

## 2019 Model Practices

### Applicant Information

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### Size

Select a size: \*

☐ Small (0-50,000) ☐ Medium (50,000-499,999) ☒ Large (500,000+)

### Application Information

Local Health Department/Organization Name: \*

Oakland County Health Division

Title of Practice: \*

Hepatitis A Outbreak Response

Submitter Name: \*

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## Size

Select a size::

☐ Small (0-50,000)   ☐ Medium (50,000-499,999)   ☒ Large (500,000+)

## Practice Categories

Model and Promising Practices are stored in an online searchable database. Applications may align with more than one practice category. Please select the top three that apply most to your practice: : \*

- |   |   |  |  |   |
|---|---|--|--|---|
| <input type="checkbox"/> Access to Care           | <input type="checkbox"/> Advocacy and Policy Making | <input type="checkbox"/> Animal Control                    | <input type="checkbox"/> Coalitions and Partnerships | <input type="checkbox"/> Communications/Public Relations      |
| <input type="checkbox"/> Community Involvement    | <input type="checkbox"/> Cultural Competence        | <input checked="" type="checkbox"/> Emergency Preparedness | <input type="checkbox"/> Environmental Health        | <input type="checkbox"/> Food Safety                          |
| <input type="checkbox"/> Global Climate Change    | <input type="checkbox"/> Health Equity              | <input type="checkbox"/> HIV/STI                           | <input type="checkbox"/> Immunization                | <input checked="" type="checkbox"/> Infectious Disease        |
| <input type="checkbox"/> Informatics              | <input type="checkbox"/> Information Technology     | <input type="checkbox"/> Injury and Violence Prevention    | <input type="checkbox"/> Marketing and Promotion     | <input type="checkbox"/> Maternal-Child and Adolescent Health |
| <input type="checkbox"/> Organizational Practices | <input type="checkbox"/> Other                      | <input type="checkbox"/> Primary Care                      | <input type="checkbox"/> Quality Improvement         | <input type="checkbox"/> Research and Evaluation              |
| <input type="checkbox"/> Tobacco                  | <input type="checkbox"/> Vector Control             | <input type="checkbox"/> Water Quality                     | <input type="checkbox"/> Workforce                   |   |

## Overview: Provide a brief summary of the practice in this section (750 Word Maximum)

Your summary must address all the questions below:

- Brief description of LHD- location, demographics of population served in your community.
- Describe public health issue.
- Goals and objectives of the proposed practice.
- How was the practice implemented/activities.
- Results/Outcomes (list process milestones and intended/actual outcomes and impacts.
- Were all of the objectives met?
- What specific factors led to the success of this practice?
- Public Health impact of practice.
- Website for your program, or LHD.

With more than 1.2 million residents, Oakland County is the 2nd most populous Michigan county, with approximately 79% Caucasian, 14% African American, 6% Asian, and 4% Hispanic/Latino. Less than 0.5% are Native Hawaiian/Pacific Islander and 1% other race. Oakland County Health Division (OCHD) is the local public health agency for Oakland County. Over 350 employees work across 40+ programs providing health services for the public, businesses, and educational communities.

In August 2016, a hepatitis A (HAV) outbreak began in Michigan. Overall, cases have been reported in 11 other states and 35 of Michigan's 83 counties. In spring 2018, Michigan had the largest hepatitis A outbreak in the country with a hospitalization rate of over 80%. No common sources of food, beverages, or drugs have been identified as a potential source of infection. Transmission appears to be through direct person-to-person spread and illicit drug use. Those with history of injection and non-injection drug use, homelessness or transient housing, incarceration and those in direct contact with these individuals are thought to be at greatest risk. To date, there have been 120 confirmed outbreak-related cases and 97 hospitalizations (80.8%).

OCHD's outbreak response objectives included:

- Provide vaccination and education opportunities to targeted, high-risk populations
- Increase overall awareness about the HAV outbreak and infection prevention

In a unified response effort, vaccination clinics were held with community agencies serving high-risk populations. Vaccination clinics were held every weekday at the Oakland County Jail for individuals incarcerated within 24 hours, at homeless shelters, substance use treatment/methadone facilities; for food service workers following food-related HAV exposures; and in coordination with the State's mobile vaccination clinics at local bars targeting specifically men who have sex with men (MSM) and individuals with drug use history. OCHD encouraged local hospitals to promote the benefits of screening for risk factors to encourage higher vaccination rates. Outbreak updates were presented to hospital partners at regular partnership meetings and two special symposiums. The two symposiums gathered 132 healthcare facilities together including hospitals, long term care, hospice, home health, dialysis centers, federally qualified health centers, surgery centers, and physical therapy centers.

Public awareness was integral to response efforts. OCHD's Nurse on Call (NOC) public health telephone hotline provided outbreak information, general education, and resources such as local vaccination opportunities. Several promotions through social media, brochures, signage, bus advertisements, and at various community events occurred. The "Hep A-No Way!" campaign encouraged the public to be aware of symptoms and contact health care about vaccination. Messaging targeted high-risk groups and non-English speakers including Spanish, Arabic, and Mandarin. Awareness materials were disseminated to over 4,500 Oakland County food establishments. Large events were also given educational lawn signs and materials for employees and attendees.

Since August 2016, the following outcomes were achieved to help meet OCHD's objectives:

- Oakland County was removed as an outbreak jurisdiction on November 28, 2018 as there has not been two outbreak-related HAV cases reported within 100 days.
- 15,436 HAV vaccines administered. 12,398 administered during outreach activities and 2,043 to those potentially exposed as post-exposure prophylaxis.
- Conducted 460 vaccination clinics at the Oakland County Jail, homeless and warming shelters, substance use treatment/methadone facilities, restaurants, soup kitchen, health care and mental health clinics, a residential crisis center, schools, community service agencies, assisted living facility, a domestic abuse response center, a women's inpatient program, and an LGBTQ community center.
- NOC has fielded 1,556 HAV related calls.
- Created 8 press releases, 187 social media posts reaching an estimated 170,040 people, 30,832 handouts, and 1 advertisement campaign featured on 12 bus exteriors and 34 bus interiors traveling throughout Oakland County.

With neighboring jurisdictions still experiencing outbreak related cases, awareness and prevention education efforts continue with the broad community while collaboration with partners targets vaccination efforts in high-risk populations.

The existence of previously established collaborations made integrating response efforts successful. For example, the Homeless Healthcare Collaboration is comprised of 65 different human service and health care providers that address homeless and vulnerable populations' needs. These established partnerships made implementing strategies at local homeless shelters and domestic abuse response centers easily facilitated. Similarly, OCHD's Prescription Drug Prevention Task Force removed many barriers to vaccinating at treatment facilities and helped coordinate messaging. The Health Division's clinic services and HIV staff already regularly conduct STD testing at the jail and local LGBTQ center.

OCHD's impact of practice on HAV reduction and prevention of new cases demonstrates an effective, coordinated response to address emerging public health issues through collaboration, multi-disciplinary teamwork, incorporating the value of health communications and public health response planning.

**Website:**

- [www.oakgov.com/health](http://www.oakgov.com/health)
- <https://www.oakgov.com/health/information/Pages/Hepatitis-A.aspx>

A Model Practice must be responsive to a particular local public health problem or concern. An innovative practice must be -

1. new to the field of public health (and not just new to your health department) OR
  2. a creative use of an existing tool or practice, including but not limited to use of an Advanced Practice Centers (APC) development tool, The Guide to Community Preventive Services, Healthy People 2020 (HP 2020), Mobilizing for Action through Planning and Partnerships (MAPP), Protocol for Assessing Community Excellence in Environmental Health (PACE EH). Examples of an inventive use of an existing tool or practice are: tailoring to meet the needs of a specific population, adapting from a different discipline, or improving the content.
- Statement of the problem/public health issue.
  - What target population is affected by problem? (please include relevant demographics)
    - What is the target population size?
    - What percentage did you reach? What has been done in the past to address the problem?
  - Why is the current/proposed practice better? Is current practice innovative? How so/explain?
    - Is it new to the field of public health?
    - Is it a creative use of existing tool or practice?

What tool or practice did you use in an original way to create your practice? (e.g., APC development tool, The Guide to Community Preventive Services, HP 2020, MAPP, PACE EH, a tool from NACCHO's Toolbox etc.)

Is the current practice evidence-based? If yes, provide references (Examples of evidence-based guidelines include the Guide to Community Preventive Services, MMWR Recommendations and Reports, National Guideline Clearinghouses, and the USPSTF Recommendations.)

Hepatitis A cases range in age from 18-90 years old with an average of 45.5 years. The census estimated in 2017 that the population in Oakland County of those people over the age of 19 as 957,226 people. Using this information from the Michigan Care Improvement Registry, 9.4% of this overall population was vaccinated with at least one dose of Hepatitis A vaccine at baseline in August 2016. By November 17, 2018, the coverage increased to 13.8% which equals approximately 42,000 adults >20 years old who were vaccinated with at least their first dose of Hepatitis A vaccine. This doesn't include those who received doses to complete their Hepatitis A vaccination series. Although it's not well known what percentage of the population needs to be immune to halt the spread of person-to-person HAV, some agencies have estimated it to be as high as 80%. To raise the vaccination percentage of Oakland County's general adult population to 80%, approximately 675,000 people would need to be vaccinated which would be logistically difficult. Therefore, it is imperative to target those populations at greatest risk for Hepatitis A infection which, in this outbreak, are adults who are experiencing homelessness, have recently been incarcerated, both IV and non-IV drug users and men who have sex with men. During this outbreak, proxy populations were assessed to track progress. This included clients assessed at the Oakland County Jail, two different substance use disorder treatment facilities and clients counted in the Homeless Management Information System (HMIS). The following population sizes were assessed (may include duplicate clients):

- Oakland County Jail (8/29/17 through 10/31/18) – 17,340 clients
- Treatment Facility #1 (2/7/18 through 11/7/18) – 1,326 clients
- Treatment Facility #2 (4/5/18 through 11/1/18) – 147 clients
- Homeless Management Information System-HMIS (October 2017 through October 2018) – 827 clients

The following percentage of proxy target populations above were reached:

- **Oakland County Jail** – Of the 17,340 inmates assessed, approximately 74% of vaccine eligible and available inmates were vaccinated either with their first or final dose of Hepatitis A vaccine. The remaining inmates were deemed not eligible for vaccination because they already were vaccinated, not yet due for their next dose, or not available due to reasons, such as being in court or not available for transport, etc.
- **Treatment Facilities** – Of the 1,473 clients assessed at the two treatment facilities, 74% were vaccinated with either their first dose or final dose of Hepatitis A vaccine. Remaining clients were not eligible for vaccination because they already were vaccinated or not yet due for their next dose.
- **Homeless Management Information System (HMIS)** – Of the 827 clients entered into the HMIS from three different homeless shelters, approximately 20% received Hepatitis A vaccinations onsite at a shelter.

This recent HAV disease outbreak has been unprecedented in both scope, severity and within the high-risk populations affected. OCHD has previously conducted vaccine preventable disease reduction efforts, such as the national H1N1 flu outbreak, using a mass vaccination clinic model offering vaccination availability to the population broadly at limited sites. This approach has relied on the public transporting themselves to vaccination clinics and becoming self-encouraged to become vaccinated. In contrast, this HAV outbreak response utilized the strength of existing collaborations and relationships to specifically target high-risk populations for utmost impact. Vaccinations were made available directly at sites the target populations reside, seek shelter, utilize support services or recreate. Standards of care in jails, treatment facilities and other facilities were enhanced through the technical assistance provided by OCHD resulting in readily assessing and providing HAV vaccination in regular processes such as intake or treatment services.

This approach is a creative use of a recommended practice found in the Community Guide of Preventive Services to use a combination of community-based interventions to increase vaccination rates in targeted populations:

[www.thecommunityguide.org/findings/vaccination-programs-community-based-interventions-implemented-combination](http://www.thecommunityguide.org/findings/vaccination-programs-community-based-interventions-implemented-combination). Efforts involved coordination with OCHD's facilitated coalitions and existing partnerships between community organizations, local government, and vaccination providers to implement and coordinate client and community wide education, targeted case management, enhanced access to vaccination services and ensuring missed opportunities to vaccinate were minimized.

## LHD and Community Collaboration

The LHD should have a role in the practice's development and/or implementation. Additionally, the practice should demonstrate broadbased involvement and participation of community partners (e.g., government, local residents, business, healthcare, and academia). If the practice is internal to the LHD, it should demonstrate cooperation and participation within the agency (i.e., other LHD staff) and other outside entities, if relevant. An effective implementation strategy includes outlined, actionable steps that are taken to complete the goals and objectives and put the practice into action within the community.

- Goal(s) and objectives of practice
- What did you do to achieve the goals and objectives?
  - Steps taken to implement the program
- Any criteria for who was selected to receive the practice (if applicable)?
- What was the timeframe for the practice were other stakeholders involved?
- What was their role in the planning and implementation process?

- What does the LHD do to foster collaboration with community stakeholders? Describe the relationship(s) and how it furthers the practice goal(s)

- Any start up or in-kind costs and funding services associated with this practice? Please provide actual data, if possible. Otherwise, provide an estimate of start-up costs/ budget breakdown.

Enter the LHD and Community Collaboration related to your practice : \*

Oakland County's HAV outbreak response began in August 2016. Awareness and prevention education efforts continue throughout the broad community with collaboration from community partners to target vaccination efforts in high-risk populations despite Oakland County being recently removed as an outbreak jurisdiction.

OCHD's outbreak response objectives included:

- Provide vaccination and education opportunities to targeted, high-risk populations
- Increase overall awareness about the HAV outbreak and infection prevention

The criteria for those who received the practice included individuals identified as high risk for contracting hepatitis A and those at greatest risk for potentially spreading Hepatitis A, such as food handlers. Those who are thought to be at greater risk in this outbreak setting include individuals with a history of injection and non-injection drug use, those experiencing homelessness, in transient housing, incarceration and those persons in direct contact with high risk individuals. Coordination and collaboration within OCHD and among community partners was imperative. This coordination allowed for a timely, effective response to exposure incidents and the overall outbreak.

A strong and vital partnership was formed between Oakland County Jail (OCJ), Oakland County Sheriff's Office (OCSO), and OCHD Public Health Nursing Unit. Vaccination outreach was and continues to be provided each weekday morning at the Oakland County Jail. A list of inmates who have entered the jail within the previous 24 hours or over the weekend are identified and provided to the Public Health Nurse to begin facilitating a vaccination opportunity. This timeframe criteria allows the greatest number of inmates to be reached before they are released. Inmates are transported to the jail clinic where they attend an education session with a Public Health Nurse where information regarding Hepatitis A, the recent outbreak and the increased risk associated with incarceration is discussed. The Public Health Nurse's role is critical in relationship building with inmates, as trust is imperative to removing potential barriers to vaccination. Inmates are afforded an opportunity to ask questions and express any concerns. Many inmates believe the government is a harmful entity and the experienced nurses have developed an ability to gain trust in a short amount of time to remove barriers to vaccination and maximize vaccine uptake. The inmate's electronic immunization record is reviewed to determine eligibility. Inmates who have previously been vaccinated against Hepatitis A are reassured that they are protected. Inmates who are eligible for either a first or second dose vaccination are offered the Hepatitis A vaccination.

Equally important is the relationship forged with Oakland County Sheriff Deputies and jail leadership. Leadership at the jail has been extremely supportive, while deputies and jail staff work seamlessly with OCHD staff to transport and care for inmates.

Oakland Community Health Network (OCHN), the county's public mental health system, was also an important partner. Staff from OCHD and OCHN worked to coordinate prevention messaging and distribute educational materials at service provider locations. OCHN was essential in fostering OCHD's connections with local substance use disorder treatment centers to provide vaccination to a high-risk population.

Collaboration between different units within the health division was also essential to prevent the spread of HAV cases and secondary exposures. Key units included Communicable Disease, Public Health Nursing, Environmental Health, Emergency Preparedness, Central Support Services, and Health Education. The Communicable Disease Unit (CD) consists of public health nurses, epidemiologists, and clerical staff who work together and handle reporting and surveillance of hepatitis A cases. Additionally, the CD unit may be involved in vaccination efforts. HAV cases were classified by epidemiologists who account for a variety of factors including laboratory results, general symptoms, and client risk factors. Upon the presence of a positive HAV case or exposure to a confirmed case of hepatitis A, an investigation begins with reports from healthcare facilities and the collection of basic patient information before being sent to OCHD's Public Health Nurses. The public health nurses are pivotal in case investigations, as they collect information quickly and educate the patient to prevent secondary transmission to close contacts. The epidemiologists and public health nurses then began identifying potential sources of disease transmission, and coordinating the response to prevent secondary exposures. These efforts often involve employees working overtime and weekends to ensure individuals can receive vaccination within 14 days of their exposure

The response to prevent the spread of hepatitis A and secondary exposures also included coordination with OCHD's Environmental Health Services, Emergency Preparedness, Central Support Services, and Health Education units. Environmental Health Sanitarians conducted inspections at food establishments where large exposures occurred and delivered educational materials to managers. Food service managers and staff at affected locations collaboratively adhered to Health Division guidance and engaged in proper precautionary measures at their establishments. Sanitarians were also instrumental in holding educational workshops for food service managers about ways to prevent foodborne illnesses especially Hepatitis A. All educational materials, social media campaigns and advertising were created by Health Education staff with input from Communicable Disease, Public Health Nursing, Environmental Health, Central Support Services and Administration. Further, staff from all disciplines within the Health Division were called upon to assist in various roles during large vaccination outreach efforts such as when an exposure occurred at a large Michigan based festival in August 2018 and OCHD rapidly coordinated to vaccinate festival staff, volunteers and direct contacts.

Lastly, OCHD worked closely with Michigan Department of Health and Human Services (MDHHS) to monitor the outbreak. OCHD



Emergency Preparedness staff was the designated lead to submit weekly situation reports to MDHHS to measure response efforts. Health Education, Public Health Nursing, and Emergency Preparedness staff worked cohesively to report the reach of communication efforts, vaccination clinic outcomes, and any notable barriers to response. In addition, multiple OCHD staff participated in weekly conference calls with affected jurisdictions. Conference calls facilitated by MDHHS offered an opportunity to learn how other counties were combatting the outbreak and share our response activities.

As proven in the collaborative response described above, OCHD values the importance of collaboration to prevent disease and improve health. Community stakeholders are engaged routinely through coalition efforts, emergency response planning, routine meetings, and communication methods so they are easily called upon to assist and provide resources within the partnership to address and prevent emerging issues such as the hepatitis A outbreak. Key stakeholders such as OCHN, OCSO, mental health and substance use treatment providers, and homeless shelters are active partnership members which made for steady communication, collaboration, and coordination.

The Hepatitis A outbreak response effort was partially supported by grant funding from MDHHS. The total grant funding amount of \$203,000 supported internal and outreach Hep A vaccination clinics, staffing and supplies such as Immunoglobulin, biologics units, portable coolers, wagons, office supplies and storage cabinet. The funding was also used to help support an awareness campaign that included mailing educational materials to restaurants, bus and mobile advertisement, paid social media content, and printed educational materials.

Fiscal Year 2018

Program Costs:

• Salaries/Fringe Benefits - Partial funding of vaccination outreach staff	\$67,034
• Advertising/Postage – Bus & billboard, social media boosts & mailings	\$34,718
• Printing/Translation of Printed Materials – Printed educational materials	\$8,160
• Supplies – Supplies to support vaccination outreaches	\$26,071
• Equipment – Biologic refrigeration units, portable coolers, wagons, etc.	\$39,642
• All Other Costs – Insurance, indirect, administrative overhead, etc.	\$26,627

In addition to the funding from MDHHS, Oakland County used locally funded positions to provide vaccines, coordinate community outreaches, develop educational materials, create marketing campaigns and provide administrative oversight of the funding and staff.

## Evaluation

Evaluation assesses the value of the practice and the potential worth it has to other LHDs and the populations they serve. It is also an effective means to assess the credibility of the practice. Evaluation helps public health practice maintain standards and improve practice. Two types of evaluation are process and outcome. Process evaluation assesses the effectiveness of the steps taken to achieve the desired practice outcomes. Outcome evaluation summarizes the results of the practice efforts. Results may be long-term, such as an improvement in health status, or short-term, such as an improvement in knowledge/awareness, a policy change, an increase in numbers reached, etc. Results may be quantitative (empirical data such as percentages or numerical counts) and/or qualitative (e.g., focus group results, in-depth interviews, or anecdotal evidence).

- What did you find out? To what extent were your objectives achieved? Please re-state your objectives.
- Did you evaluate your practice?
  - List any primary data sources, who collected the data, and how? (if applicable)
  - List any secondary data sources used. (if applicable)
  - List performance measures used. Include process and outcome measures as appropriate.
  - Describe how results were analyzed.
  - Were any modifications made to the practice as a result of the data findings?

Please enter the evaluation results of your practice : \*

The objectives of OCHD's outbreak response objectives included:

- Provide vaccination and education opportunities to targeted, high-risk populations
- Increase overall awareness about the HAV outbreak and infection prevention

Overall, objectives were achieved as Oakland County is no longer considered an outbreak jurisdiction in the state of Michigan which is defined as having two outbreak related Hepatitis A cases reported within a 100-day period.

Reaching targeted high-risk populations with easily accessible vaccination opportunities and easy to understand educational prevention messages proved to be successful in some populations and more challenging in others. 15,436 HAV vaccines have been administered and vaccination efforts amongst incarcerated individuals was extremely successful based on significant partnership and leadership with the Oakland County Jail. 329 outreach vaccination clinics occurred at the jail alone. Although 20% of the proxy target population received a HAV vaccination, connecting with individuals experiencing homelessness proved to be challenging due to transient living situations.

The objective of increasing outbreak awareness and how to prevent infection across all communities was also successful. Based on reach of social media messaging alone, OCHD hepatitis A prevention messaging reached 184,152 people. Coupled with the projected reach of the large-scale bus and mobile advertisements, the total estimated reach of all advertising and prevention messaging was 430,000 people.

During and after implementation of response efforts, various process and outcome evaluation methods were conducted to assess the effectiveness of the program. The following performance measures were monitored:

- Weekly percent of assessed Oakland County Jail incoming inmates who were not eligible for Hepatitis A vaccine (i.e. already vaccinated, not yet due for subsequent dose or had contraindications).
- Weekly percent of eligible inmates accepting vaccination.
- Assessing for the following risk factors in a sampling of clients visiting the Health Division STD clinic: men who have sex with men, history of intravenous drug use, sexual partner of someone with a history of intravenous drug use and history of incarceration.
- Daily reported cases of Hepatitis A and investigating potential inclusion in the outbreak. Communicable Disease unit staff collected risk factor history, clinical information and coordinated submission of clinical samples to the MDHHS Bureau of Laboratories for genotyping.
- Number of outbreak related cases was reported by the Communicable Disease unit weekly.

Public Health Nurses and clerical staff assessed clients for vaccine eligibility at various high-risk community outreach sites such as the Oakland County Jail, drug treatment centers and homeless shelters. They recorded which clients were eligible to receive vaccination (e.g. not yet vaccinated, due for a subsequent dose, no contraindications) and which of those clients accepted and were vaccinated. This monitoring helped to determine the need for the ongoing heightened vaccination efforts.

Staff also assessed risk factors (e.g. drug use, recent incarceration, homelessness, etc.) of clients upon registration and during clinic visits. Risk factors were entered into the electronic medical records to better evaluate how many clients receiving HAV vaccination had risk factors and how many had more than one risk factor.

The Communicable Disease unit including Public Health Nurses, epidemiologists and clerical staff received reports of Hepatitis A cases and investigated them for inclusion in the outbreak. Information was collected and entered into the Michigan Disease Surveillance System.

Secondary data of clients experiencing homelessness was entered into the Homeless Management Information System at local shelters. In addition, Michigan Care Improvement Registry and census population data was used to evaluate the percentage of the county's general population vaccinated against Hepatitis A

Evaluation results were analyzed from primary and secondary results. At the Oakland County Jail, all inmates listed on daily spreadsheets are accounted and input into a database. This database reflects who was vaccinated, who was not and why. The percentage of vaccine ineligible inmates is calculated using the weekly number of incoming inmates who were ineligible for vaccination divided by the total number of incoming inmates for the same week. Since January 1, 2018, the weekly percentage of incoming inmates whom are ineligible for vaccination has consistently averaged 27% ranging from 21% to 33%. The percentage of vaccine for eligible inmates was calculated using the weekly number of inmates accepting vaccination divided by the total number eligible to receive Hepatitis A containing vaccine during that week. Since January 1, 2018, the weekly percentage of incoming inmates accepting Hepatitis A vaccine has consistently averaged 69% ranging from 60% to 77%. Applicable data is entered into OCHD's electronic medical record where it is then transferred into Michigan Care Improvement Registry (MCIR).

OUCHD quickly learned that many incarcerated persons were concerned about receiving a vaccine in the jail and the stigma associated with their incarceration. To eliminate a barrier to vaccination, inmates are assured that their immunization record will reflect that the site of vaccination was OCHD, not the jail.

Primary data was exported from the Health Division's STD clinic electronic medical record and clients with completed risk factor questions was analyzed. Of the 1,069 with risk factor information, 30% had only one of the four risk factors assessed and an additional 2% had more than one risk factor reported.

Risk factors of confirmed outbreak Hepatitis A cases was monitored by OCHD's Communicable Disease Unit to help guide targeted outreach efforts. Of the 120-confirmed outbreak related Hepatitis A cases, 37% had documented substance abuse, 8% were MSM, 7% were experiencing homelessness or had transient living conditions and 4% were incarcerated at the time of their illness onset.

At this time, daily vaccination efforts at the Oakland County Jail continue due to the plateauing of ineligible incoming inmates and a steady percentage of inmates willing to be vaccinated. This factor continues to be evaluated to ensure appropriate resource allocation. OCHD STD clients continue to be assessed for additional factors and offered Hepatitis A vaccinations. A list of assessment questions is presented to clients at registration and they non-verbally indicate which ones they qualify for. Almost a third of clients meets the eligibility criteria. The Communicable Disease Unit will continue to monitor for cases, risk factors and investigate reported cases as the outbreak continues in some neighboring jurisdictions.



Sustainability is determined by the availability of adequate resources. In addition, the practice should be designed so that the stakeholders are invested in its maintenance and to ensure it is sustained after initial development (NACCHO acknowledges that fiscal challenges may limit the feasibility of a practice's continuation.)

- Lessons learned in relation to practice.
- Lessons learned in relation to partner collaboration. (if applicable)
- Did you do a cost/benefit analysis? If so, describe.
- Is there sufficient stakeholder commitment to sustain the practice?
  - Describe sustainability plans.

Please enter the sustainability of your practice : \*

Major lessons were learned regarding partner engagement strategies. Although OCHD partners with many community stakeholders regularly, every prevention and response effort varies and brings new opportunities for improvement. OCHD approached each partner as someone who can help alleviate this disease outbreak. This helped elicit the partner as an equal colleague, gain their trust and engage them into providing solutions.

At Hepatitis A outreach sites, OCHD remained flexible and adjusted the clinic process to best suit the needs of the population. In the jail, trust and education was of vital importance. Inmates were provided both written and verbal explanation of the HAV disease risk associated with incarceration and the benefits of vaccination. This resulted in the vaccination acceptance rate remaining at around 70% in an environment that could easily turn adversarial. A strategy was used to empower inmates with education and knowledge necessary to fully understand the health benefits of vaccination and disease risk of hepatitis A as it relates to incarceration. OCHD Public Health Nurses emphasized to the inmates that vaccination against Hepatitis A was optional. In a jail setting an inmate has limited control, but empowering inmates to make an educated decision about vaccination proved beneficial to vaccine uptake.

It has also been equally important to continuously provide feedback to the partner and ask for feedback from them. An example is the partnership with Oakland County Jail leadership. Leadership has been consistently informed of the vaccination outcomes, updates about the ongoing outbreak, and daily logistical challenges and successes during clinics. The Health Division has regular communication about scheduling and the continued efforts as the statewide outbreak is reduced in its severity and scope.

Lastly, it cannot be understated how important it is to identify key community stakeholders during times of non-crisis and engage in relationship building before a crisis happens. Many outreach clinics occurred at agency locations where partnerships already exist. For example, the Health Division has hosted and coordinated the Homeless Healthcare Collaboration for over six years. This group brings together over 100 individuals and 65 different hospitals and service agencies to work together to improve the healthcare of people experiencing homelessness. This partnership resulted in Public Health Nurses regularly visiting the centers and other local shelters, specifically the HOPE Adult and Recuperative Care Centers, to help coordinate the healthcare of their clients. When the need arose to offer Hepatitis A vaccination to this high-risk population, there was a tremendous amount of support from shelter leadership and clients already trusted the Public Health Nurses and OCHD services.

External community partners are extremely willing to continue Hepatitis A vaccination and prevention efforts. As a result, continued Health Division response plans will be dictated by both future funding opportunities and the epidemiology of the outbreak. OCHD will continue daily jail outreach, biweekly outreach to treatment facilities, and monthly outreach to homeless shelters for the considerable future. The collaborative model used in this response effort is easily replicable by other local public health jurisdictions.

## Additional Information

How did you hear about the Model Practices Program?: \*

- |   |   |  |  |   |
|---|---|--|--|---|
| <input checked="" type="checkbox"/> I am a previous Model Practices applicant | <input type="checkbox"/> At a NACCHO conference | <input type="checkbox"/> Colleague in my LHD | <input type="checkbox"/> Colleague from another public health agency | <input type="checkbox"/> E-Mail from NACCHO |
| <input type="checkbox"/> Model Practices Brochure                             | <input type="checkbox"/> NACCHO Connect         | <input type="checkbox"/> NACCHO Exchange     | <input type="checkbox"/> NACCHO Exhibit Booth                        | <input type="checkbox"/> NACCHO Website     |
| <input type="checkbox"/> Public Health Dispatch                               |   |  |  |   |

Have you applied for Model Practices before?: \*

- ☐ No, this is my first time applying.    ☒ Yes, I have applied in the past.

If you answered yes to the question above, please let us know the year and award type. :

Multiple years

