variances in order to purchase this software. We will continue to strive to save money for furture technology purchases that will increase customer satisfaction, increase efficiency and save money in the long run.

Not only that, but the electronic health record we purchased actually has ongoing operational costs that are lower than our previous software. This will help our bottom line in the future. All in all, I'm very pleased with the progress we've made, and I know you will be, too.

Mark W. (Marcus) Cheatham, Ph.D.

Marcos Cheath

Health Officer

Board of Health



The Board of Health governs the agency's programming, finances and personnel. It is comprised of two county commissioners, appointed by each of the three counties served by the health department. It is the Board of Health's responsibility to see that a plan is formulated and implemented which will provide long-term continuing health protection for the district's residents.

Bruce DeLong • Clinton County Commissioner

Mr. DeLong is serving his seventh year on the Board of Health. He is Chairperson of the Board and Program Committee and also serves as a member of the Finance Committee.

Dr. Dwight Washington • Clinton County Commissioner

Dr. Washington is serving his first year on the Board of Health. He also serves on the Personnel, Well and Septic Stakeholders and Mid-Central Coordinating Committees and is a representative to the Michigan Association for Local Public Health Board.

George Bailey • Gratiot County Commissioner

Mr. Bailey is serving his third year on the Board of Health. He is also a member of the Finance Committee.

Sam Smith • Gratiot County Commissioner

Mr. Smith is serving his second year on the Board of Health. He also serves as a member of the Personnel, Program and Mid-Central Coordinating Committees.

Betty Kellenberger • Montcalm County Commissioner

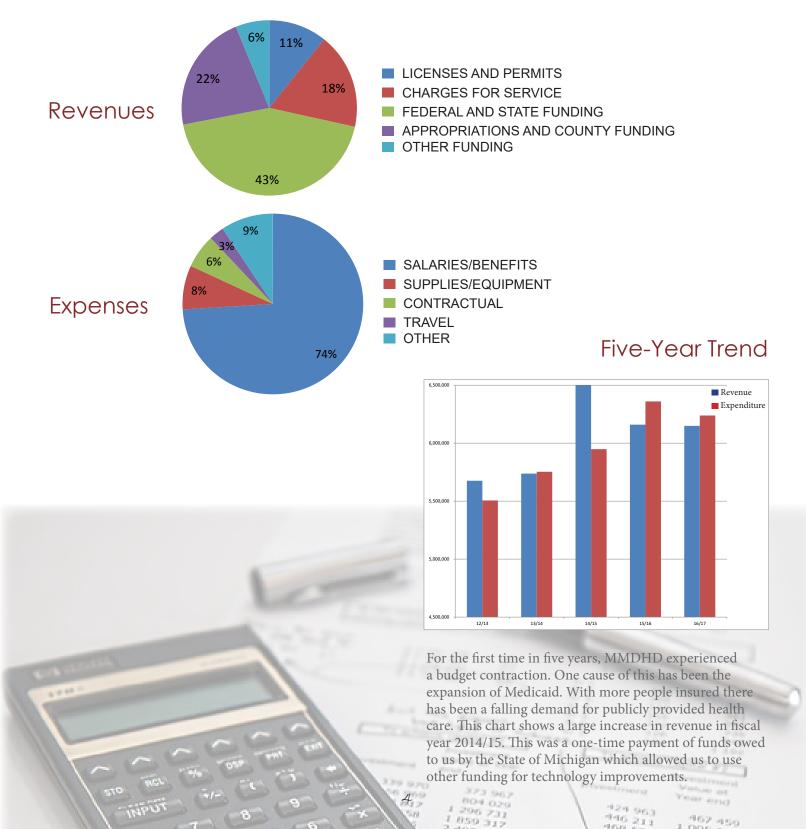
Ms. Kellenberger is serving her fifth year on the Board of Health. She is the Chairperson of the Personnel Committee and is a member of the Quality Vision Action Team.

Tom Lindeman • Montcalm County Commissioner

Mr. Lindeman is serving his fourteenth year on the Board of Health. He is Chairperson of the Finance Committee, Vice Chairperson of the Board and the Mid-Central Coordinating Committee, and also serves as a member of the Program Committee.

Finances

The pie charts below show MMDHD's revenues and expenditures. Most of our funding comes from the State of Michigan (largely federal funds passed through from the Centers for Disease Control and Prevention, the Environmental Protection Agency and the Department of Agriculture). Appropriations from the counties are 22% of our funding. We earn the rest by billing insurances, charging fees and winning grants.



Environmental Health

NEW PROGRAMS IMPROVE EFFICIENCY

Those of you who have been clients of MMDHDs Environmental Health Division may have memories of drawing the location of a well or septic system on paper, or coming to the department to pull a file folder of information about a piece of land, or watching a sanitarian shuffle stacks of paper during an inspection of your restaurant. In 2017 all that began to change as we rolled out Hedgehog software.

FetchGIS mapping

The well and septic programs also utilize the FetchGIS mapping tool. This tool has a map viewer that shows things like existing wells and septics, buildings and water bodies that might influence where you put a well or septic system. It allows the sanitarian to make an electronic drawing of a new well or septic right in the viewer. The tool also enables the sanitarian to make measurements in the viewer to ensure isolation distances for new wells and septics are met.

Permits and licenses

The entire process of getting a permit or a license is now contained in Hedgehog, including the application, inspection or evaluation, issuing the permit or license and payment of any fees (Those darn fees!).



Inspections

We also use Hedgehog for our restaurant inspection program. The electronic inspection program is risk-based, which means it helps the inspector identify problems that increase the risk of foodborne illness at a facility. Depending on the results of an inspection, Hedgehog creates corrective action plans and schedules any needed follow-up inspections.

There is still more to be done. First of all, some of our smaller programs like medical waste or body art (tattoo parlors) are not in Hedgehog yet. But all of the big ones like wells, septic systems and restaurant inspections are. Second, you can't make a payment for a permit or license online yet, but that is coming soon.

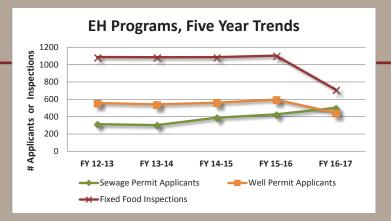
Finally, all of our old paper records are not accessible in Hedgehog yet. However, MMDHD has a grant from the Clinton Conservation District to digitize those records; and we will be starting that any day now. That means that it won't be long before you can go to our website and look up a parcel to see everything we know about it on-line. (Why is the Clinton Conservation District paying for us to digitize records from Gratiot and Montcalm Counties? Because the Maple River flows down from those other counties, so if you want clean water in Clinton County you have to deal with the whole region).

We believe Hedgehog will greatly improve customer service by making it easier and more convenient for clients to access records. If you want to come in and talk to us in person, we'd love to see you. But if you'd rather access records online, you'll have the option.



In 2017, this division provided services to 3,157 unduplicated clients.





FOOD PROGRAM

Through regular inspections and education, this program helps assure the public that the meals consumed outside of the home are safe.

			Number of Clients Served		
	Clinton	Gratiot	Montcalm	District	
Advanced food training classes	47	37	33	117	
Food service inspections (fixed)	264	168	280	712	
Food Service Inspections (temp.)	57	52	89	198	
TOTALS	368	257	402	1,027	

WASTEWATER MANAGEMENT

Proper treatment of human wastewater helps prevent the spread of disease and viral infection. These programs provide guidance and oversight for on-site sewage disposal.

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	Clinton	Gratiot	Montcalm	District
On-site sewage disposal permits	167	77	258	502
Site evaluation	94	25	71	190
TOTALS	261	102	329	

ENVIRONMENTAL QUALITY

Assuring a good quality of life where we live and play is a key component of these programs.

			Number of Clie	ents Served
	Clinton	Gratiot	Montcalm	District
Campground program	3	6	27	36
DHS inspections	46	23	62	131
Nuisance complaint investigations	105	75	126	306
Radon test kits distributed	231	28	56	315
Public swimming pool program	35	6	15	56
TOTALS	420	138	286	844

SURFACE AND GROUNDWATER CONTROL

A fundamental component of public health met by these programs is the protection of our lakes, streams and the water we drink.

			Number of Clients Served		
	Clinton	Gratiot	Montcalm	District	
Groundwater quality control (permits)	147	87	211	445	
Well contaminate monitoring	7	28	14	49	
Septage haulers-trucks inspected	10	9	14	33	
Septage haulers- sites inspected	1	0	8	9	
Loan evaluations	6	5	40	51	
Clandestine drug investigations	2	1	2	5	
TOTALS	173	130	289	592	

Campground Inspections ■ Private Well Inspections ■ Public Swimming Pool Program ■ Adult Foster Care Inspections ■ Unsanitary Condition Investigation ■ Indoor Air Quality

Community Health & Education

IMPROVING CUSTOMER SERVICE AND THE BOTTOM LINE

Our search for a new electronic health record for our Community Health and Education Division was driven by the desire to improve the quality and efficiency of services in programs like immunizations, family planning and hearing and vision. For example, we knew that our old software was often slow, which frustrated clients and it was difficult to get data out of the system to evaluate our services. We also knew our billing processes were slow, and claims were sometimes rejected because of errors, meaning we fell short



in revenue generation. We struggled to improve in these areas, but we also knew we needed better software. Patagonia has helped us we make great strides in the following areas:

Client Experience

The Community Health and Education Division is much more user-friendly now. Clients can call one number to get scheduled for any program in any office. Then the system sends appointment reminders via text, which cuts down on missed appointments. And the system is much faster, so clients and employees are happier.

Connectivity

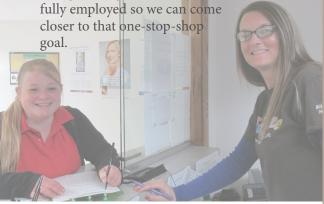
Patagonia is automatically connected to many other systems. This reduces the amount of work staff have to do and boosts their productivity. For example, Patagonia is connected to the Michigan Care Improvement Registry (Michigan's immunization database), so we can seamlessly address a family's immunization needs right along with everything else. In the future, we'll also be able to get many types of laboratory test results automatically, which will also increase productivity.

Immunizations ■ Health Education ■ Hearing and Vision ■ HIV Counseling/Testing ■ STD Program ■ Breast and Cervical Cancer Control ■ Communicable Disease Control ■ Maternal and Infant Health Plan■

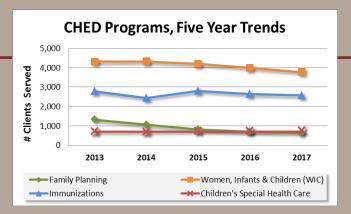
Billing

Patagonia automatically checks outgoing claims for completeness and accuracy, which reduces rejected claims. It's also connected to payment clearing houses of the major insurance companies, so claims go out right from Patagonia after a visit, and payments come to us with less fuss than before.

These improvements have enabled us to try new ways of delivering services. For example, we are striving to be a "one-stop-shop" where patients can walk in and receive the entire suite of services they are eligible for, all in one visit. At this time, we fall short of that goal because we can't afford the number of staff it would take, but Patagonia is helping us get closer. Here is another example: Shiawassee County lost their only family planning provider, so the health department invited us to see clients at their facility. With Patagonia, it is easy for us to stand up a clinic anywhere, any time with a few laptops and a connection to the internet (none of our three counties' funds pay for this). This enables us to meet an important public health need in a neighboring community and keep our staff



In 2017, this division provided services to 33,559 unduplicated clients.



MATERNAL AND CHILD HEALTH

These programs give financial, social, nutritional and medical support to qualified families and benefit the community by reducing infant mortality, ensuring healthy births and maintaining the health of mothers and children.

Number of Clients Served

	Clinton	Gratiot	Montcalm	District
Hearing screenings (# conducted)	2,858	1,849	3,705	8,412
Vision screenings (# conducted)	4,669	2,708	5,437	12,814
Children's Special Health Care	282	130	351	763
Family planning services	178	230	229	637
Women, Infants and Children	932	1,184	1,668	3,784
Maternal and infant health	N/A	173	N/A	173
TOTALS	8,919	6,274	11,390	26,583

CHRONIC DISEASE CONTROL

These activities target specific chronic diseases and focus on early detection and referral

Number of Clients Served

	Clinton	Gratiot	Montcalm	District
Lead poisoning screening	322	318	584	1,124
TOTALS	322	318	584	1,224

COMMUNICABLE DISEASE CONTROL

These programs offer testing, education, prevention and treatment services to control communicable diseases within our communities and may be available at low or no cost.

Number of Clients Served Clinton Gratiot Montcalm District Communicable disease control 624 377 638 1.639 HIV counseling and testing 36 54 **Immunizations** 765 1.125 2.570 680 Sexually transmitted disease control 33 60 90 183 TOTALS 1,422 1,135 4.446

ORAL HEALTH

For families that cannot afford dental care, help with prevention is essential for their children's oral health. MMDHDs Fluoride Varnish Program, supported by Meijer, helps meet this need.

Number of Clients Served

CI	inton	Gratiot	Montcalm	District
Fluoride varnish applications- WIC	12	67	448	527
Fluoride varnish applications- Head Star	t 0	0	879	879
TOTALS	12	67	1,327	1,406

TB Control ■ WIC ■ Blood Lead Screening and Education ■ Oral Health Initiatives ■ Children's Special Health Care Services ■ Community Health Worker Program ■ Family Planning

Community Health Assessment



A LOOK AT YOUTH TRENDS:

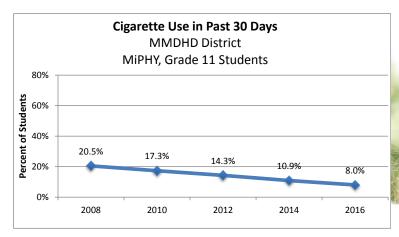
Youth health is improving!

There has been a lot of bad news about health in the media lately, but in reality many things are moving in the right direction. Consider the health of our youth. In some ways they are healthier than they've ever been. Let's look at data from our community health assessments about the health of youth, in particular substance abuse, including tobacco and alcohol, teen pregnancy and violence. Most of what we will look at comes from the Michigan Profile for Healthy Youth Michigan.gov/miphy, a survey of youth in school done by the Michigan Department of Education.

In a Community Health Assessment residents come together to examine information about the health of their community. They use that information to create Health Improvement Plans to guide the work of improving health. MMDHD is involved in three different assessments. In Gratiot County the assessment is called Live Well Gratiot. In Montcalm County it is Healthy Montcalm. In Clinton County it is Healthy! Capital Counties (done in collaboration with Eaton and Ingham Counties).

Tobacco use among teens falls to record low levels

Smoking tobacco remains the number one preventable cause of death, so it is good news that tobacco smoking by teenagers continues to fall to record low levels, and teens are more likely than ever to express negative attitudes about it. The decline in smoking is partly the result of some teens switching to vaping, but tobacco smoking is so deadly that any reduction is welcome.



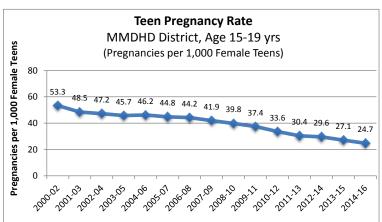






Teen Pregnancy rate at all-time low

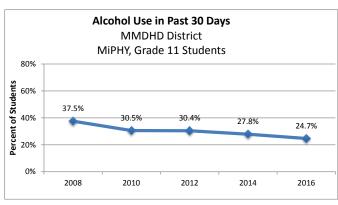
Teen pregnancy is at an all-time low and the rate continues to plunge. This means more girls than ever are staying in school and completing their education and entering the workforce. This is not a result of a change in the number of teens engaging in sexual activity. More than half of teens have sex before graduating from high school and that has remained largely unchanged for many years. What has changed is that teens are protecting themselves against getting pregnant. We need to continue giving teens access to birth control or the rate will rise.





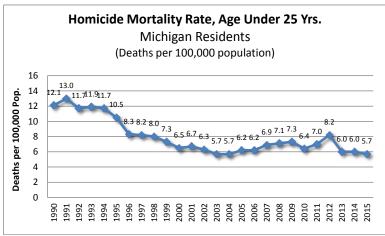
Alcohol use among teens decline

Many teens drink alcohol and that is cause for concern. But you might be surprised to learn that teens are drinking less than in the past. People often suspect that teens are drinking less alcohol because they are switching to marijuana, but this is not the case. While we do believe that the development of a commercial marijuana industry in Michigan will cause teen use of marijuana to rise like it did in places like Colorado and Washington, we are not seeing signs of that yet.

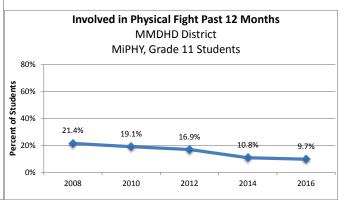


Teens less likely to be victims of violence

Given what we see in the news, it seems as though it's a dangerous time to be a teenager. But actually, teens are less likely to be a victim of an act of violence than any time in the past generation. They are less likely to be a victim of a homicide and less likely to be a victim of an assault. The U.S. and Michigan do have higher rates of teens being a victim of violence than most other countries, but the middle of the mitten has some of the lowest rates of teen violence in the Country.







Where does community health assessment information come from?



You already got a look at the Michigan Profile for Healthy Youth in the previous article. All of the data we use comes from publicly available sources and you can access it yourself from your computer or smart phone.

Residents who are concerned about health and the environment often express frustration about the difficulty of getting information. In fact, the State agencies that monitor health and the environment are doing a better job than ever of making their data available to the public and we are going to share our favorite sources with you.

Vital Records: The Michigan
Department of Health and Human Services
makes a wealth of statistics available on

its website. Data collected in vital records, like birth and death certificates, by hospitals during admission, from health surveys, etc. are invaluable for learning about things like leading causes of death, maternal and child health, accidents and injuries, the reasons for hospitalization and much more. You will get a menu of different kinds of statistics. One of the most useful is "Community Health Information". You may also want to look at Birth Characteristics or Mortality Trends to get detailed information about how we enter and leave the world. Most of the data is available right down to the county level. Visit www.michigan.gov/mdhhs to access this information. Select the "Inside MDHHS" tab on the right and select Reports and Statistics.

Water Quality: There are several groups working on environmental issues in the District. People who are concerned about water quality can learn about the health of the rivers and lakes in their community at the Michigan Surface Water Information Management System. The website opens to a viewer with a detailed map of Michigan. Click on the "Layers" icon to choose what to view (e.g., cold water streams, E. coli contamination, etc.) Click on the "Identify" tab and then click on an object on the map to get information about it. *Visit www.mcgi.state.mi.us/miswims/ to access this information*.

Water Systems: You can learn about the status of permitted industrial, agricultural, commercial and municipal water systems and what the Michigan Department of Environmental Quality (MDEQ) is doing to monitor them at the MiWaters website. The site encourages you to create an account, but you don't need to. Click on the Site Map Explorer link to see a map of MDEQ permitted systems. Click on the filter tab to select the kind of facility you would like to map, and a list of those systems will appear. Select the one you're interested in and then click on the Export tab to see MDEQ documents. Visit https://miwaters.deq.state.mi.us/miwaters/ to access this information.

Toxic Pollution: It is sad but true that most of the towns and villages in our District have been affected by toxic chemicals. With the Michigan Environmental Mapper you can browse a map of toxic pollution sites near you. The Environmental Mapper shows locations of contaminated sites and outlines areas with special environmental rules in place. You can use the information tool to click on the sites and get specific information about the pollutants involved. Visit www. mcgi.state.mi.us/environmentalmapper/ to access this information.

We know many of you are concerned about public health and are active in groups working with community partners to protect it. We encourage you to use these systems to explore the issues and to contact us with any questions.



Going the extra mile with My Community Dental Centers-St.Johns

Kevan Smith hadn't been to a dentist in eight years. He had Medicaid insurance, but finding a dentist willing to treat him was a struggle and he couldn't afford to pay a dentist out-of-pocket. He had to choose between groceries or dental care, and the need to eat always took precedence over his teeth.

Kevan's dental issues had been causing him a great deal of pain; so much so that he couldn't eat or sleep. He was in pain all the time and it was taking a tremendous toll. Finally, he visited a dentist out of desperation and was told he had a serious infection that could have taken his life if he had waited much longer. He was given an antibiotic, but needed additional treatment—treatment he couldn't afford. As he was leaving the dentist's office, an employee took him aside and gave him a glimmer of hope. She told him of a dental clinic



MCDC staff posing with Kevan on his birthday Left to right: Kendra Beutler, Kristi Roberts, Katy Hawkes, Kevan Smith, Lisa Smith (MMDHD), Laurie Pennell and Sheri Alward.

where he could get quality care-- one that took Medicaid and one that would be thrilled to have him as a patient! That clinic was My Community Dental Centers (MCDC)- St. Johns.

Kevan has been a patient of MCDC- St. Johns ever since and is beyond grateful.

"My Community Dental Centers truly has been a blessing to me," he said. "Going through life in non-stop pain is no way to live, but things are much better now. I'm not in pain anymore and I'm no longer ashamed of my smile!"

Kevan affectionately refers to the MCDC staff as his "beautiful earthly angels of healing," because of the compassionate and gentle care they provide. He had several traumatic experiences at different dentists over the years and feels blessed to have found a dental home where he feels comfortable and at-ease. "The staff go out of their way to make sure a patient's time in the dental chair is as pleasant as possible," he said. "And to someone like me, that means an awful lot!"

Kevan said the MCDC staff go out of their way to treat their patients with dignity, which doesn't happen very often when you're poor. "MCDC has a genuine concern for people and how they're doing. I think of the staff as family and get the same feeling in return. They even gave me balloons and a cake on my birthday!"

Kevan was shocked to find out that he qualified for services at MCDC long before his first visit. He went years without knowing the clinic existed and that they served clients just like him. He is so grateful to have found MCDC that he routinely distributes dental supplies and MCDC brochures to people at the Department of Human Services, area food banks and Michigan Works. "I'm doing what I can to spread the word to others in need so they won't have to suffer needlessly like I did," he says.

"When you are desperate and someone offers you healing and your suffering suddenly ends, there are no words to describe the gratitude you feel. All I can say to MCDC is thank you!"

MCDC primarily sees patients with Medicaid, but also serves those with other insurance plans, as well as the uninsured.

Medical Director's Perspective



Advances in technology and informatics have helped improve efficiencies in public health and our ability to evaluate the needs of those we serve. One useful way technology aides public health is by tracking and evaluating infectious diseases. In 1893, Michigan was the first jurisdiction that required reporting of specific infectious diseases. Public health surveillance has evolved greatly since that time and continues to progress. When the computerized Michigan Disease Surveillance System (MDSS) was introduced 14 years ago, there were already over 100 public health surveillance systems at the federal, state, and local levels. The MDSS strives to make it easier and more efficient for diseases and conditions to be reported. Many public health and commercial labs report results electronically directly to the MDSS via electronic laboratory reporting, which is the fastest way to report.

Social media has also become a useful tool for assisting with disease surveillance, outbreak management, targeting specific vulnerable populations, and discovering the public's views on matters of public health importance. Social media allows people to freely post personal information, often reveling things they would not report to medical officials or health departments and share views on topics they may not openly discuss.

Social media tools have been effective in rapidly detecting disease. The International Society for Disease Surveillance (ISDS) established a social media work group to evaluate its use in public health and to develop research, technology, and innovations in electronic public health surveillance. They found that social media can provide real-time surveillance, hasten outbreak management, and identify populations in need of support and interventions. Social media was also found to be particularly important in notifying the public of health emergencies and reporting adverse drug events.

Groups that have historically been hard to reach, such as adolescents and men that have sex with men (MSM), may be more inclined to engage with social media, allowing for a new way to reach these individuals. In fact, a large proportion of the studies evaluated by the ISDS concentrated on populations with increased risks of STDs, such as MSM. At least 40% of MSM use the internet to find sex partners and MSM who use the internet to find partners are more likely to engage in risky sexual behavior. Often, sexual partners found through the internet are only known to each other by internet nick names or screen names, making traditional STD contact tracing extremely difficult. By giving disease investigation specialists cell phones and enabling them to search for sexual contacts by screen names, nearly three-times as many sexual contacts in a contact investigation were identified.

In 2005, the Centers for Disease Control and Prevention encouraged ISDS colleagues to utilize the internet for health promotion and to find and contact partners of clients infected with STDs and HIV. The National Coalition of STD Directors have developed Internet partner notification guidelines as they recognize that the internet is a powerful platform for communication and a proven platform for STD transmission. Social media has and will continue to provide useful data to support and improve public health efforts and needs to be utilized.

The use of technology in public health continues to grow and evolve. We continue to find ways it can improve health and develop the ethical framework needed to assure that personal information is used appropriately and securely.

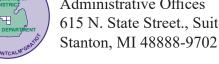
Jennifer Morse, M.D., M.P.H., FAAP

Medical Director



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Graphic design: Leslie Kinnee, MMDHD

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