

Infectious Disease & Immunization Forum Webinar: Hepatitis A 2017 Outbreak Response – Lessons from Big Cities

November 3, 2017

Hepatitis A 2017 Outbreak Response – Lessons from Big Cities

Friday, November 3, 2017, 12:00 – 1:30 pm Eastern Time

Adobe Connect: http://naccho.adobeconnect.com/hepareponse/event/event_info.html

Time	Item
12:00 – 12:10 PM	Welcome <ul style="list-style-type: none">Michelle Cantu, Director, Infectious Disease and Immunizations, NACCHO
12:10 – 12:30 PM	San Diego <ul style="list-style-type: none">Dr. Sayone Thihalolipavan, Deputy Public Health Officer, Public Health Services, County of San Diego Health and Human Services Agency
12:30 – 12:45 PM	Detroit <ul style="list-style-type: none">Dr. Suzanne White, Chief Medical Advisor, Detroit Health Department
12:45 – 1:00 PM	Los Angeles <ul style="list-style-type: none">Dr. Sharon Balter, Director, Acute Communicable Disease Control, Los Angeles County Department of Public Health
1:00 – 1:30 PM	Q&A <ul style="list-style-type: none">Moderated by Michelle Cantu, Director, Infectious Disease and Immunizations, NACCHO
1:30 PM	Closing

Presentation materials and recording will be made available. In addition, please complete the evaluation form which will be sent to you after the webinar.

San Diego

HEPATITIS A OUTBREAK SAN DIEGO COUNTY



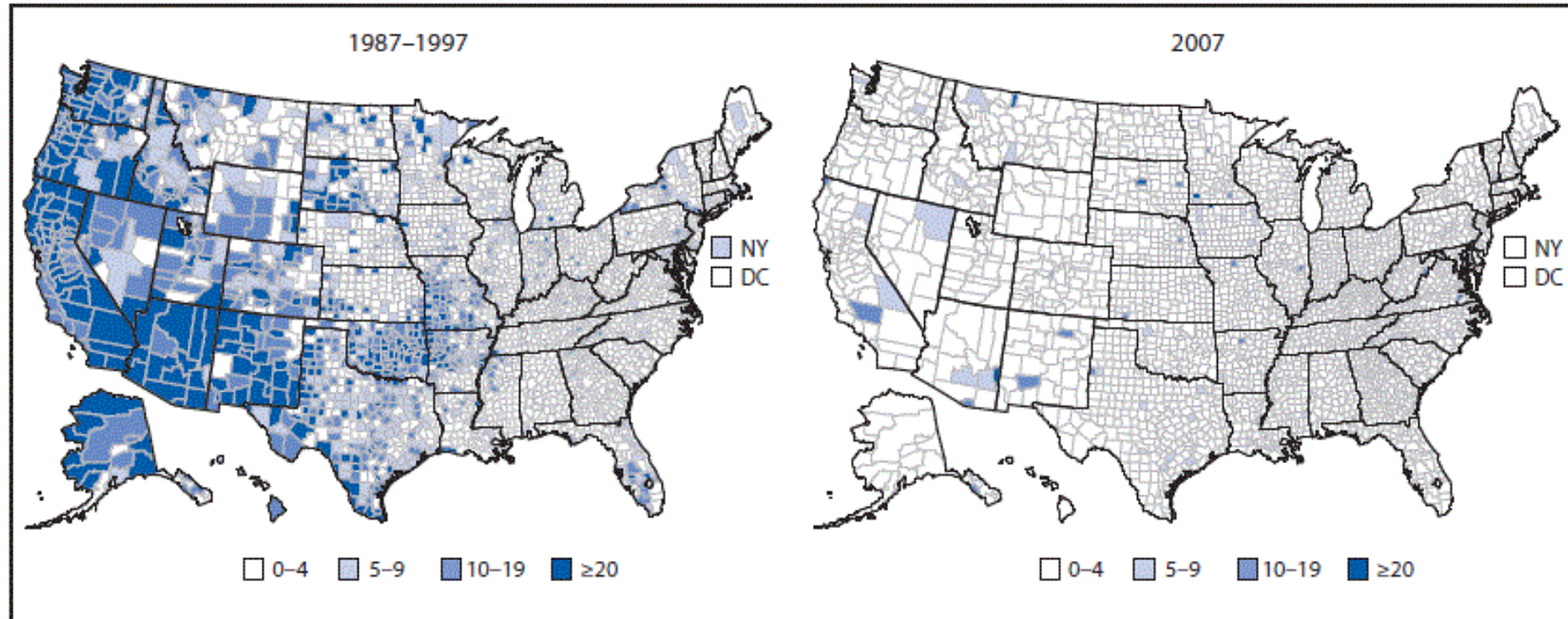
**Sayone Thihalolipavan MD, MPH
Deputy Public Health Officers
Health and Human Services Agency
County of San Diego**

**NACCHO Hepatitis A 2017 Outbreak Response Webinar
November 3, 2017**



**LIVE WELL
SAN DIEGO** Image: CDC

**Incidence* of reported acute hepatitis A cases
National Notifiable Diseases Surveillance System, United States,
1987–1997[†] (pre-vaccine) and 2007**



* Rate per 100,000 population.

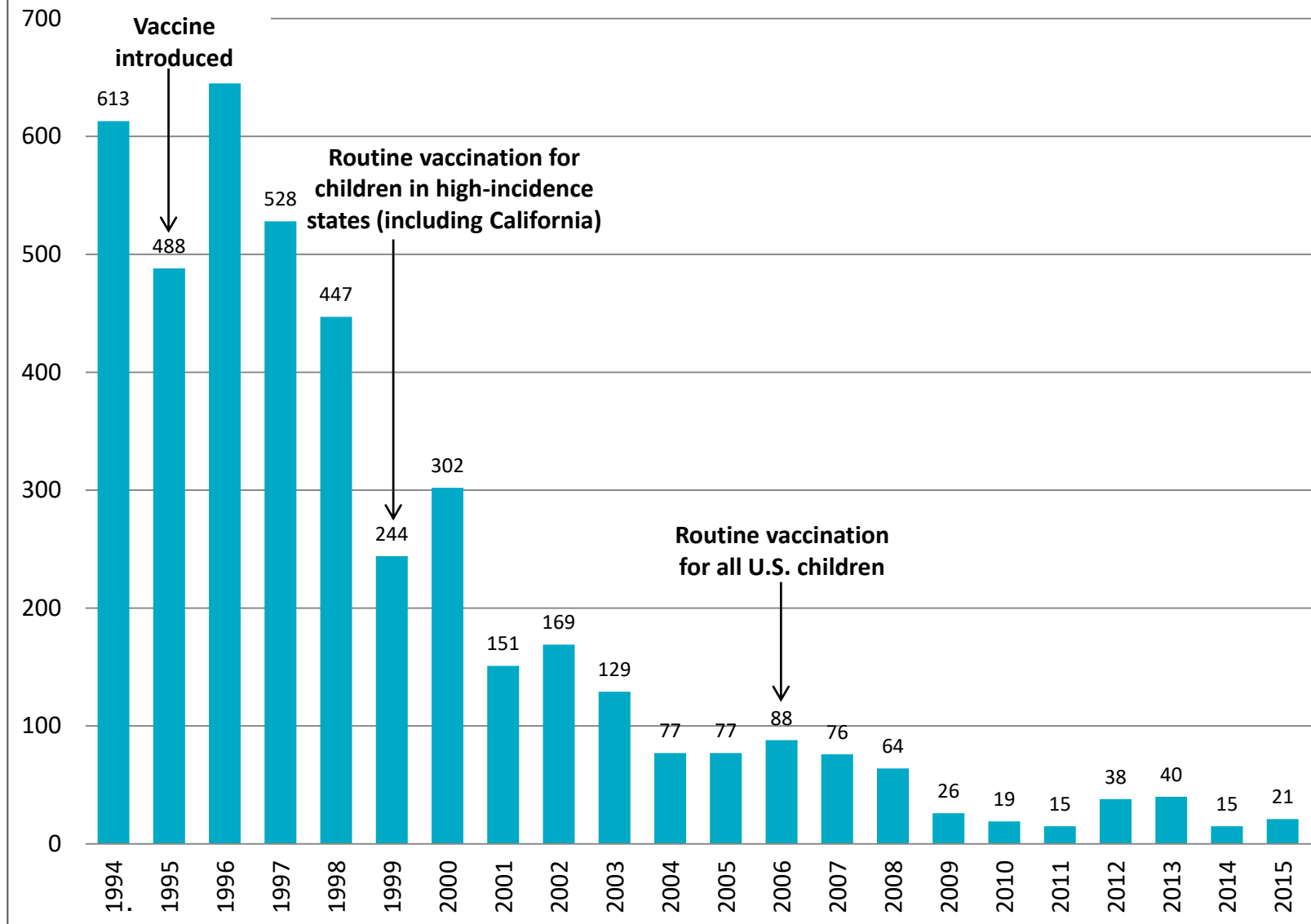
[†] Annual average incidence.

Source: CDC. Downloaded 7/1/17 from:
<https://www.cdc.gov/mmwr/volumes/65/su/su6501a6.htm>

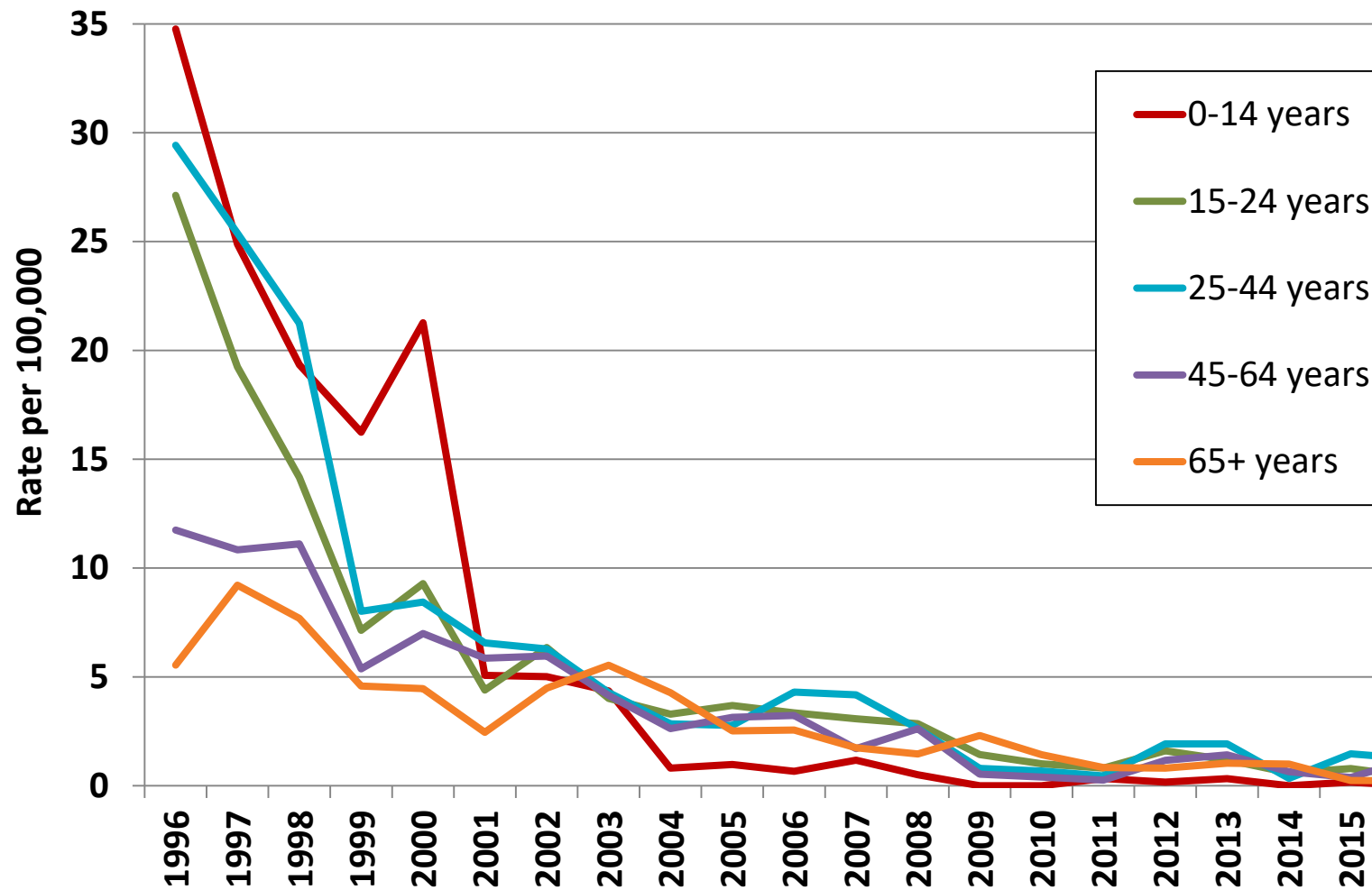


**LIVE WELL
SAN DIEGO**

All Hepatitis A Cases, San Diego County 1994 - 2015



Rate of Hepatitis A Virus Infection by Age San Diego County, 1996-2015



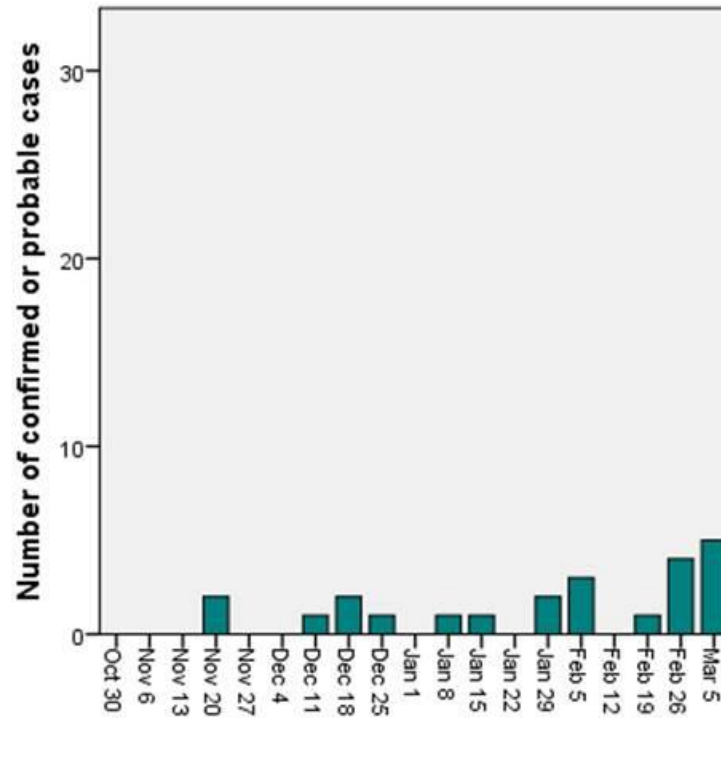
Data are provisional and subject to change as additional information becomes available. Grouped by CDC disease years.

HEPATITIS A – EPI CURVE



Outbreak-associated Hepatitis A cases by onset week

11/1/2016- 3/11/2017



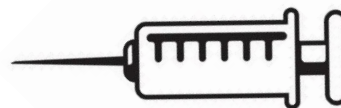
Outbreak Determined

Consulted with CDPH and CDC
Sent Health Alert with local Health Officer
recommendation to also immunize homeless

*Date of specimen collection or report used if onset date unknown; dates may change as information becomes available



- **Vaccinate**



- **Sanitize/Hygiene**



- **Educate**

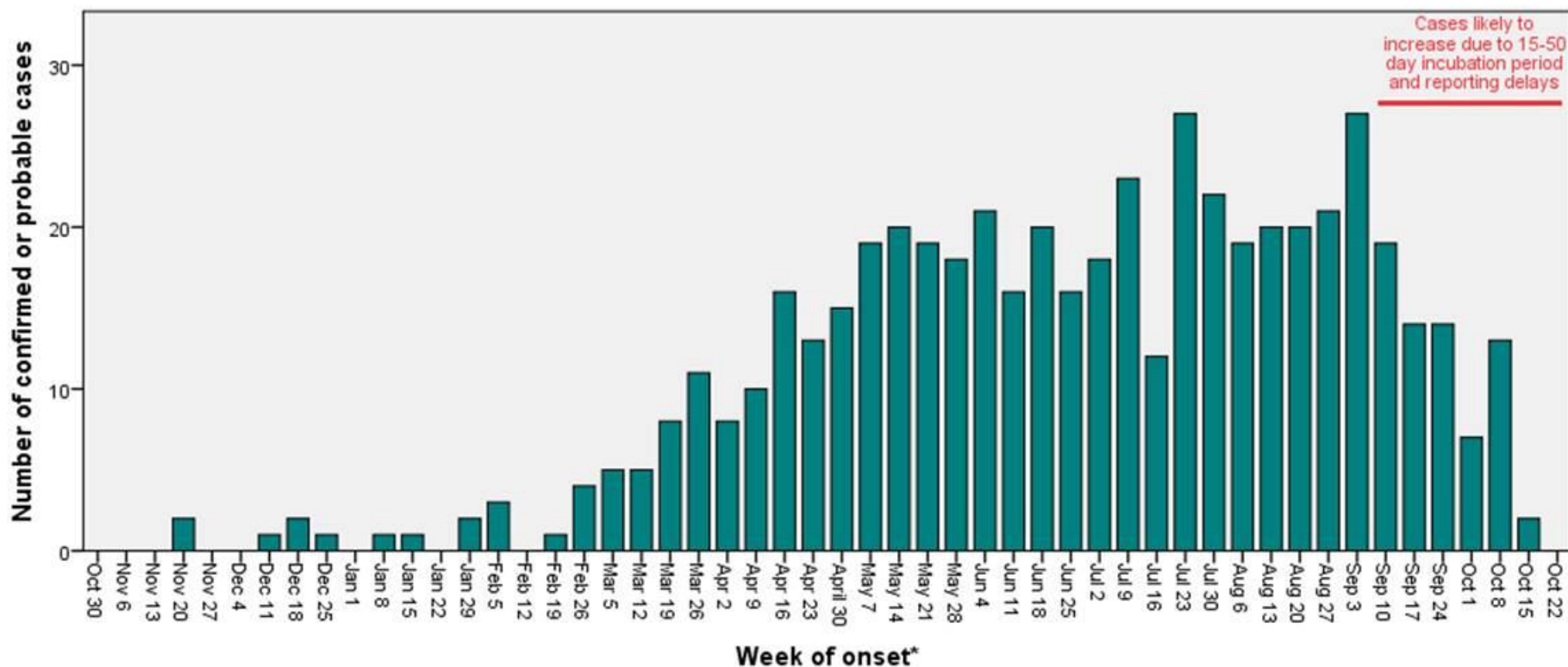


HEPATITIS A – EPI CURVE

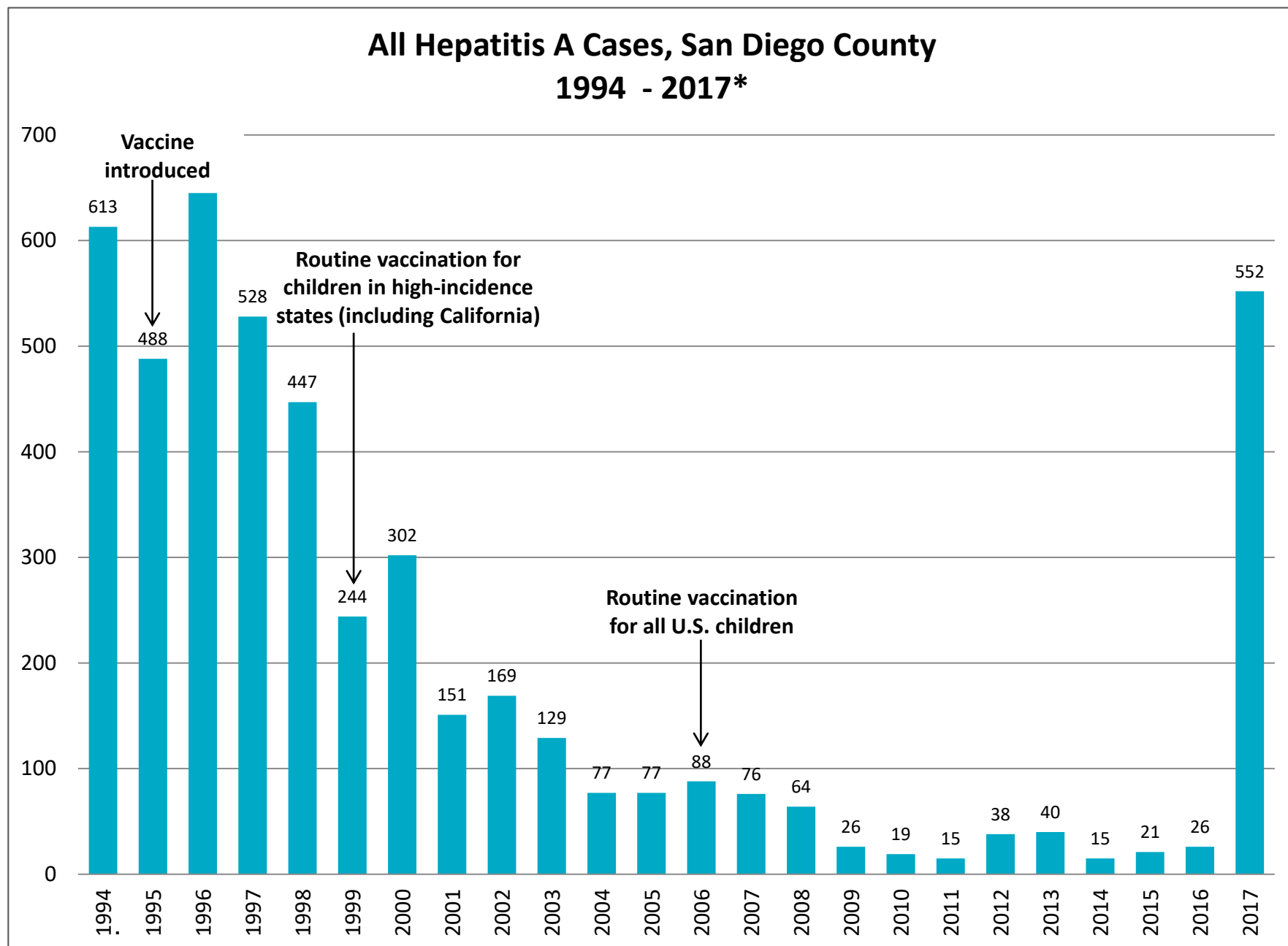


Outbreak-associated Hepatitis A cases by onset week

11/1/2016–10/26/2017, N = 536*



*Date of specimen collection or report used if onset date unknown; dates may change as information becomes available



*Year to date. Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services, 10/26/17

HEPATITIS A OUTBREAKS, UNITED STATES 1995 - PRESENT

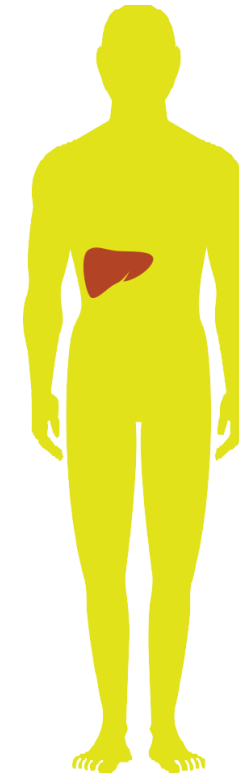


YEAR	LOCATION	METHOD OF SPREAD/SOURCE	#CASES	#HOSPITALIZATIONS	#DEATHS
2003	PA & OH	Food (Green Onions)	660	Unknown	3 (0.5%)
2016-17	SAN DIEGO	Close Person to Person Contact	536	369 (69%)	20 (3.7%)
2016-17	MICHIGAN	Close Person to Person Contact	457	370 (86%)	18 (4.2%)
2016	HAWAII	Food (Raw Scallops)	292	74 (25%)	0
2013	10 states	Food (Pomegranate Seeds)	165	71 (43%)	0

HEPATITIS A, SAN DIEGO

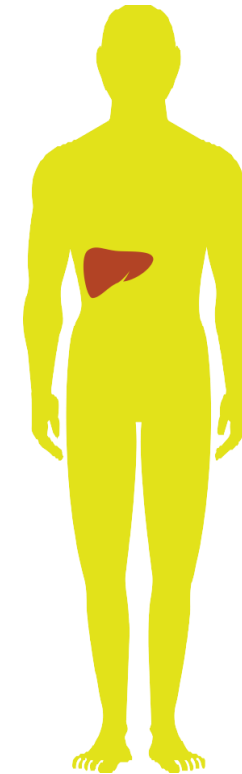


- 536 confirmed/probable outbreak cases
 - Onset dates from 11/22/16 through 10/26/17
 - 369 (69%) hospitalizations, 20 (3.7%) deaths
 - 363 (68%) male, 173 (32%) female
 - Age range 5-96 (median 43)
- Suspected exposure type
 - 172 (32%) homeless and illicit drug use
 - 87 (16%) homeless only
 - 64 (12%) illicit drug use only
 - 152 (28%) neither
 - 61 (11%) unknown





- Co-infections
 - 74/418 (17.7%) with hepatitis C
 - 22/427 (5.2%) with hepatitis B
- 24 non-outbreak cases meet CSTE definition (not included in count)
- 32 suspect cases under investigation
- Linked cases in other CA counties, AZ, CO, RI, UT





- Activation of Incident Command System and response to the outbreak focused on a three-pronged strategic approach to:
 - **Vaccinate**
 - **Sanitize**
 - **Educate**
- Conducted surveillance, case investigations, and post-exposure prophylaxis. Worked closely with Department of Environmental Health on possible food sources and collaboration with other partners at local, state, and federal levels.
- Local health emergency declared on **9/1/17**.
- Governor declared a State of Emergency on **10/13/17**.

CHALLENGES



- Disease-specific
 - Long incubation period; infectious period before & after symptom onset
 - Lack of effectiveness of hand sanitizer
- Population-specific
 - May be difficult to reach for interview
 - May not interface with or be able to access existing vaccination sites
 - May not have adequate access to sanitation
- Other
 - Low vaccination rates amongst adults with CDC indications
 - Isolation of discharged medically stable yet infectious homeless individuals
 - Potential of cross over into other populations or general public
 - Risk communication as relates to those at risk vs. “worried well”

CDC VACCINATION RECOMMENDATIONS



- All children
- Travelers to [countries with high or intermediate endemicity of HAV infection](#)
- Men who have sex with men
- Intravenous and non-intravenous illicit drug users
- People with chronic liver disease
- Persons with clotting factor disorders
- Close contacts of newly arriving international adoptees
- Persons working with nonhuman primates
- Also noted - any person who desires immunity






- 3/17: Homeless individuals
- 5/17: Homeless services providers and volunteers, public safety workers who work with at-risk, behavioral health who work with at-risk, and selected healthcare workers who work with at-risk
- 6/17: Sanitation and janitorial workers who clean up after at-risk
- 8/17: Food handlers



VACCINATION SITES



- Over 90,000 vaccinations offered at:
 - Public Health Centers
 - Medical institutions

 - Jails during intake and to inmates
 - Substance use disorder treatment programs
 - Homeless service providers
 - Single Room Occupancy hotels
 - Encampments, ravines, culverts, and other areas in the field with homeless outreach workers, sometimes including homeless outreach team workers or police officers;
 - Emergency Departments
- 
- Enhanced Approach
- New Approach

EXPANDING VACCINATION CAPACITY

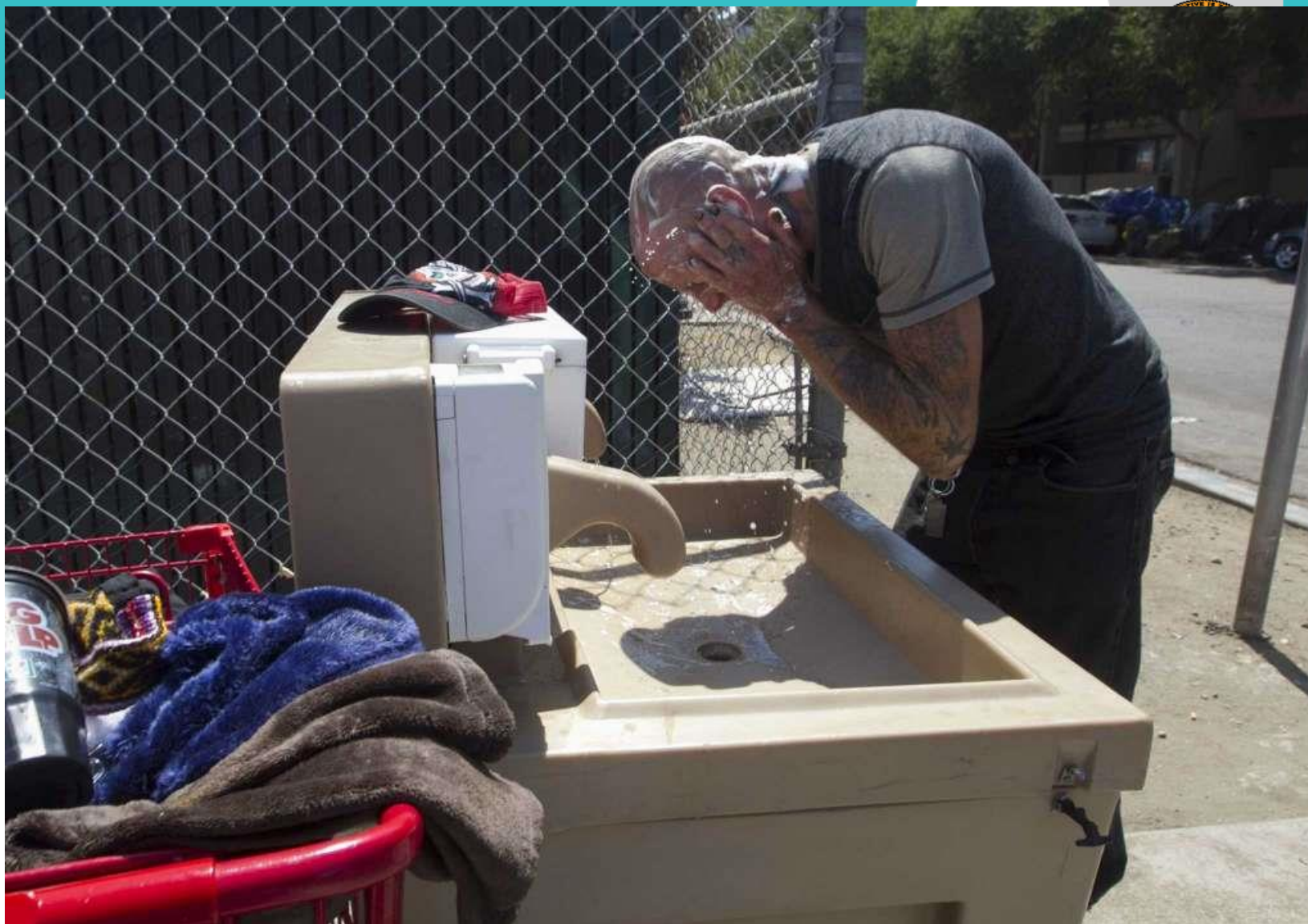


- Vaccinations offered by:
 - County-employed nurses, including behavioral health settings
 - Contract or temp agency nurses
 - Local Medical Reserve Corps volunteers
 - Medical community, including pharmacists
 - County Medical Society Foundation volunteers
 - Paramedics – required local scope of practice expansion

- Note: Coupling with flu vaccinations and other services when possible



- Indoor sanitation
 - Disinfection guidance for indoor areas available
 - Food inspectors provide guidance information to operators during more than 8,265 inspections
- Outdoor sanitation and access to hygiene
 - Sanitation of streets being conducted in some areas
 - 149 handwashing stations placed
 - Public restroom access expanded where possible
 - 8,172 hygiene kits distributed

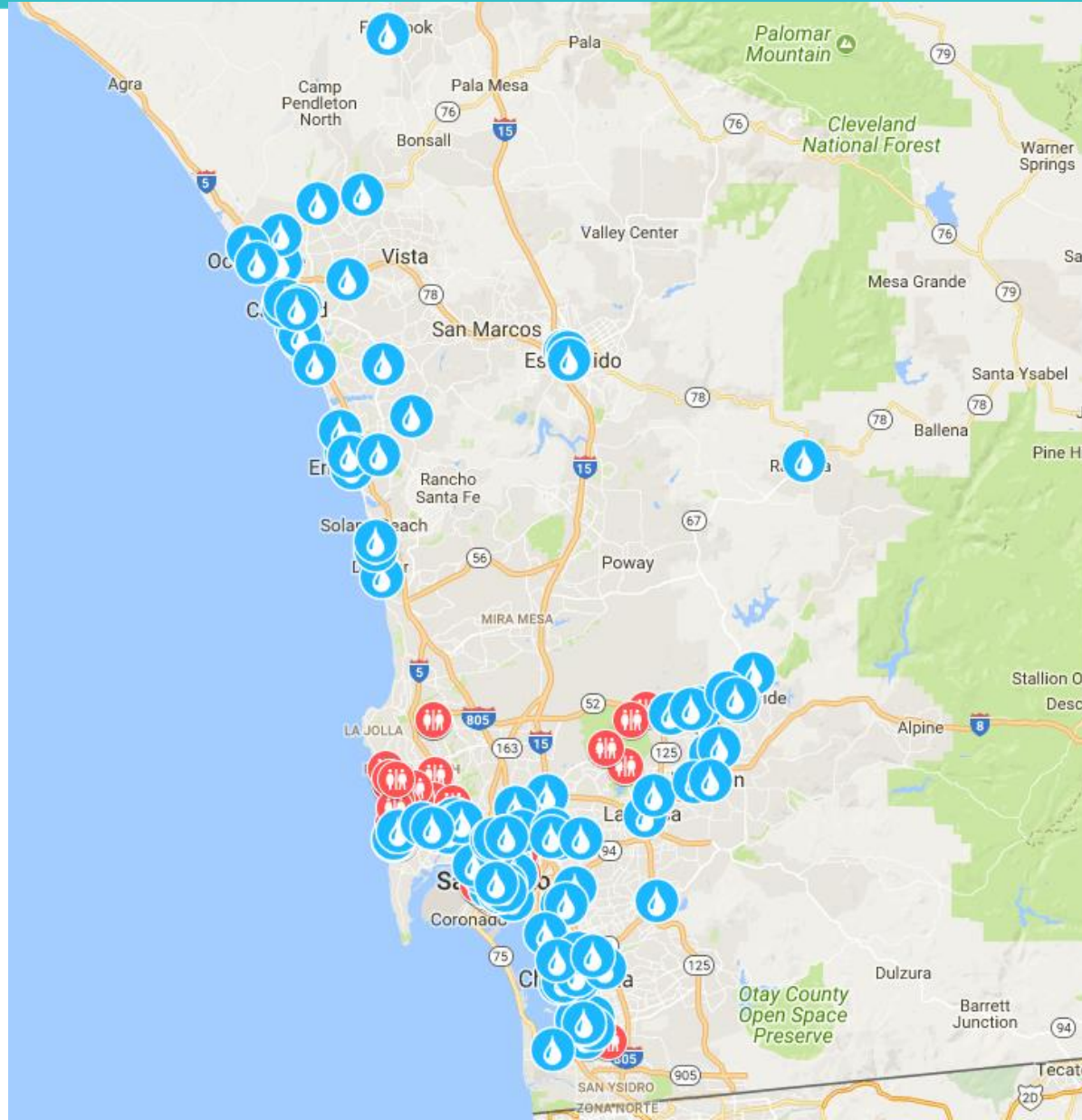


Handwashing station being used in downtown San Diego on 9/2 (Photo: San Diego Union Tribune)



City contractor cleaning a street in downtown San Diego on 9/11 (Photo: San Diego Union Tribune)

MAP OF HANDWASHING STATIONS AND PUBLIC BATHROOMS ON 211 PAGE



<http://211sandiego.org/resources/health-wellness>



- 14 news stories, 2 press conferences
- Provided 146 education events, with a total reach to 3,070 attendees
- Conducted meetings with homeless service providers (more recently with HUD), behavioral health providers, and city leadership of local jurisdictions
- Distributed flyers, posters, FAQs, and more – available on [webpage](#)
- Activated 2-1-1, non-emergency hotline, for general inquiries
- Creating guidance for “infrequent volunteers” during holidays and for annual Point in Time Count of homeless
- Enhancing communication to MSM population



- 10 CA Health Alert Network (CAHAN) notifications
- Convened health care providers and attended high level health care stakeholder meetings to encourage:
 - Recognition and active reporting of suspect cases to allow interviews to be conducted before patient lost to follow up
 - Vaccination of population at risk and/or those recommended by CDC
 - Checking of San Diego Immunization Registry before vaccination to avoid redundant doses and noting doses given afterwards
 - Avoiding discharge of infectious patients to the street by using established temporary housing process
 - Use of standard precautions



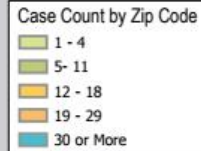
- Notified over 14,000 permitted food facilities in the region
- Emailed information and prevention guidance to:
 - 8,000 food facilities and partners
 - 3,300 HAZMAT permitted businesses
 - 2,700 agricultural growers and farmers
 - 2,400 public pool facilities
- Stakeholder notifications to over 11,800 food industry businesses
- Informed over 8,265 operators during food inspections
- Outreach to 3,150 additional businesses, permittees and community groups

IT TAKES A VILLAGE...



- Multiple County Departments involved
- Local medical providers and related organizations
- Local homeless service and behavioral health providers and related organizations
- Local municipalities
- Other local partners including but not limited to local restaurant association, food and beverage association, faith-based organizations, food banks and pantries, hotel motel association, farmers market and agricultural growers, chamber of commerce
- State partners including but not limited to California Department of Public Health, California Emergency Medical Services Authority, California Department of Pesticide Regulation, and San Diego River Conservancy
- Federal partners
 - Centers for Disease Control and Prevention
 - Housing and Urban Development

Number of Hepatitis A Outbreak Associated Cases with Available Location Data by Zip Code(s)



536
Cases
as of 10/26/2017

These data reflect the patient's reported Zip Code and may not necessarily reflect the Zip Codes where the Hepatitis A case exposure occurred.

1,348

Vaccination Field Events
4/7/2017 - 10/26/2017

Zip Codes with a population of less than 5,000 residents are combined with neighboring Zip Codes.

21,299

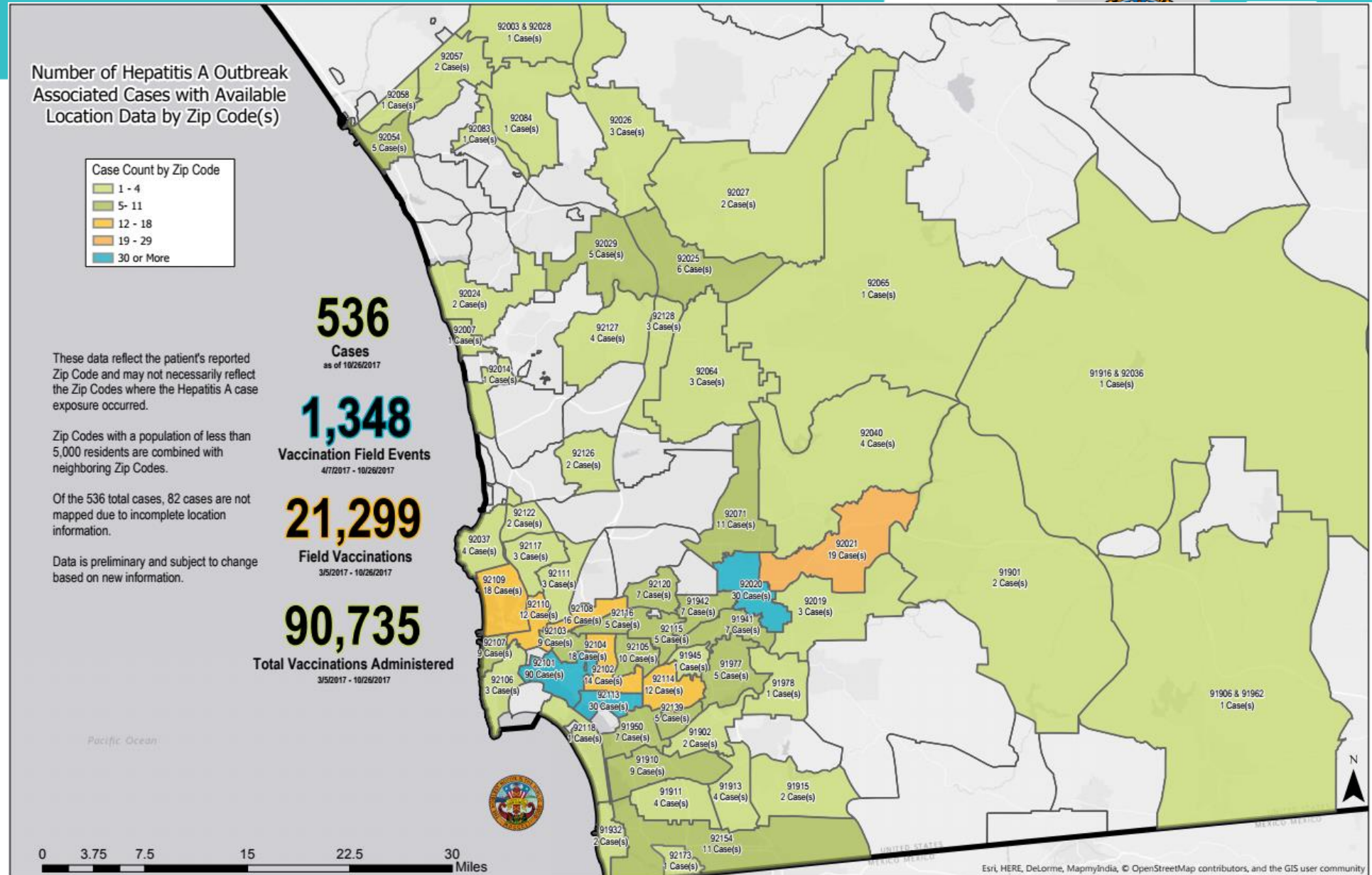
Field Vaccinations
3/5/2017 - 10/26/2017

Of the 536 total cases, 82 cases are not mapped due to incomplete location information.

90,735

Total Vaccinations Administered
3/5/2017 - 10/26/2017

Data is preliminary and subject to change based on new information.



Hepatitis A Outbreak Vaccination Field Event Locations

- Vaccination Field Events**
- Foot Team
 - Mobile Van
 - POD
 - Zip Code Boundaries

Vaccination field events include stationary mass vaccination clinics, vaccination efforts using a mobile van, and non-stationary "foot team" efforts in the field.

Field vaccinations are the number of vaccinations given during vaccination field events.

Total vaccinations administered represents total vaccinations administered countywide. These include but are not limited to vaccinations from vaccination field events, vaccinations administered in clinical settings (i.e., Jails, Public Health Centers, Emergency Departments, Community Clinics, Pharmacies), vaccinations given to at-risk professionals, and vaccinations given to individuals after exposure to a Hepatitis case.

Zip Codes with a population of less than 5,000 residents are combined with neighboring Zip Codes.

Data is preliminary and subject to change based on new information.

Pacific Ocean

536

Cases
as of 10/26/2017

1,348

Vaccination Field Events¹
4/7/2017 - 10/26/2017

21,299

Field Vaccinations
3/5/2017 - 10/26/2017

90,735

Total Vaccinations Administered
3/5/2017 - 10/26/2017

0 3.75 7.5 15 22.5 30 Miles



¹Map points display only 1,335 Vaccination Field Events

Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community



LIVE WELL
SAN DIEGO



For more information contact:

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Public Health Services

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Email: sayone.thihalolipavan@sdcounty.ca.gov

[Webpage: http://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/community
epidemiology/dc/Hepatitis_A.html](http://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/community_epidemiology/dc/Hepatitis_A.html)

Detroit



Hepatitis A Outbreak in SE Michigan

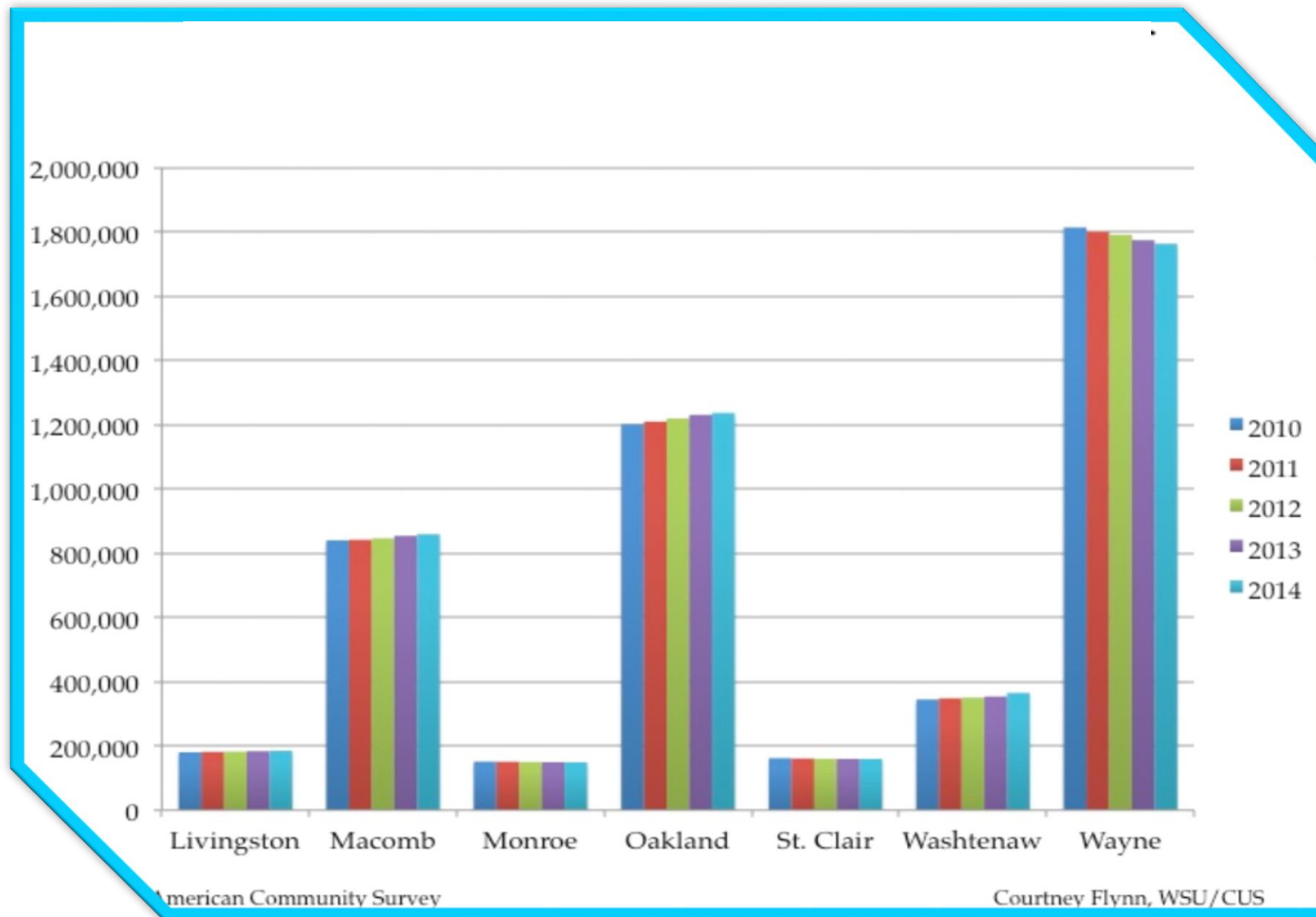
Suzanne R. White, MD, MBA

Chief Medical Advisor
Detroit Health Department
Michael E. Duggan, Mayor

Detroit



Detroit and Southeastern Michigan

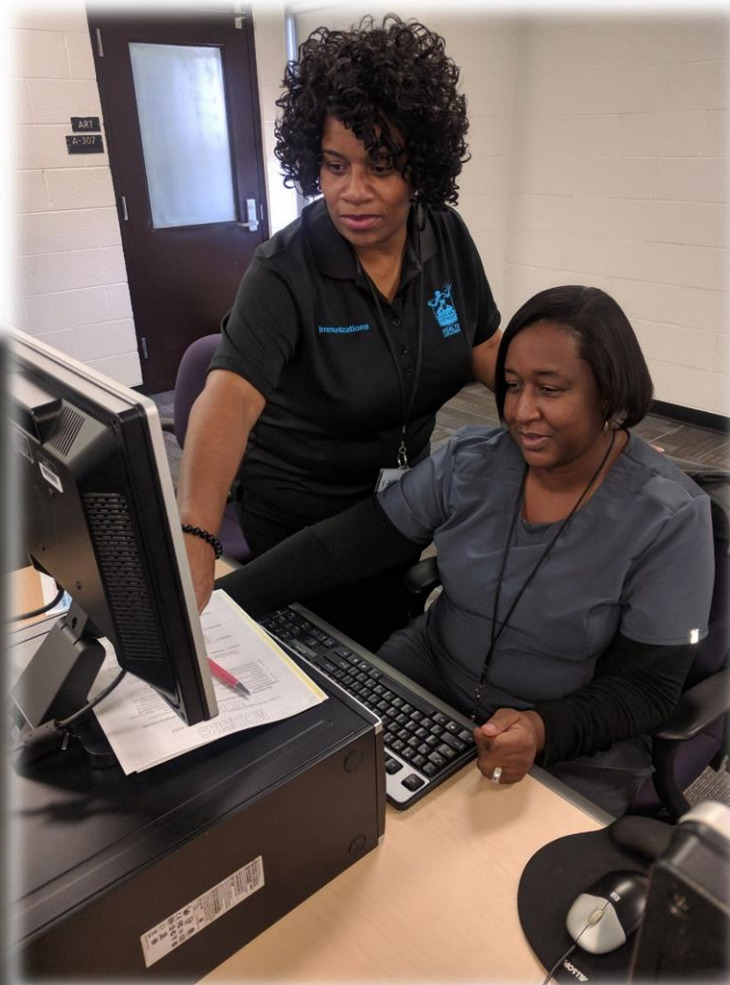




Dr. Joneigh Khaldun



Dr. Kenetra Young



Nurse Denise Cade & Team

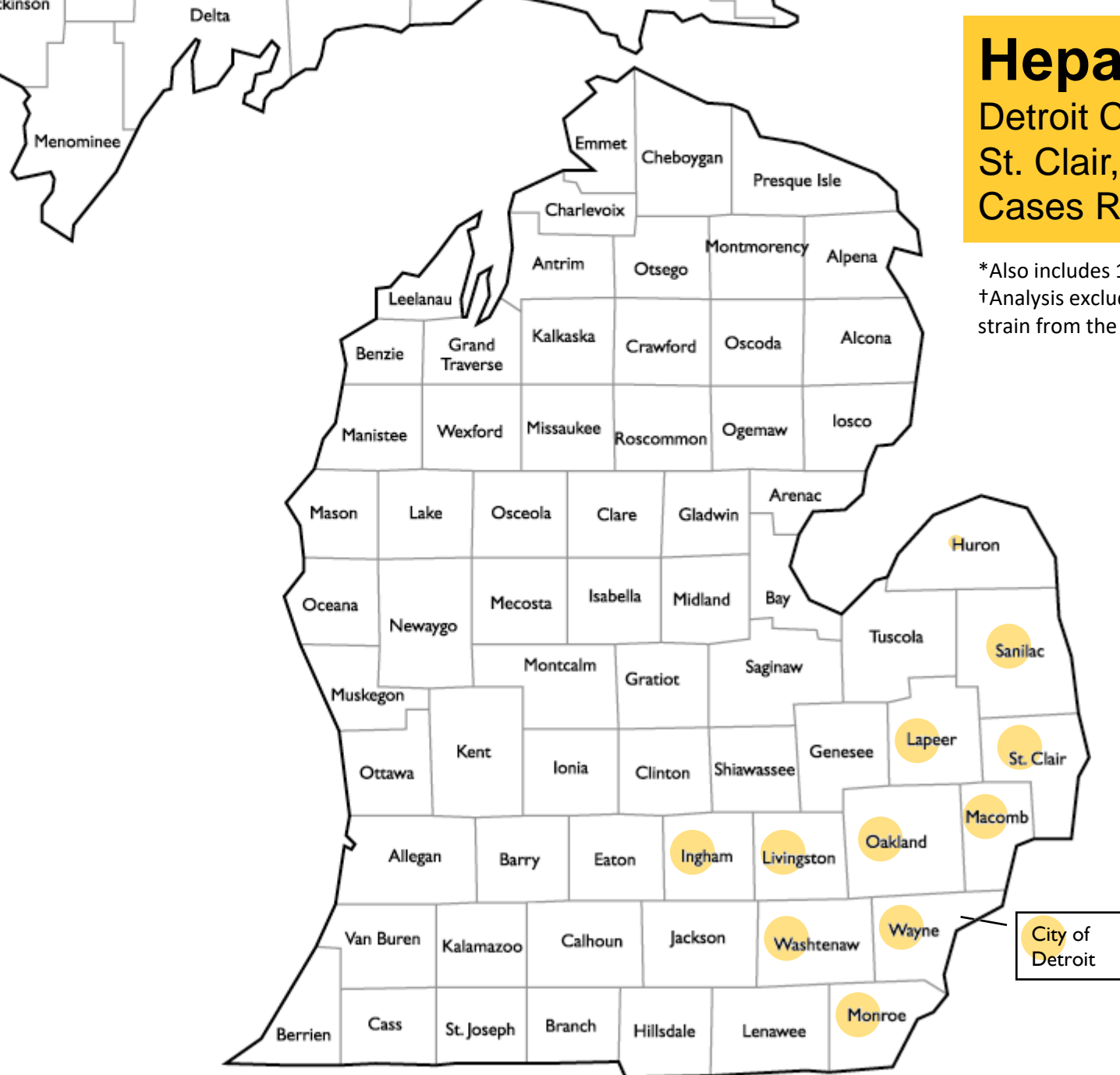
Hepatitis A in Southeast Michigan, Since 8/1/16

Large increase in monthly cases

Initial cases include persons with substance abuse disorder, homelessness, transient living, incarcerated, MSM, food workers

No common source of infection identified



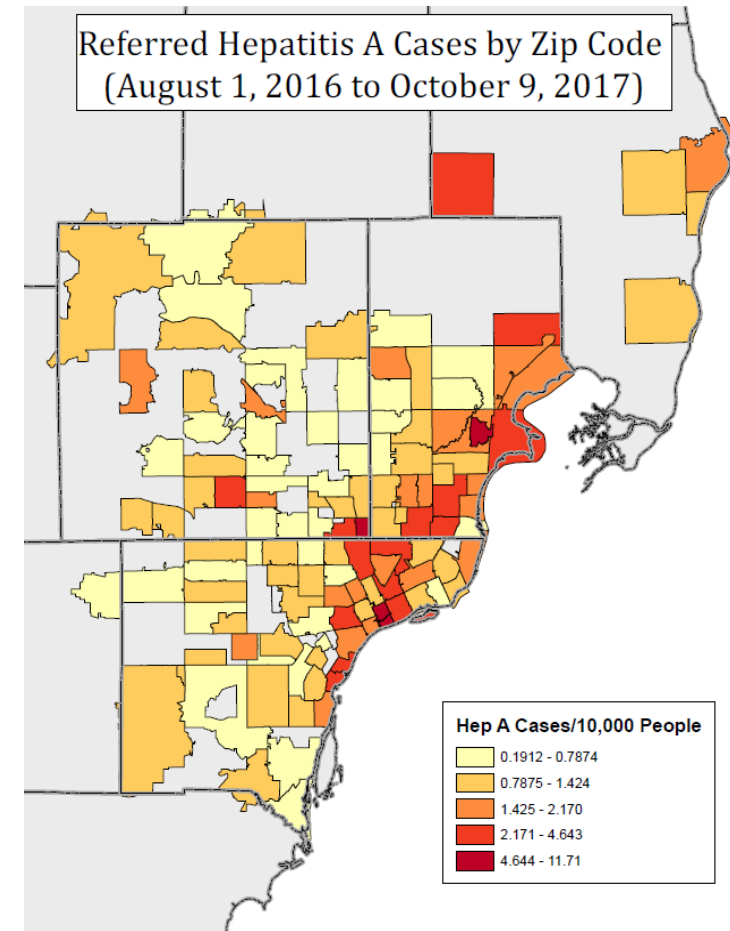


Hepatitis A Cases in Southeast MI

Detroit City, Lapeer, Livingston, Macomb, Monroe, Oakland, St. Clair, Sanilac, Washtenaw & Wayne * for Confirmed Cases Referred August 1, 2016 — October 18, 2017†

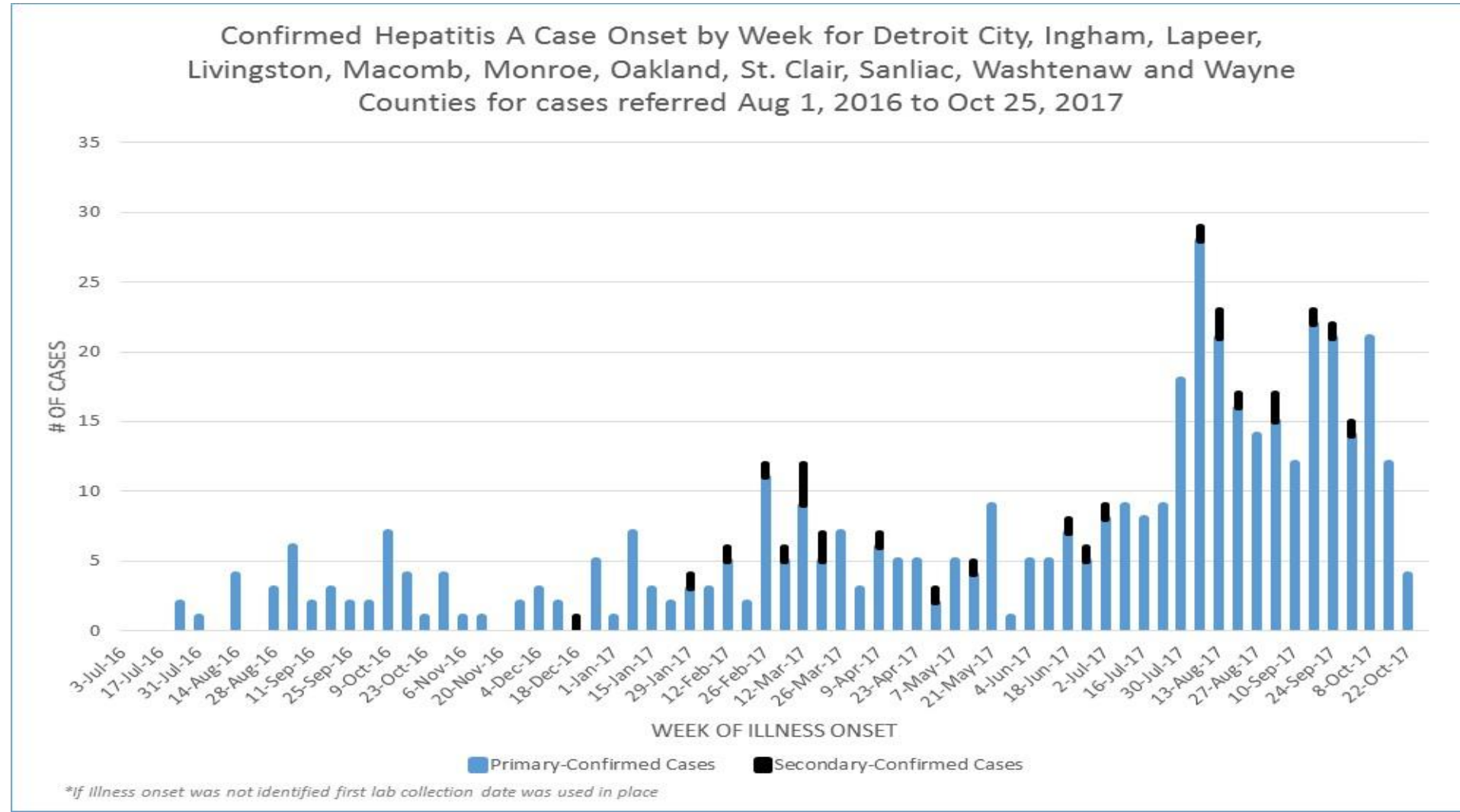
*Also includes 1 case from Huron County that was found to have the outbreak strain when tested by CDC.

†Analysis excludes cases that have been submitted to CDC and found to be PCR Negative, have a different strain from the outbreak strains, or have international travel in the 2-6 weeks prior to illness onset.



Confirmed Hepatitis A Cases*

(*By Week of Illness Onset)



Southeast Michigan Hepatitis A Outbreak Cases and Deaths

From August 1, 2016 to October 26, 2017

*Table updated weekly by 4:00pm each Friday at www.mi.gov/hepatitisAoutbreak

Cases	Hospitalizations	Deaths
457	370 (85.6%)	18 (4.2%)

Please note: Affected jurisdictions include City of Detroit, and Lapeer, Livingston, Macomb, Monroe, Oakland, St. Clair, Sanilac, Washtenaw & Wayne Counties. Table does not include all reported hepatitis A cases in the region; only those that are identified as outbreak-related. More descriptive data on the current outbreak can be found within the [Comprehensive Summary](#). Data are provisional and subject to change.

Source: www.mi.gov/hepatitisAoutbreak

Epi Summary for Hepatitis A Cases in Southeast MI (Detroit City, Ingham, Lapeer, Livingston, Macomb, Monroe, Oakland, St. Clair, Sanilac, Washtenaw & Wayne)* for Confirmed Cases Referred August 1, 2016-October 25, 2017†						
	H2 CY2016	Q1 CY2017	Q2 CY2017	Q3 CY2017	MTD Oct-17	Total
Total # of Cases (by Onset)	56	71	66	212	52	457
# Primary Confirmed Cases w/ Outbreak Strains	21	33	39	48	0	141
# Primary Confirmed Cases w/out sequencing	34	29	22	155	51	291
# Secondary Confirmed Cases	1	9	5	9	1	25
Data below excludes secondary cases						
Female, n (%)	20 (36.4)	21 (33.9)	21 (34.4)	83 (40.9)	15 (29.4)	160 (37.0)
Hospitalized, n (%)	48 (87.3)	52 (83.9)	53 (86.9)	171 (84.2)	46 (90.2)	370 (85.6)
Min Age (years)	24	21	24	20	20	20
Max Age (years)	83	86	86	87	74	87
Median Age (years)	45	43.5	39	42	36	42
No Substance Abuse + No Homeless/Transient Living, n (%)	29 (52.7)	18 (29.0)	15 (24.6)	84 (41.4)	13 (25.5)	159 (36.8)
Documented Substance Abuse, n (%)	16 (29.1)	37 (59.7)	38 (62.3)	92 (45.3)	24 (47.1)	207 (47.9)
Homeless/Transient Living, n (%)	9 (16.4)	8 (12.9)	11 (18.0)	17 (8.4)	4 (7.8)	49 (11.3)
History of Hepatitis B, n (%)	3 (5.5)	3 (4.8)	2 (3.3)	5 (2.5)	0 (0.0)	13 (3.0)
History of Hepatitis C, n (%)	9 (16.4)	14 (22.6)	22 (36.1)	60 (29.6)	14 (27.5)	119 (27.5)
MSM, n (%) *Data includes only male cases	1 (2.9)	1 (2.4)	2 (5.0)	6 (5.0)	11 (30.6)	21 (7.7)
Correctional Facility Inmates, n (%)	1 (1.8)	2 (3.2)	4 (6.6)	16 (7.9)	4 (7.8)	27 (6.3)
Healthcare Worker, n (%)	1 (1.8)	0 (0.0)	1 (1.6)	6 (3.0)	3 (5.9)	11 (2.5)
Food Worker, n (%)	2 (3.6)	1 (1.6)	2 (3.3)	9 (4.4)	3 (5.9)	17 (3.9)
Deaths, n (%)	4 (7.3)	4 (6.5)	3 (4.9)	6 (3.0)	1 (2.0)	18 (4.2)
Cases LTF	14 (25.5)	19 (30.6)	21 (34.4)	43 (21.2)	2 (3.9)	99 (22.9)
*Also includes 1 case from Huron County that was found to have the outbreak strain when tested by CDC †Analysis excludes cases that have been submitted to CDC and found to be PCR Negative, have a different strain from the outbreak strains, or have international travel in the 2-6 weeks prior to illness onset. ‡ Source of data: MDSS						

Strategy to Stop the Spread

Strategies to Stop the Spread

- Understanding the Risk
- Prevention
 - Outreach
 - Education
 - Vaccination
- Response
 - PEP
 - Protecting Key Personnel

Persons at Increased Risk for Hepatitis A or for Severe Outcomes of Infection

- Persons who use injection and non-injection illegal drugs
- Persons who are homeless
- Persons who are incarcerated
- Persons who work with the high risk populations listed above
- Persons who have close contact, care for, or live with someone who has HAV
- Persons who have sexual activities with someone who has HAV
- Men who have sex with men
- Travelers to countries with high or medium rates of HAV
- Persons with chronic liver disease, such as cirrhosis, hepatitis B, or hepatitis C*
- Persons with clotting factor disorders (hemophilia)
- Any person who is concerned about HAV exposure and wants to be immune

*Individuals with chronic liver disease (e.g., cirrhosis and hepatitis C) may not be at increased risk of getting HAV infections but are at increased risk of having poor outcomes if they are infected with HAV.

Note: Following its introduction in 1996, hepatitis A vaccine was initially recommended for children and adolescents in communities with high or intermediate HAV endemicity (regularly found). Since 2006, ACIP has recommended universal childhood vaccination for use at age 12-23 months in all states (though not required vaccination for child care or school entry).

Hepatitis A Outbreak Website

The screenshot shows the MDHHS website header with navigation links: FAQs, Contact Us, MDHHS Home, and MI.gov. The main navigation bar includes: Assistance Programs, Adult & Children's Services, Safety & Injury Prevention, Keeping Michigan Healthy, Doing Business with MDHHS, and Inside MDHHS. The left sidebar lists various health topics, with 'Hepatitis' highlighted under 'Chronic Diseases'. The main content area is titled 'Hepatitis A Southeast Michigan Outbreak' and includes a breadcrumb trail: MDHHS / KEEPING MICHIGAN HEALTHY / CHRONIC DISEASES / HEPATITIS. The text describes the outbreak, its public health response, and provides a table of cases and deaths as of October 18, 2017. A photograph shows a healthcare worker administering a vaccine to a child.

Keeping Michigan Healthy

MDHHS / KEEPING MICHIGAN HEALTHY / CHRONIC DISEASES / HEPATITIS

Hepatitis A Southeast Michigan Outbreak

Public health officials and the Michigan Department of Health and Human Services (MDHHS) are continuing to see an elevated number of hepatitis A cases in the City of Detroit, and counties of Lapeer, Livingston, Macomb, Monroe, Oakland, St. Clair, Sanilac, Washtenaw, and Wayne.

Since the beginning of the outbreak in August 2016, public health response has included increased healthcare awareness efforts, public notification and education, and outreach with vaccination clinics for high-risk populations. 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, and incarceration are thought to be at greater risk in this outbreak setting. Notably, this outbreak has had a high hospitalization rate.

Southeast Michigan Hepatitis A Outbreak Cases and Deaths as of October 18, 2017*
*Table will be updated weekly by 4:00pm each Friday

Cases	Hospitalizations	Deaths
431	348 (85.7%)	17 (4.2%)

Please note: Affected jurisdictions include City of Detroit, and Lapeer, Livingston, Macomb, Monroe, Oakland, St. Clair, Sanilac, Washtenaw & Wayne Counties. Table does not include all reported hepatitis A cases in the region; only those that are identified as outbreak-related. More descriptive data on the current outbreak can be found within the [Comprehensive Summary](#). Data are provisional and subject to change.

In support of efforts, MDHHS has a website for the hepatitis A outbreak that has important and timely information, available at:

www.mi.gov/hepatitisAoutbreak

- The website contains a brief case count, hospitalized cases, and deaths for an at-a-glance review that is updated **each** Friday.
- A Comprehensive Summary with case demographics and risk profiles is also available along with communication documents and educational materials available for download.

Printed Materials

(Over 10,000 Distributed)

What is happening in Michigan?

There is a large outbreak of hepatitis A virus in our communities. Since August 1, 2016, over 350 people have been sick with hepatitis A and 14 people have died. The majority of people sick with hepatitis A live in Southeast Michigan, but recently hepatitis A has spread outside of this area to other parts of our state. Many people in the current outbreak are at risk for a more serious illness, with nearly 9 out of every 10 people hospitalized after getting sick.

People have become sick after:

- injecting drugs or using street drugs (including pain killers)
- close contact with someone who has hepatitis A
- going to jail
- paying for sex or sex work
- eating food prepared by someone who is sick

We need your help to stop the outbreak. For more information, visit www.mi.gov/hepatitis. Please read this brochure to help you and your friends and family.

What is hepatitis A?

Hepatitis A is an easily spread virus that causes liver swelling and damage.

The hepatitis A virus affects people in different ways:

- People usually start to feel badly 2 to 6 weeks after they get the infection
- Some people can have a mild illness lasting for several weeks
- Other people can become very sick for many months and a few may die of liver failure

Symptoms of hepatitis A include:

- nausea & vomiting
- pain in the abdomen (the belly area)

How is it spread? Who is at higher risk?

A person can get hepatitis A when they eat, drink, or touch their mouth with food, liquid or objects (including their hands) that have come into contact with stool (poop) from an infected person.

People who are more likely to get hepatitis A are those who:

- Share injection and non-injection street drugs (including pain killers)
- Have sexual activities with someone who has hepatitis A
- Have close contact, care for, or live with someone who has hepatitis A
- Are men who have sex with men

The other way to prevent the spread of infection is to wash hands with soap and water:

- after using the bathroom
- after diaper changes
- before handling food

What do I do if a friend or family member is sick?

If you, your friend, or a family member becomes sick, please see a health care provider.

Get tested

The health care provider will also be able to help you decide if you need to go to the hospital.

If your test is positive, the local health department will talk with you about how you may have been exposed to hepatitis A.

The local health department will also need to know who has been in close contact with you to offer them vaccination or an immune boost for protection.

More information on hepatitis A

Call your health care provider, your local health department, or go to:

Michigan Department of Health and Human Services (MDHHS)
www.mi.gov/hepatitisAoutbreak

Centers for Disease Control and Prevention (CDC)
www.cdc.gov/hepatitis

Help stop the spread of hepatitis A in Michigan communities

Protect yourself
Protect others
Get vaccinated

For information on where to get vaccinated.

Contact your health care provider, your pharmacy, or your local public health department:

Detroit Health Department
 Phone: 313-876-4000
<http://www.detroitmi.gov/health>

Macomb County Health Department
 Phone: 586-469-5372
www.macombgov.org/publichealth

Oakland County Health Division
 Phone: 1-800-848-5533 or
 Email: noc@oakgov.com
www.oakgov.com/health

Monroe County Health Department
 Phone: 734-240-7800

St. Clair County Health Department
 Phone: 810-987-5300
www.schealth.co

Wayne County Department of Health, Veterans & Community Wellness
 Phone: 734-727-7078

For additional local health departments
 Phone: 517-335-8159

Don't wait!

If you or a loved one have a history of substance abuse, please reach out to a health care provider to discuss ways you are at higher risk for hepatitis A and how you can prevent the disease.

MDHHS
 Michigan Department of Health & Human Services
 Rev. 10/2017

Protect yourself from hepatitis A...

Get vaccinated!

Protégase de la hepatitis A...

¡Vacúnese!

What is hepatitis A?

Hepatitis A is a serious liver disease caused by a virus. The virus is found in the feces (poop) of infected people. If a person has an infection with the hepatitis A virus, it can easily spread from person-to-person and cause liver disease lasting a few weeks to a serious illness lasting many months. In some cases, people can die because of hepatitis A.

¿Qué es la hepatitis A?

La hepatitis A es una enfermedad grave del hígado causada por un virus. El virus se encuentra en las heces (popó) de personas infectadas. Si una persona está infectada con el virus de la hepatitis A, puede transmitirlo fácilmente de persona a persona. La hepatitis A causa una enfermedad en el hígado que puede durar unas cuantas semanas a meses, con el tiempo convirtiéndose en una enfermedad más seria. En algunos casos, las personas pueden morir debido al virus de la hepatitis A.

What Are the Symptoms of Hepatitis A? ¿Cuáles son los síntomas de la Hepatitis A?

Nausea and Vomiting
Náusea y Vómito

Stomach Pain
Dolor Estomacal

Loss of Appetite
Pérdida de Apetito

Fatigue / Tired
Cansancio

Fever
Fiebre

Jaundice (yellowing of the skin or eyes)
Ictericia (Coloración amarillenta de piel u ojos)

Dark urine, pale stools, and diarrhea
Orina oscura, heces blancas, y diarrea

Am I at risk?

You are more likely to be infected with the virus if you:

- have chronic liver disease
- use illegal drugs
- have sex with an infected person
- touch objects or eat food that someone with hepatitis A infection handled

¿Estoy en riesgo?

Es más probable que se infecte con el virus:

- si tiene una enfermedad crónica del hígado
- si usa drogas ilegales
- si tiene sexo con una persona infectada
- tocando objetos o comiendo alimentos que alguien con la infección hepatitis A tocó

Vaccine Clinic / Clínica de Vacunas

www.mi.gov/hepatitisAoutbreak

Adapted with permission from the County of San Diego.
 Created: 8/2017

MDHHS

Poster – Protect Yourself from Hepatitis (updated 10/2017)

Hepatitis A is in Michigan communities.

Hepatitis A is a liver disease caused by the hepatitis A virus (HAV). Hepatitis A is spread through contaminated food or water and close contact with persons who are infected. Hepatitis A can affect anyone. Frequent hand washing with soap and warm water after using the bathroom, changing a diaper, or before preparing food can help prevent the spread of Hepatitis A.

The best way to protect against hepatitis A is to get the hepatitis A vaccine. Talk to your health care provider to get the two doses you need for protection. Need help paying for vaccines? Your local health department or your federally qualified health center may have hepatitis A vaccine available for little cost.

Stop the spread. Get vaccinated today.

www.michigan.gov/immunize

MDHHS
 Michigan Department of Health & Human Services

Flyer – Hepatitis A is in Michigan communities

Brochure – Help stop the spread of hepatitis A in Michigan communities (updated 10/2017)

Communications

Michigan Health Alert Network (MIHAN) Messages

- [Increased hepatitis A Activity in Some Southeast Michigan Counties](#) (10/28/16)
- [Continued Increase in hepatitis A cases in Southeast Michigan counties](#) (3/24/17)
- [Ongoing hepatitis A Outbreak in SE MI](#) (7/18/17)
- [Increase in hepatitis A cases among men who have sex with men – Southeast Michigan, October 2017](#) (10/19/2017)

Press Releases

- [Continued increase in hepatitis A cases in southeast Michigan](#) (3/24/17)
- [Health officials continue to investigate ongoing hepatitis A outbreak in Southeast Michigan](#) (7/7/2017)
- [MDHHS issues Annual Viral Hepatitis Surveillance Report, urges vigilance in light of hepatitis A outbreak in Southeast Michigan and growing opioid crisis](#) (8/2/2017)
- [Public health officials continue hepatitis A investigation, vaccination efforts](#) (9/21/2017)
- [Hepatitis A cases increase among men who have sex with men, associated with Southeast Michigan outbreak](#) (10/26/2017)

Letters

- [Letter to Healthcare Workers](#) (7/18/17)
- [Letter to Healthcare Workers and LHDs](#) (8/1/17)
- [Letter to Medicaid Providers](#) (9/15/17)
- [DHD Letters to Providers](#) (10/6 and 10/31/17)
- [DHD Newsletter to Providers](#) (10/31/17)

Presentations & Partnerships to Distribute Outreach Materials

Communications

September 18, 2017: the Michigan Medicaid program issued a letter to healthcare providers about the outbreak including prevention, testing, and treatment information. This letter was sent to 5,069 Medicaid-enrolled providers and 11,758 other providers.

Prevention: Vaccination



Hepatitis A Vaccine Coverage Estimates

Michigan Children 19 through 35 months as of June 30, 2017 that have at least 2 doses of the Hepatitis A vaccine recorded in the Michigan Care Improvement Registry (MCIR)*		United States Children 19 through 35 months as of 2015 that have at least 2 doses of the Hepatitis A vaccine ever as reported to the National Immunization Survey
Coverage Est., 19 through 35 months 2+ Doses	57.9 %	59.6 %
Michigan Adults 19 years and older as of October 21, 2017 that have at least 1 or 2 doses of the Hepatitis A vaccine ever recorded in the MCIR		United States Adults 19 years and older as of 2015 that have at least 2 doses of the Hepatitis A vaccine ever as reported to the National Health Interview Survey
Coverage Est., ≥19 yrs., 1+ Doses Ever	12.4 %	--
Coverage Est., ≥19 yrs., 2+ Doses Ever	7.9 %	9.0 %

***MCIR Reporting Rules:** Health care providers who are required to report an immunization shall report: ALL immunizations administered to every child born after December 31, 1993 and less than 20 years of age within 72 hours of administration. Adult vaccination record submission to the MCIR is not required though highly encouraged. A 2006 change to the Michigan Public Health Code enabled the MCIR to transition from a childhood immunization registry to a lifespan registry including citizens of all ages in the MCIR.

Prevention Vaccination

- DHD held 21 vaccination clinics to reach high risk individuals in shelters, soup kitchens, and treatment centers
- MDHHS & DHD working with Detroit's 4 Major ED Trauma Centers to assure ongoing ED vaccination targeting at-risk patients
- DHD working with Detroit's FQHCs to ramp up and sustain vaccination efforts for high risk patients
- MDHHS working with Macomb, Oakland, St. Clair Counties and Michigan Department of Corrections to implement jail and detention center vaccination
- DHD is vaccinating all Detroit MFRs through a train-the-trainer program
- Efforts have been led by DHD CD & Immunizations Teams and supported by DHD EP, MRC, MI Volunteer Registry, the VNA and other community groups

Reasons for Declination

- Some believed they had already received the Hepatitis A vaccine
- Inmates could not be verified in MCIR
- Staff without access to MCIR
- Fear of needles
- Dislike of like the government
- Fear of experimentation (Tuskegee Project)
- Fear that vaccines were expired or unsafe
- Fear that the vaccine might worsen Hepatitis C or cause recurrence

Ongoing Challenges & Lessons Learned

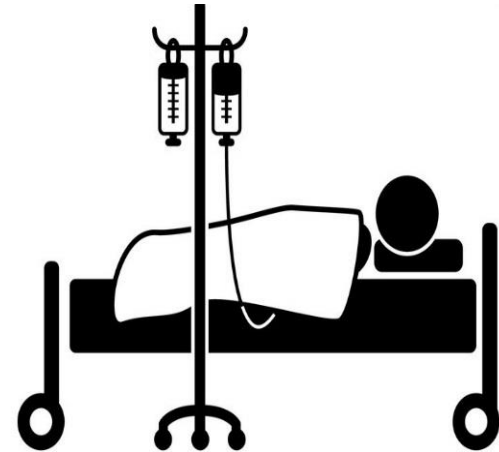
**Difficult to reach populations
(Geographic constraints)**

**High numbers of close contacts,
partners lost to follow-up**

**Vaccine financing, shortage, delivery
issues**

Epidemiological support needed

Partnerships are critical



For questions related to this Presentation, contact MDHHS:

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LA County

Responding to a Potential Hepatitis A Emergency in Los Angeles County



Sharon Balter, MD
Chief, Acute Communicable Disease Control
Los Angeles County
Department of Public Health

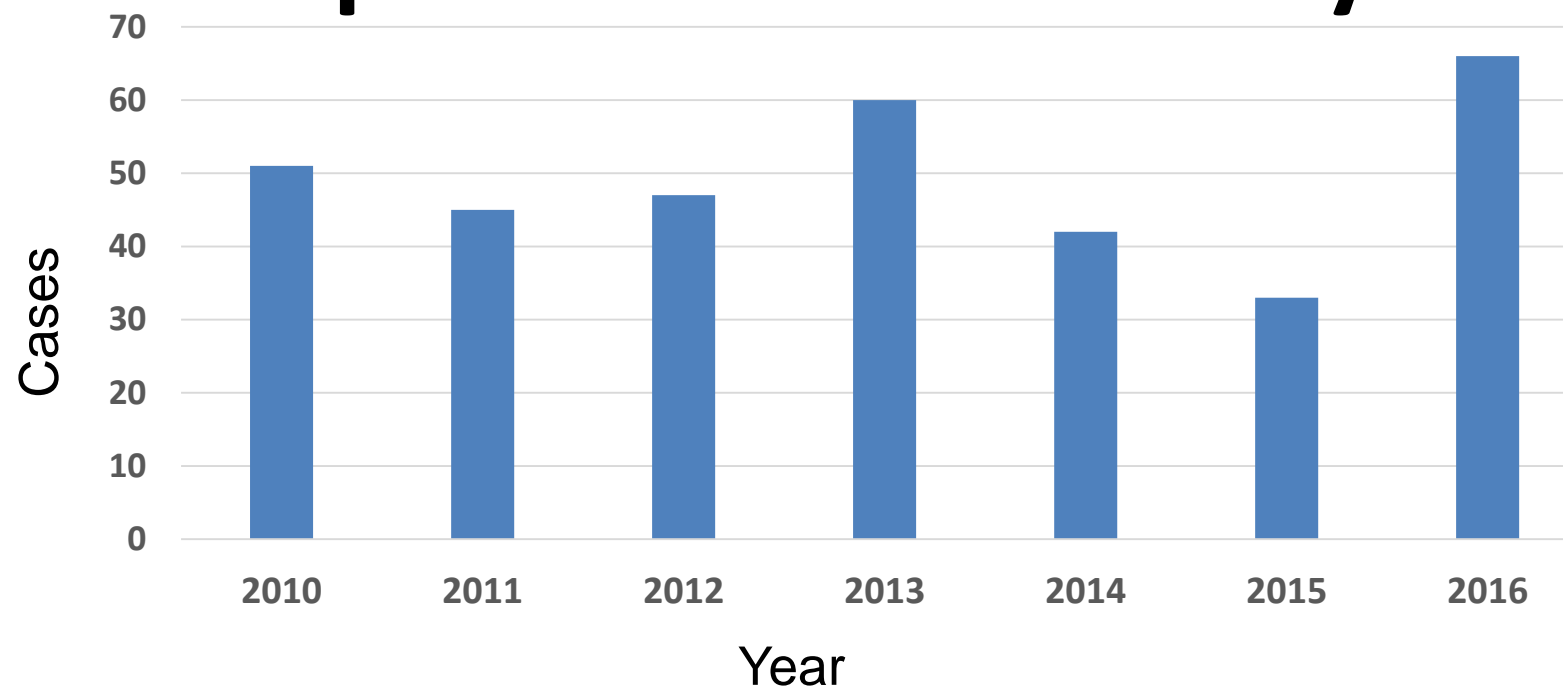
Los Angeles County

- Population >10 million
 - More than 25% of California residents live in LAC
 - Most populous county in the US
- Size - 4,058 square miles
 - Larger than Rhode Island and Delaware combined
- Population density is very high: 2,420 people per square mile
- Los Angeles County has the highest number of millionaires and the largest number of homeless people of any county in the US

Los Angeles County

- Estimated 57, 000 homeless spread over the community
 - Many large tent encampments
 - Additional smaller sites
 - Proximity to San Diego and Santa Cruz elevated concern
 - A lot of travel between jurisdictions
- 400,000 MSM
 - Recent increases both nationally and internationally along with other recent outbreaks in this community elevated concern for Hepatitis A

Hepatitis A in LA County



- In LA County there are approximately 40-60 cases each year
- Highest rates in people 35-44 years old
- No cases among homeless population in recent years

Current Outbreak in LA County

- 14 outbreak associated cases
- June- July
 - 1 from SD to a board and care
 - 1 from SD to a mental health facility, 3 secondary cases
 - Vaccination of contacts, no additional spread

Current Outbreak in LA County

- Beginning in September
 - Cases reported among homeless from San Diego and Santa Cruz arriving by bus and living on the streets
 - 1 case released from jail worked briefly as a food handler
 - Cases among homeless or IDU in LA County residents without clear links to San Diego or Santa Cruz
- Because of concern for spread among an underserved population, announced an outbreak

Vaccine distribution among the homeless

- Started in August
- Began more aggressively after outbreak declaration
 - Community Health nurses
 - Shelters, feeding sites and other locations in the community
 - Go with homeless outreach workers who know the community well
 - Offer vaccine in our free public health clinics
 - Shared Vaccine with partners
 - Community Based Clinics
 - Hospitals
 - Jails
- Total number of vaccines administered or distributed to partners is 17,005



Other efforts – working with hospitals

- Worked to obtain recuperative beds for patients who are still infectious but do not need a hospital bed so they are not discharged to the street or jail
- Outreach to providers via HAN
 - For homeless patients with suspected hepatitis A asked providers to notify health department even before IgM result is available:
 - Facilitate interviewing
 - Facilitate finding housing while awaiting testing
 - Facilitate testing at the Public Health Laboratory for hospitals that send the test out and will not receive results within 24 hours

Other efforts - Sanitation

- Surveys of homeless encampments to assess
 - sanitation
 - availability of handwashing stations and toilets
- Encourage to building handwashing facilities and toilets in areas around homeless encampments
 - Issues around security and cleaning
- Restaurant inspectors to do outreach about hepatitis A and cleaning to
 - restaurants and business that open bathrooms to homeless

Outbreak Response Plan

- Initial response will focus on aggressive vaccination and education in areas with early cases to prevent a larger outbreak.



Case in the jail

- Efforts at providing vaccine to jail inmates
- Recent case in the jail highlights challenges
 - Delayed diagnosis
 - Exposures in inmate reception center – large numbers
 - Need to vaccinate primary and secondary contacts – over 1200
 - To date no additional cases

Men who have sex with men

- Outbreaks ongoing nationally and internationally
 - National: NYC, CO, SF all reporting increases
 - Internationally: Europe, Chile, Australia
- We were expecting increases
- Last week noted 12 cases to date compared to 9 total last year with more under investigation
- Announced an increase in cases among MSM in an effort to promote vaccination in this group as well.

Vaccine supply

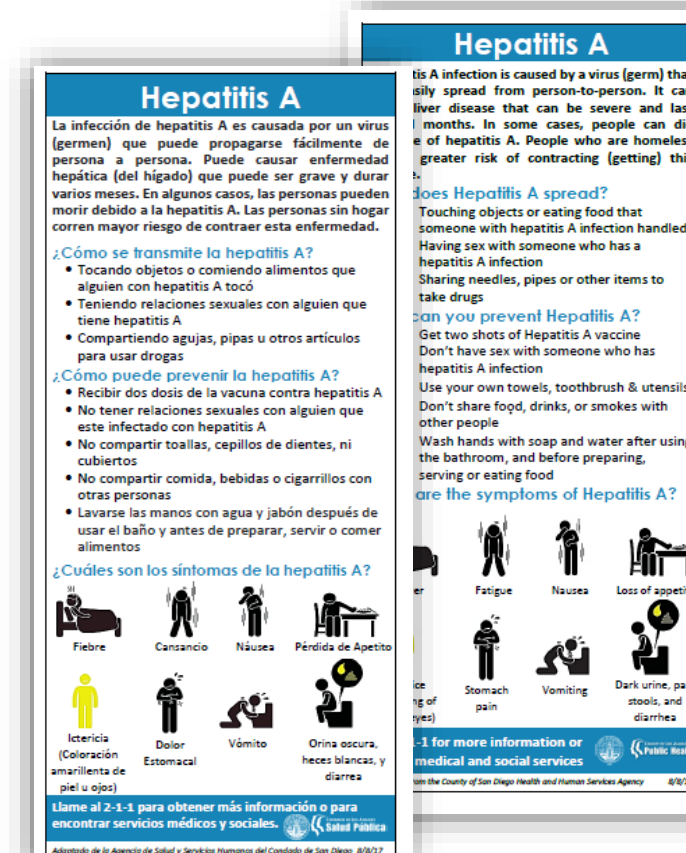
- At the same time we began to hear from hospitals and providers that they were unable to obtain single antigen vaccine
- Although we still have vaccine, it is constrained so we have urged MSM to get Twinrix wherever possible
- Encouraged immunocompetent individuals to defer their second dose until the supply increases

Effort

- LA County DPH activated after local spread was first identified
- Modified ICS since then
- Effort to reach homeless residents is great
- Launching an awareness campaign to improve uptake

Other efforts: Awareness campaign

- Promoting awareness and vaccination through media and social media
- Conducting health education and promoting vaccination
- Palm cards, posters in bus stations



Acknowledgements

- Tremendous number of staff at LAC DPH
 - Community Health Services
 - Acute Communicable Disease Control
 - Environmental Health
 - Emergency Preparedness and Response
 - Vaccine Preventable Disease Control
 - Logistics
 - Communications office
 - Public Health Laboratory

Thank you!

To ask the presenters a question,
please type it into the Q&A box.

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