Chris Steller

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Sent: Monday, February 4, 2019 9:35 PM
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Subject: FW: MDH Report - Public Health Response Account
Attachments: Public_Health_Response_Account_2019.pdf

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Subject: MDH Report - Public Health Response Account

Greetings,

I'm pleased to share with you the attached report on the Public Health Response Account. Please let me know if you have any questions.

Thanks,

Melissa Finnegan
Director of Legislative Relations | Executive Office

Minnesota Department of Health
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Public Health Response Account: Update and Expenditures

Report To The Minnesota Legislature
January 2019

Public Health Response Account: Update and Expenditures

Minnesota Department of Health

Infectious Disease Epidemiology, Prevention and Control Division
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Introduction and Background

Minnesota Statues, section144.4199, subdivision 8 requires the Commissioner of Health to:

> "Submit a report to the chairs and ranking minority members of the house of representatives Ways and Means Committee, the senate Finance Committee, and the house of representatives and senate committees with jurisdiction over health and human services finance, detailing expenditures made in the previous calendar year from the public health response contingency account."

During the winter/spring of 2017, the Minnesota Department of Health dealt with three large infectious disease outbreaks: multi-drug resistant TB (MDR TB) in Hmong elders predominantly in Ramsey County, syphilis across the state with clusters in tribal communities, and measles in unvaccinated individuals primarily in Hennepin County.

In response, the Minnesota legislature and Governor Dayton created the Public Health Response Contingency Account (hereinafter Public Health Response Fund) in 2017 to enhance Minnesota's state and local response to urgent public health threats. The law provides $5 million for the account but limits its uses to major infectious disease outbreaks.

This report provides a summary of our activities and accomplishments in 2018 with the funding received from the Public Health Response Contingency Account. (A report was submitted to the legislature January 2018 that described the activities and accomplishments in 2017.)

Detailed information on expenditures is included as an attachment at the end of the report.

Program Specifics

Tuberculosis

Tuberculosis (TB) is caused by a bacterium called *Mycobacterium tuberculosis*. The bacteria usually attack the lungs, but can attack any part of the body such as the kidney, spine, and brain. Not everyone infected with TB bacteria becomes sick. As a result, two TB-related conditions exist: latent TB infection (LTBI) and TB disease. If not treated properly, TB disease can be fatal.

Multi-drug resistant tuberculosis (MDR TB) is an infection caused by tuberculosis bacteria that have built up resistance to the two most common and effective TB medications used to treat persons with TB (INH, Rifampin). (See the 2018 Public Health Response Fund Report for more information on TB.)

MDH received a total of $224,635 from the PH Respnse Fund to respond to this ongoing outbreak of MDR TB. Two temporary epidemiologists for MDH were hired using these funds; their salaries covered through June 30, 2018. A temporary TB epidemiologist was also hired for St. Paul-Ramsey County Public Health (SPRCPH) and paid for using these funds through May 31, 2018, at which time SPRCPH hired that individual permanently.

MDR TB Outbreak Response Update

JANUARY 2018—DECEMBER 2018

The focus of our outbreak response work, in collaboration with SPRCPH, has been to conduct community outreach, provide education and training, and complete contact investigations. Staff from MDH and SPRCPH check-in regularly to evaluate progress on metrics related to contact investigations, trainings, and outreach.

Community Outreach

Community awareness and outreach has been a critical aspect of the outbreak response work. MDH and SPRCPH staff reached out to California public health officials to learn from their experiences working with the Hmong community on TB outbreaks. A roundtable on the MDR TB outbreak and community engagement was held with the Hmong community on Janauary 30, 2018. Participants included staff from MDH, SPRCPH, the California Department of Public Health and some of their local public health agencies. The meeting was an opportunity to share strategies, best practices, and resources for working effectively within the community during an outbreak. Descriptions of additional community outreach work follow.

MDH Hmong TB Advisory Group

MDH established and now facilitates the Hmong TB Advisory Group with assistance from SPRCPH. The Hmong TB Advisory Group, made up of 15-20 Hmong individuals, meets monthly to advise MDH and SPRCPH on outreach efforts, review materials and translations, and guide strategy.

Summary of Activities	Meeting dates in 2018
Hmong TB Advisory Group meetings	March 21, April 25, June 4, July 11, August 29, October 17

Hmong Senior Centers

There are 17 Hmong Senior Centers (adult day centers) in the Twin Cities metropolitan area. There is potential for MDR TB to spread to elders in other adult day centers. For this reason, MDH felt it was important to educate both staff and attendees about the symptoms and risks of TB.

Summary of Activities	Completed Dates
Presentations to senior center staff at 16 of 17 Hmong Senior Centers	Completed in 2017
Presentations to senior center attendees	*Majority completed in 2017 and another on May 17, 2018*
Letters about TB disease and the outbreak were sent to Hmong senior center participants	Completed (April 2017)
Created "Adult Day Center Participant Tuberculosis (TB) Risk Assessment" and worked with DHS to disseminate guidance to owners and operators of adult day centers throughout Minnesota.	Completed (November 2017 and August 2018)
Presented webinar in collaboration with Leading Age Minnesota to discuss TB risk assessment for adult day center participants	May 3, 2018

Hmong Health Professionals and Community Leaders

MDH has worked to engage and collaborate with Hmong health professionals and community leaders to increase awareness of MDR TB and promote dissemination of information.

Summary of Activities	Completed Dates
Presentation on outbreak updates to the Hmong Council of 18	April 2, 2018
Presentation to Wilder staff on mental health issues	Janauary 8, 2018
Wilder staff training	January 18 and 24, 2018
Meeting with Director of Programs, Health and Wellness with the Hmong American Partnership (HAP)	April 2, 2018
Updates and dialogue with the Hmong Health Care Professionals Coalition (HHCPC)	May 7, 2018 and September 6, 2018

General Hmong Community

MDR TB is not well understood by the community, especially among the Hmong elders. It is crucial that community and family members be engaged and have a better understanding of MDR TB and its treatment to stop the outbreak. These activities are designed to increase their awareness and understanding of MDR TB.

Outreach to the Hmong community has included attendance at Hmong community events such as community fairs and Hmong markets to provide information on TB. MDH also placed print ads and radio PSAs in local Hmong media about TB.

MDH conducted a request for proposals to identify a vendor to produce an educational video for Hmong elders. The project includes two parts. The first is a 10-15 minute scripted dramatic video filmed entirely in Hmong. The target audience for this project is Hmong elders. The second project includes animation style videos (2-5 minutes) filmed in both English and Hmong. The target audience for these pieces is the adult children/caretakers of Hmong elders. These shorter videos will also be shared on social media. You can see the videos at:

Album with all videos: https://vimeo.com/album/5590306

Individual Links:

Mob Kab Ntsws MDR-TB (Hmong Captions): https://vimeo.com/294182171

Mob Kab Ntsws MDR-TB (English Subtitles): https://vimeo.com/289938934

Get to Know MDR-TB: https://vimeo.com/297975376

Kawm Kom Paub Kab Mob Ntsws MDR-TB: https://vimeo.com/297987847

Interview with Muaj Lo, MD: https://vimeo.com/294620687

Summary of Activities	Completed Dates
Hmong Community Events (tabling)	
Hmong American Partnership (HAP) Spring Community Health Forum	May 19, 2018
Karen Health Fair	August 25, 2018
Hmong Resource Fair	October 6, 2018
Presentations	
Hmong clients at Wilder	January 12, 2018
Hmong elders group at Hmong Alliance Church	January 14, 2018
Print Ads and Radio PSAs in Local Hmong Media	
Hmong Times Hmong Today Hmong Radio KFAI Hmong programming	Spring and Summer 2018 Fall 2018
Educational Video	
Hmong Video Project	Target completion date: 10/15/2018

Health Care Provider Education

The first case associated with the senior center outbreak went undetected for five years despite multiple medical visits, resulting in unnecessary disease transmission. As a result, we have placed an emphasis on providing training about TB and MDR TB to health care providers serving the Hmong community. The goal is to increase their awareness of TB (signs and syptoms) and to encourage them to consider TB in patients presenting for care with respiratory symptoms.

Summary of Activities	Audience	Completed Dates
Medica Care Plans. TB and MDR TB: Pathology and Medical Mangement	Nurse care coordinators	February 27, 2018
Poster Presentation for The Union North American Region. An outbreak of Multi-drug resistant Tuberculosis, Minnesota 2016-2017. Chicago, IL	TB clinicians, public health	March 1, 2018
Minnesota Clinical Lab Collaborative. TB In Minnesota: Review and MDR Outbreak	Laboratorians	April 19, 2018
Leading Age. TB and MDR TB: Pathology and Medical Management	Long-term care providers, adult daycare providers	May 3, 2018
MDH Physician Rotation. Public Health Current Events: MDR TB Outbreak	Primary care medical residents	May 4, 2018

In addition to health care provider trainings, MDH sent a health advisory to health care providers via the Health Alert Network on September 24, 2018. The subject was “TB in Adult Day Care Centers and Updated MDR TB Contact Screening Recommendations.” The alert provided information on how to

assess adult day center participants for TB risk factors and test for TB if any risk factors are present. Providers were referred to the "MDH Adult Day Center Participation TB Risk Assessment" document on the agency website. The link for the health advisory is http://www.health.state.mn.us/han/2018/sep24tb.pdf

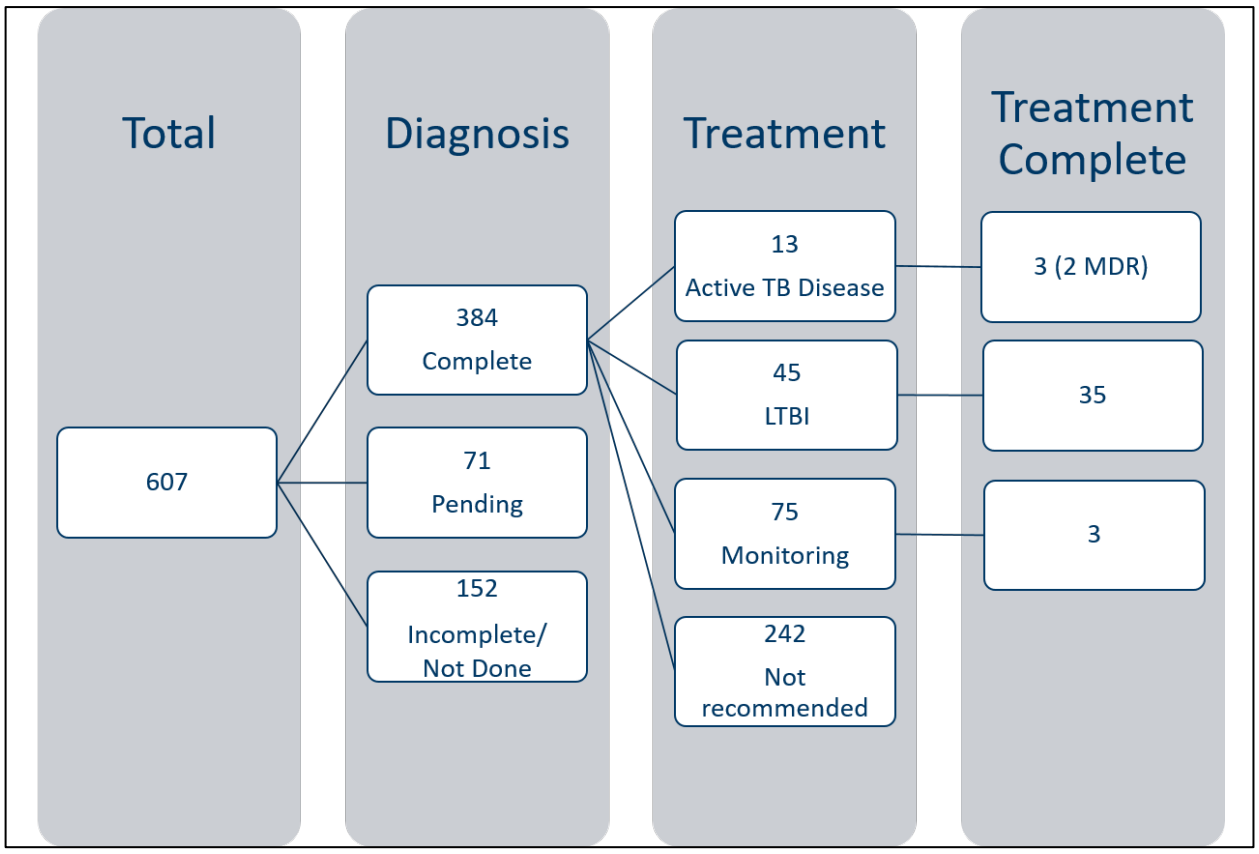
Contact Investigations/Screening

TB contact investigations are one of the most important components of a TB control program. Contact investigations focus on individuals who have had prolonged contact with an infectious case of TB, starting with those with the greatest exposure. (See the 2018 Public Health Response Fund Report for more information on TB contact investigations.)

Since January of 2016, there have been 19 cases of MDR TB in the Hmong community, and 11 of those have been identified as outbreak cases, resulting in a large number of community members who have been exposed (contacts) to MDR TB. To date, MDH has identified 607 persons who are contacts to MDR TB. This includes household contacts and health care workers, as well as contacts in congregate settings such as adult day centers, long-term care facilities, and church congregations.

To date, 384 persons have completed the recommended screening. In addition to the 11 outbreak cases of MDR TB (active disease), two unrelated TB disease cases were found (including one non-MDR case). Sixty-five new cases of MDR LTBI (infection but not yet active disease) have been identified. Twenty-six of these new cases and nine previously untreated cases have completed treatment for MDR LTBI. Five new and three previously untreated are currently taking treatment. Sixty-nine new and previously untreated LTBI cases are being monitored for development of active disease for two years, and three have completed this monitoring period. Most are expected to finish this monitoring period in August 2019. Seven contacts are currently in the evaluation process and may require treatment and follow-up. Sixty-four individuals have not yet been reached. We have considered 152 lost to follow-up due to inadequate locating information, death, and refusal (see Figure 1). Follow up to reach contacts has included phone calls, letters, and home visits. Figure 1 outlines the status of the contact investigation follow-up.

Figure 1: Hmong MDR TB contact investigation progress. (As of October 9, 2018)



CDC Support

In January 2018, the CDC provided technical assistance to SPRCPH by sending a team of two physicians and a Public Health Advisor (PHA) to provide technical consultation to SPRCPH at MDH's request. The team spent approximately 16 working days meeting staff and reviewing the current activities of the program in order to address as many areas as possible.

The objectives for the onsite visit were to review current practices of the TB control program in Ramsey County and to identify opportunities to improve TB care and prevention. Specifically, the CDC team reviewed case management activities, clinical services, infection control plans, including optimizing directly observed therapy (DOT), contact investigations, as well as improving the uptake of treatment for MDR latent TB infection (LTBI). The CDC provided a report of their findings and recommendations to SPRCPH.

In July 2018, the CDC placed a full time PHA in Minnesota to support the ongoing response to this MDR-TB outbreak. The PHA is assigned to MDH with a work location at SPRCPH.

Syphilis

Syphilis is a sexually transmitted disease that can be treated with antibiotics. If left untreated, syphilis can affect the nervous system and cause paralysis, sensory deficits and dementia. Moreover, pregnant women infected with syphilis who are not treated can pass it on to their fetus. Congenital syphilis can result in miscarriage, stillbirth, low birth weight or death shortly after birth. Babies born with congenital syphilis can have bone deformities, anemia, enlarged liver and spleen, jaundice, blindness or deafness, meningitis, skin rashes, seizures and may be developmentally delayed.

Syphilis is on the rise in Minnesota and nationally. From 2005-2015, rates of primary/secondary syphilis increased 246%. In 2017, there were 934 reported cases of syphilis in Minnesota. (See the 2018 Public Health Response Fund Report for more information on syphilis.)

Outbreak Status

As of December 19, 2018, the total number of outbreak related syphilis cases reached 136. A case for this outbreak is defined as any reported syphilis case diagnosed in 2016, 2017, or 2018 that resides in Mille Lacs County, Cass County, Beltrami County, Mahnomen County, or Itasca County with known or reported drug use or a reported case of syphilis that is linked to a case that is part of the outbreak.

- 59 (43%) cases are male and 77 (57%) cases are female.
- 15 (19%) of the female cases were pregnant at the time of report. All pregnant females have been treated with antibiotics.
- Communities of color are disproportionately affected:
    - 126 (93%) cases among people of color,
    - 9 (7%) cases among White non-Hispanic people.
- 60 (44%) of the cases have admitted or have a known history of drug use.
- 28 (21%) cases are hepatitis C positive.
- 117 cases (86%) have had disease investigation interviews. These interviews are used to identify sexual partners who may have been exposed to syphilis so that they can be tested and treated if appropriate. Of those interviewed:
    - 7 (6%) have refused to be interviewed,
    - 7 (6%) have been unable to be located,
    - 5 interviews are pending.

MDH received a total of $288,503 from the Public Health Response Fund to respond to the ongoing syphilis outbreak.

In October 2017, MDH hired a full-time, temporary, syphilis prevention coordinator using these funds to oversee the syphilis prevention projects conducted with response funds. A summary of 2018 activities pertaining to the syphilis response follows.

Syphilis Prevention Projects Update

JANUARY 2018—DECEMBER 2018

Jail Screening

During disease investigation interviews in 2016-2017, MDH found a significant number of syphilis cases had a history of incarceration and drug use. The MDH syphilis prevention coordinator developed relationships with three county jails (Mille Lacs County, Crow Wing County, and Scott County) in Minnesota to implement a screening project to:

- Identify and treat syphilis cases among individuals booked on drug-related charges in the jails.
- Prevent cases of congenital syphilis by identifying and treating cases of syphilis among pregnant females in the jails.

To date, the three participating jails have identified and appropriately treated six new cases of syphilis through this project.

Tribal Grant Agreements

The Department has been responding to outbreaks in the American Indian community since 2016, with a cluster in Central Minnesota and the northwestern part of the state. Thus, some of the contingency funding was designated for two tribal grants for syphilis prevention, which the syphilis prevention coordinator manages.

Mille Lacs Band of Ojibwe

Through June 2018, Mille Lacs Band of Ojibwe has provided syphilis testing to 67 patients and treated 12 positive cases of syphilis. Furthermore, they have distributed 21,000 sterile syringes and 630 sharps containers. Syphilis awareness outreach has occurred through alcohol and drug inpatient and outpatient clinics, online through Facebook, teen pregnancy prevention programming, community flyers, and various community events.

White Earth Nation

Through June 2018, the White Earth Nation provided a syphilis prevention content focus at the 7th Annual Harm Reduction Summit and has integrated syphilis prevention messaging and testing referrals into their mental health treatment and syringe services programs. They are currently coordinating rapid syphilis screening training for their public health nurses and behavioral health staff, and planning the implementation of an evidence-based intervention to educate their community on syphilis and HIV called Native Women Speaking.

Community Education and Outreach

A key strategy to increase syphilis testing among American Indians across Minnesota is to disseminate culturally-centered syphilis educational materials into the community alongside providing syphilis awareness outreach at American Indian community events. The following lists various community

education approaches implemented, and specific events the MDH Syphilis Prevention Coordinator has joined in 2017 and 2018.

Summary of Activities	Completed Dates
In-Person Outreach	
• Tribal Nurse Family Spirit staff • Central MN Family Home Visitor staff • Red Lake Detention Center staff • Metro Urban Indian Directors meeting	January 2018
• St. Paul Indian Action meeting, Tribal Health Directors meeting • Little Earth Health Fair	February 2018
• Bois Forte Mid-Winter Pow Wow	March 2018
• Little Earth Health Fair	April 2018
• Red Lake Detention Center inmate and staff presentations • Little Earth Health Fair	May 2018
• White Earth Nation Harm Reduction Summit • North East Family Home Visitors staff update	August 2018
• Little Earth National Night Out • Mille Lacs Band of Ojibwe Traditional Pow Wow • Red Lake Nation Labor Day Pow Wow	September 2018
Media Campaign	
• The successful GoodHealthTV PSA continued to run in Tribal Health clinics, and is being rerun for three months starting fall 2018 • KAT Communications, using the audio from the GoodHealthTV PSA, ran educational ads on radio stations for American Indian audiences in: Minneapolis/St. Paul, Cass Lake, Cloquet, Grand Portage, Granite Falls, Nett Lake, and White Earth	Throughout 2018
Print Materials Distribution	
• All Tribal Health and IHS locations in MN, Kateri Residence • Red Lake Detention Center • Little Earth of United Tribes • Indigenous People's Task Force • American Indian Women's Resource Center • Salvation Army Minneapolis • Native American Community Clinic • Ain Dah Yung Center • American Indian Community Housing Organization	Throughout 2018

Measles

Minnesota experienced a large measles outbreak in the spring and summer of 2017. The outbreak affected predominantly unvaccinated children, 91 percent of the 75 cases were unvaccinated. Twenty-two individuals (29%) were hospitalized. Eighty-one percent (61/75) of cases occurred in Somali Minnesotans. However, there was also spread to unvaccinated children in Le Sueur and Crow Wing Counties. (See the 2018 Public Health Response Fund Report for more information on measles.)

MDH received a total of $100,445 from the Public Health Response Fund to respond to the measles outbreak. MDH extended the temporary Somali outreach worker, who was hired during the outbreak, to assist in case investigation and to oversee the measles projects conducted with response funds. Additionally, response funds were used for measles laboratory test development. A summary of 2018 activities follows.

Measles Projects Update

JANUARY 2018-DECEMBER 2018

Public Health Laboratory

Resources from the public health response fund were used to assess and validate a new molecular test that can identify the genotype of the measles virus that is found in vaccines. This test can more quickly identify specimens that are positive for measles virus due to recent vaccination (but not infectious and therefore do not need public health intervention). The genotyping test that was used by the MDH Public Health Laboratory (MDH-PHL) was very resource intensive, in terms of labor, testing materials, equipment and time. The test required at least 48 hours to complete. The new test can be performed within four hours of an initial positive result.

The validation testing done by the MDH-PHL indicates that this molecular test performs very well to quickly and accurately identify specimens positive for measles due to recent vaccination. During 2018, the MDH-PHL completed the final documentation needed to put this assay into use internally. This test was used to notify epidemiology partners of a vaccine-related positive sample collected from a recently-vaccinated individual. The preliminary result was provided to epidemiology within 24 hours of identifying the positive specimen, and confirmed four days later by sequencing.

MMR Survey Background

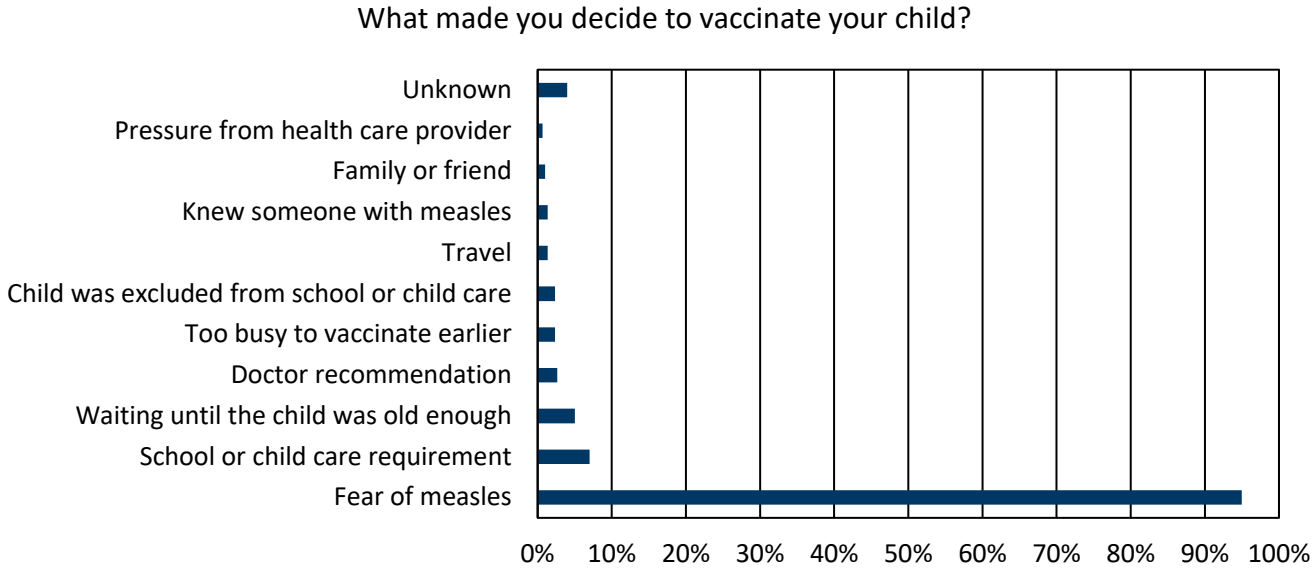
MDH received feedback from our Somali outreach staff, the local Somali community, and local health care providers that a follow-up survey with Somali Minnesotan families who vaccinated their children with the measles, mumps, and rubella (MMR) vaccine was needed for two reasons. The first was to understand the Somali Minnesotan community's experience around receiving MMR and interaction with the health care system. The second was to understand what factors influenced MMR-hesitant families to get vaccinated during the outbreak.

The survey was developed in partnership with the University of Minnesota School of Public Health who have expertise in survey design. The survey was designed to obtain data through conversational interviews. MDH Somali outreach staff conducted the survey in Somali.

MMR Survey Results

MDH staff completed telephone interviews with 300 families that vaccinated their previously overdue children with MMR vaccine. The response rate (300/442, 71%) was high and most respondents were appreciative that MDH had called and wanted to know how their family was doing. The 2017 measles outbreak was a significant driver of MMR vaccination for Somali-Minnesotan children. The majority of parents said fear of measles was the most influential reason to get their child vaccinated.

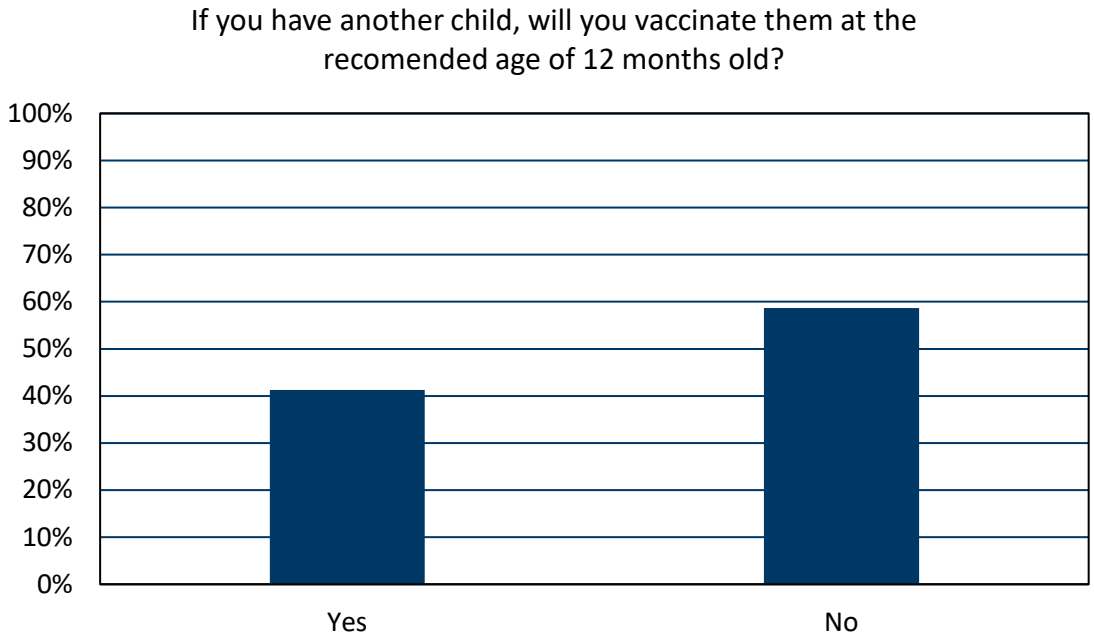
Figure 2: Factors that influenced parent's decision to vaccinate their child with MMR during the measles outbreak.



Prior to vaccinating with MMR, families commonly worried about their child developing autism after vaccination. Many families said they were concerned their child would develop problems with speech, but did not mention the word autism. Most parents reported that their children did not have any side effects after receiving the MMR vaccine. Among parents that did report side effects, the most common were fever, mild rash, pain at the injection site, and crying. These side effects resolved on their own. A few families were worried about changes in speech or behavior they observed after vaccination. MDH followed up on all of these concerns. In some instances, MDH staff contacted health care providers to obtain more information. Any families that reported concerns about speech and behavior changes also received a follow-up call to see how they were doing. Upon follow-up, the majority of families no longer had any concerns about their child's speech or behavior. In two instances, the concerns were found to be present prior to vaccination. Two families refused to provide more information and asked MDH to stop calling. One family was lost to follow-up.

Our survey results showed that health care providers were the top source of health information surrounding MMR vaccine. Overall, parents reported that clinic visits went well and were appreciative of receiving more information about the MMR vaccine and the diseases that it prevents. Families that reported negative experiences with the clinics felt judged for delaying vaccination or felt they did not receive enough information about MMR. The majority of families felt they made the right decision to vaccinate their child during the outbreak. However, just over half stated they would still delay vaccination until future children are older, rather than vaccinate at the recommended age of 12 months (Figure 3). Thus indicating that further work must be done to reassure parents that on-time vaccination is important.

Figure 3. Percent of families that said whether they would vaccinate a future child with MMR at the recommended age of 1 years old.



Lessons Learned

We had expected fear of measles to be a significant driver for vaccination; however, we were surprised that the overwhelming majority of respondents listed fear of measles as the main reason they vaccinated their child. Several respondents stated they were unaware measles could occur in Minnesota, but were well aware of the consequences of this serious disease. The potential for measles outbreaks needs to be communicated broadly in this community by public health, health care providers, and community partners. Somali outreach workers employed by MDH have been conducting immunization outreach in the community over the past several years. Continuing and building upon these outreach efforts will help increase awareness of the potential of vaccine-preventable disease outbreaks in Minnesota and the importance of vaccines in preventing disease. Complementary to this, we are also developing key messages and strategies to address the need for more education for health care providers.

As expected, the majority of children tolerated the MMR vaccine well and their parents did not mention any side effects. However, several families expressed significant fear of side effects from the MMR vaccine and were very anxious when even minor and expected side effects such as mild fever, rash, and pain at the injection site occurred. Through the survey, we found health care providers can help to reduce parent's anxiety with more support and information about how to manage expected side effects. Parents who received information about what to expect after vaccination and reassurance that the vaccine was safe and effective reported having a good experience in the clinic.

Allowing for a longer well-child visit could give health care providers the opportunity to build better relationships with Somali families in their practice. Families that felt their health care provider knew them well and took time to address all of their concerns described their experiences as good. Several families described hearing reassurance from their providers that their child would be okay after vaccination and would be protected against measles. This helped to alleviate their anxiety about potential side effects. Building trust will help the messages of reassurance to be more effective.

It was encouraging to see many families, who were previously hesitant, vaccinate their children with MMR vaccine. However, there is still a lot of hesitancy in the Somali Minnesotan community and this is highlighted by the fact that just over half of respondents said they would still delay MMR vaccination for future children. This survey only reached families that had previously been behind on MMR vaccination, and then chose to vaccinate during the outbreak. There remains a sizable population that did not vaccinate their children in the face of a large measles outbreak. It is clear that more work is needed to curb the belief in the Somali Minnesotan community that the MMR vaccine is associated with autism. This will take time and continued collaboration with Somali community leaders and other trusted messengers. Community partnerships with MDH, health care providers, and other public health partners would be beneficial. The Somali public health advisor group could be a great avenue for the partnerships to grow and expand.

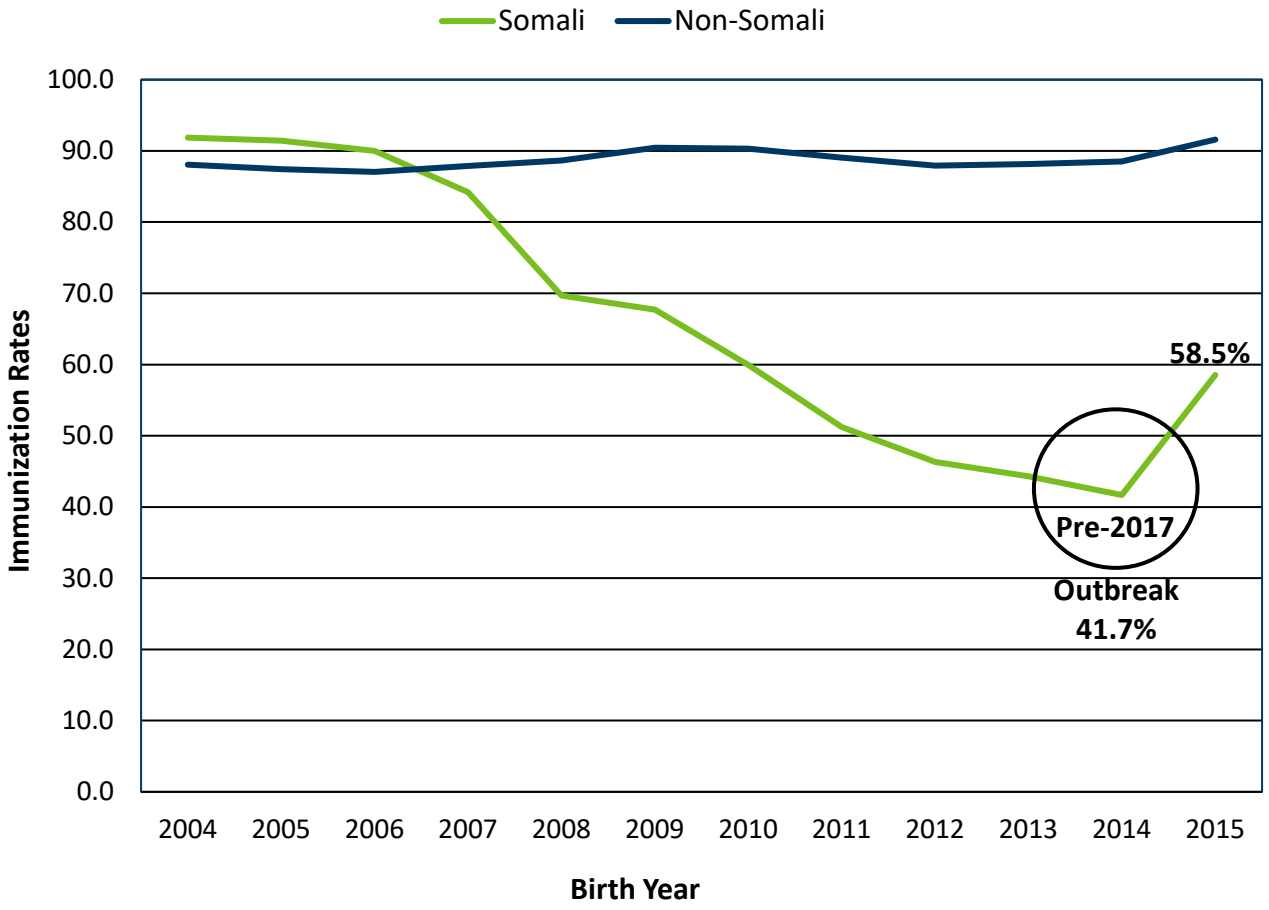
MMR Vaccination Status

This outbreak was caused by extremely low vaccination rates in the Somali community—only 42 percent for MMR (measles, mumps and rubella) in children 24 to 36 months of age. Until vaccination rates in the Somali population improve, Minnesota is at risk for a similar situation occurring again.

Three Imported cases of measles (from Africa and the Middle East) were reported in Minnesota in August and September of 2018. Thankfully, there was no measles spread from these imported cases. However, they serve as a reminder that the threat of measles importation is real and the introduction of measles to pockets of unvaccinated individuals could result in an outbreak.

New data on MMR coverage evaluated in February 2018 showed that MMR immunization coverage at 24 months for Somali children increased from 41.7 percent prior to the outbreak to 58.5 percent after the outbreak (Figure 4).

Figure 4: Comparison of MMR Rates at 24 month in children of Somali descent versus non-Somali, birth years 2004-2015, Minnesota



We are encouraged to see the increase in vaccination coverage as result of outbreak. However, a review of overall MMR vaccine administration (Figure 5 and 6)) indicates that vaccination has returned to pre-outbreak levels. While the vaccination rate increase during the outbreak helped to get more children up-to-date with their MMR vaccination, we have a great deal more work to do in this area.

Figure 5: MMR administered by week, 2017, Minnesota

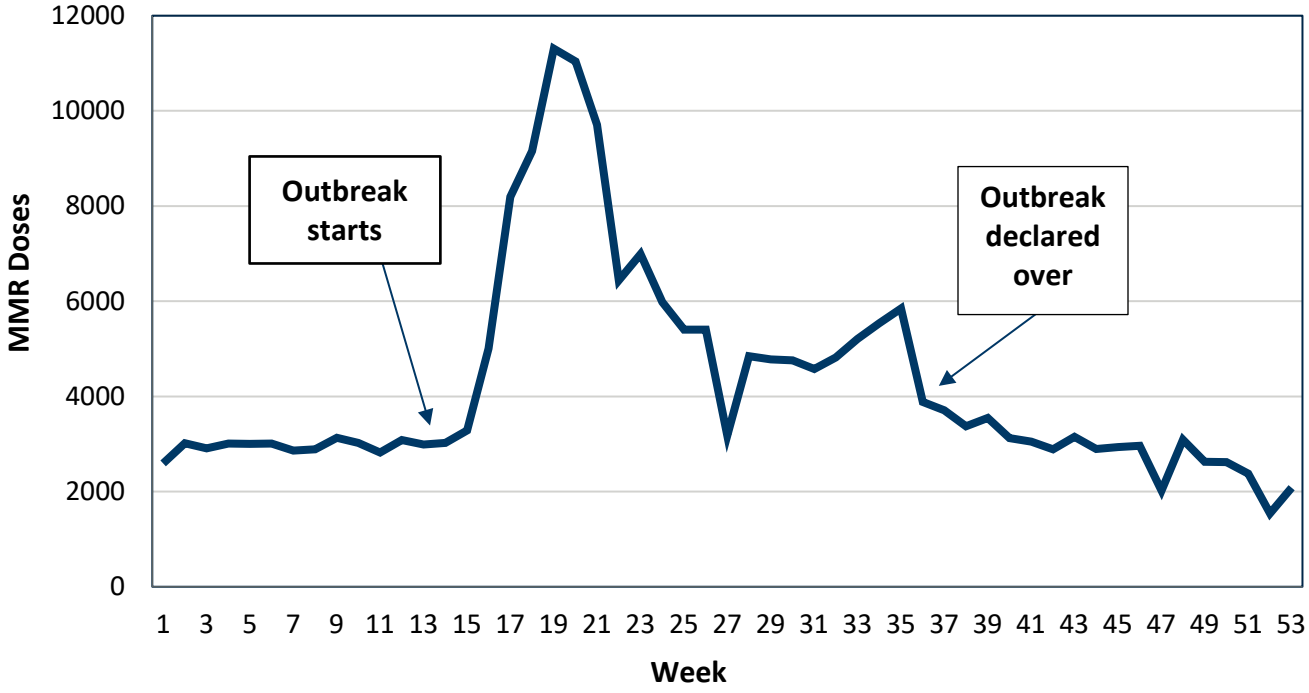
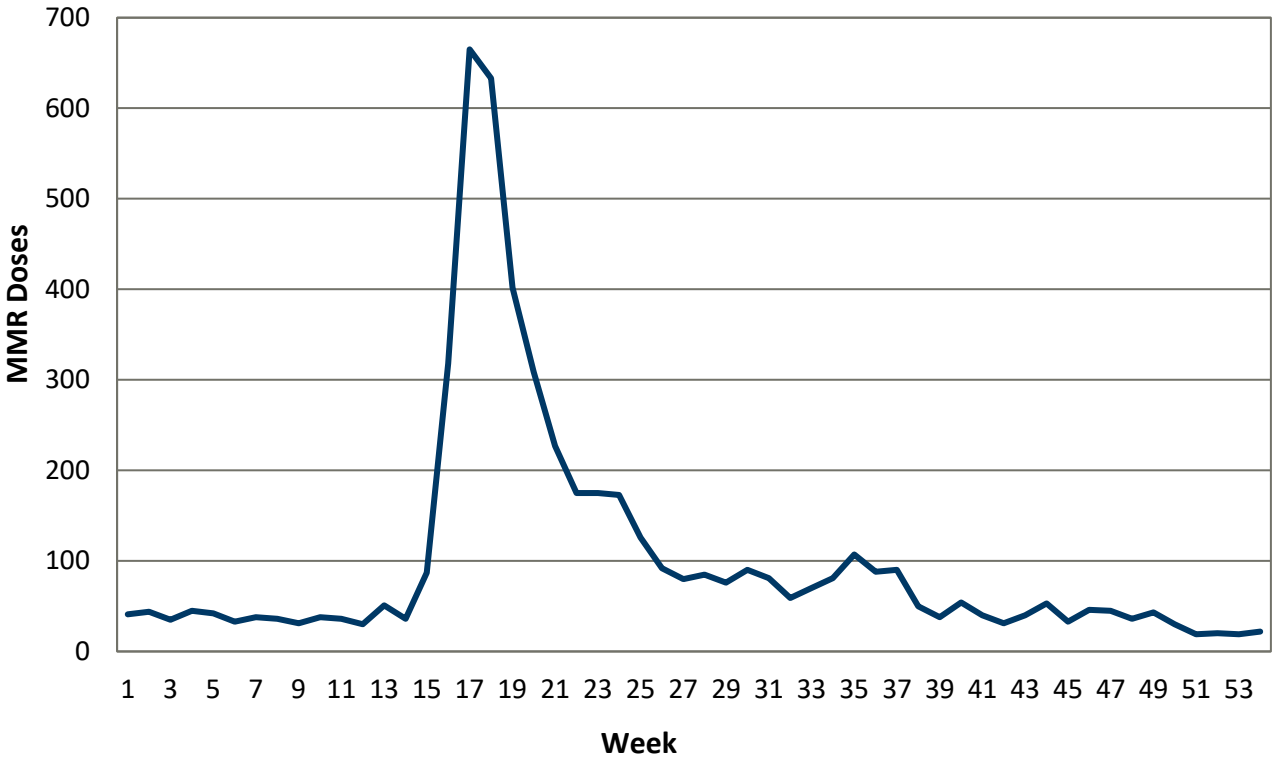


Figure 6: MMR doses administered by week among children of Somali descent, 2017, Minnesota



As a part of our routine work and outbreak follow-up, we continue to engage the Somali community in multiple ways. As community relationships grow, we find the desire for information on all vaccines is high. MMR vaccine is still top of mind for many parents, but as the perceived threat of measles decreases parents have inquired more about other childhood vaccines. There is also a growing need in the community for information about adult vaccines. This is a great opportunity to show the community that MDH is a credible source of information regarding all vaccine-preventable diseases and that we are concerned about preventing disease in all age groups. MDH still draws skepticism as a government agency, but our Somali staff have forged trusted relationships within the community.

MDH identified child care centers as an important setting for outreach about five years ago because of the high risk for outbreaks among children and for the opportunity to reach parents and caregivers. Prior to MDH's concentrated outreach, these centers did not consistently submit annual immunization reports and did not have knowledge of immunization requirements under Minnesota statute. Each year, MDH Somali staff identify newly opened centers and provide technical assistance with the annual report. They provide additional reminders and phone calls to Somali-owned centers on top of the usual reminders sent to all licensed centers by MDH and the Minnesota Department of Human Services (DHS).

Licensed child care centers (DHS Rule 3) report the aggregate immunization status of their enrollees annually by December 1 every year. In 2017, MDH identified and communicated with nearly 80 centers that served primarily Somali-Minnesotan children regarding their annual reports. At the conclusion of the reporting year, we identify centers that completed their reports, but have reported less than 60 percent MMR coverage. In 2016 there were 22 centers with very low coverage, but we have noted an improvement. In 2017, the number of centers with very low coverage decreased to four. We also saw that there were fewer non-responders in 2016, 16 centers did not complete their report compared to 11 in 2017.

These relationships proved to be critical during the outbreak, but now we are moving into a time where MDH's presence is even more important. The community needs to know that our commitment to preventing disease through vaccination is continuous. Child care center owners impacted during the outbreak continue to be in contact with MDH staff through routine outreach and have shown that they are valuable partners in improving immunization coverage. In addition to the completion of the immunization report, several child care centers have requested that MDH provide training to parents and staff at the child care center. MDH staff complete about one training a month (usually on a Saturday) and have a waitlist. These trainings are in addition to the regular child care outreach described above and help build confidence in vaccines within the community.

Account Budget and Expenditures

Description	Budget	Encumbered	Expended	Available
Measles	**100,445**		**64,366**	**36,079**
Communications			762	
Employee Compensation			54,434	
Supplies			9,169	
Syphilis	**288,503**	**128,794**	**103,017**	**56,692**
Employee Compensation			46,826	
Grants		112,843	31,022	
Information Technology			2,121	
Other Operating		15,951	2,834	
Printing and Advertising			8,632	
Supplies			11,199	
Travel			383	
Tuberculosis	***213,885**		**121,258**	**92,627**
Employee Compensation			120,398	
Information Technology			168	
Other Operating			300	
Travel			392	
Total	**602,833**	**128,794**	**288,641**	****185,398**

Notes:

Financial data is as of January 2019.

*The Minnesota Department of Health received initial approval of $224,635 for the tuberculosis response. Following the fall 20-day Legislative Advisory Commission order for new federal funds, in December 2017 the department transferred $10,750 of the tuberculosis budget back to the reserve for the public health response account.

**The available balance of $185,398 was transferred back to the reserve for the public health response account in November 2018.