

# Hepatitis A Outbreak Summit

March 13, 2019

1 - 2:30 pm: Clinical

3 - 4pm: Community Services



# Clinical Session Agenda

- **Welcome and Introduction** – *Paula Mandel, PCHD Deputy Director*  
5 minutes
- **Local Hepatitis A Outbreak** – *Mary Derby, Ph.D., Epidemiology Program Manager*  
15 minutes
- **Clinical Interventions** – *Kristin Robinson-Lund, Nurse Manager*  
15 minutes
- **Sanitation Interventions** – *David Ludwig, Consumer Health and Food Safety Manager*  
10 minutes
- **Roundtable Discussion** – *Mark Person, Community Mental Health & Addiction Program Manager*  
45 minutes

# Community Services Session Agenda

- **Welcome and Introduction** – *Paula Mandel, PCHD Deputy Director*  
5 minutes
- **Local Hepatitis A Outbreak** – *Mary Derby, Ph.D., Epidemiology Program Manager*  
15 minutes
- **Sanitation Interventions** – *David Ludwig, Consumer Health and Food Safety Manager*  
10 minutes
- **Roundtable Discussion** – *Gary Frucci, Environmental Health Supervisor*  
30 minutes

# Welcome and Introduction

**Paula Mandel**

PCHD Deputy Director

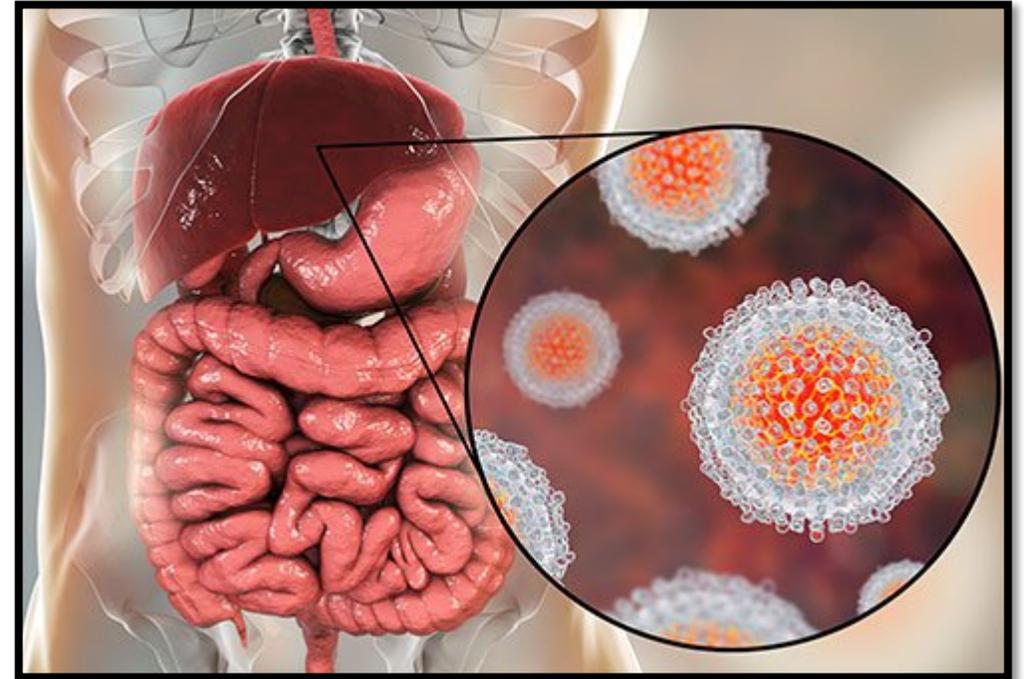
# Local Hepatitis A Outbreak

Mary Derby, Ph.D.,

Epidemiology Program Manager

# Hepatitis A Overview

- Viral infection
- Vaccine-preventable
  - (case reduction since 1996 when vaccine made available)
- Treatment: supportive
- Transmission: fecal-oral
- Incubation period: 28-30 days (range 15-50)



# Hepatitis A Overview

- Symptoms: fever, anorexia, malaise, nausea, vomiting, diarrhea, abdominal pain, jaundice, dark urine.
- Duration: typically several weeks (up to several months)
- Can be asymptomatic, especially in children

**HEPATITIS A FACTS**

**1** Is a viral infection of the liver spread when faecal matter enters the mouth

**2** May last several weeks and can be debilitating but most people recover completely

**3** Preventable with careful hand washing, keeping toilets and bathrooms clean, avoiding infected water sources

**SYMPTOMS INCLUDE**

nausea      vomiting

**SPREAD BY**

direct contact      food & beverages      cups & spoons

and any other objects handled by the infected person

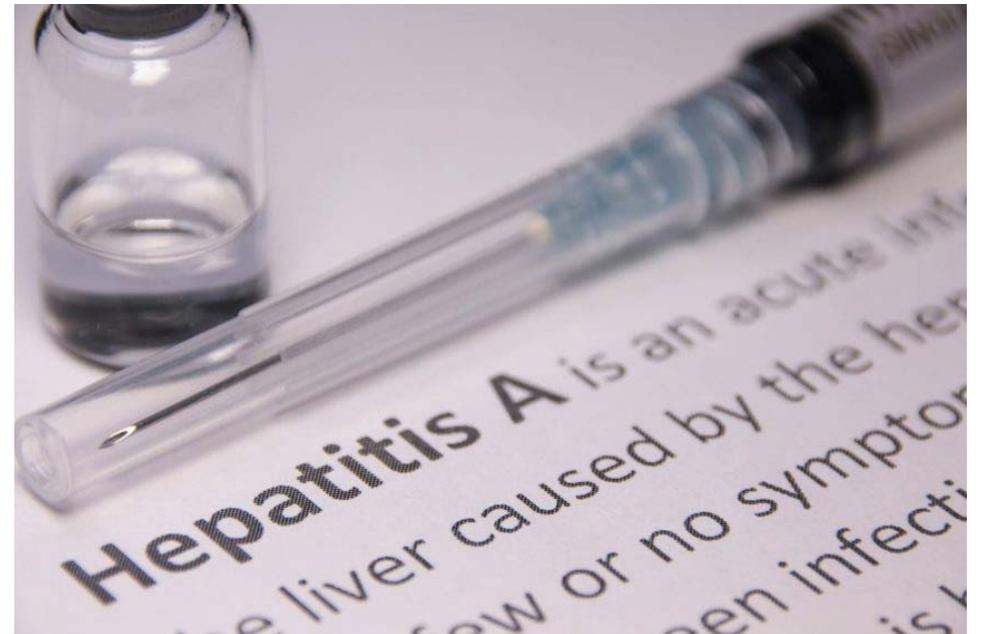
Source: <http://www.medicaltourism.com>

# Role of PCHD Epidemiology

- **Receive suspect and positive laboratory reports:**
  - Providers: within 1 working day suspect or confirmed case
  - Laboratories: within 1 working day for positive results, submit disease panel results
- **Interview cases:**
  - Incubation period: where/how they could have been infected
  - Contagious period: potential close contacts that could have been infected

# Role of PCHD Epidemiology

- **Implement prevention and control measures:**
  - Provide education to case and close contacts
  - Recommend Post Exposure Prophylaxis (PEP) to contacts within 14 days of exposure



# Who is at increased risk of contracting hepatitis A?

- People with direct contact with someone with hepatitis A
- Travelers to countries where hepatitis A is common
- People who are experiencing homelessness
- Men who have sex with men (MSM)
- People who use drugs, both injection and non-injection drugs
- Household members or caregivers of a recent adoptee from countries where hepatitis A is common
- People with clotting factor disorders such as hemophilia

## Hepatitis A Risk Assessment

1. Do you lack a permanent home?  No  Yes
2. Have you used illegal or illicit drugs?  No  Yes
3. Have you been in a correctional facility at any time since November 1, 2018?  No  Yes
4. Have you been told that you have hepatitis A?  No  Yes
5. Have you received the hepatitis A vaccine in the last 6 months?  No  Yes

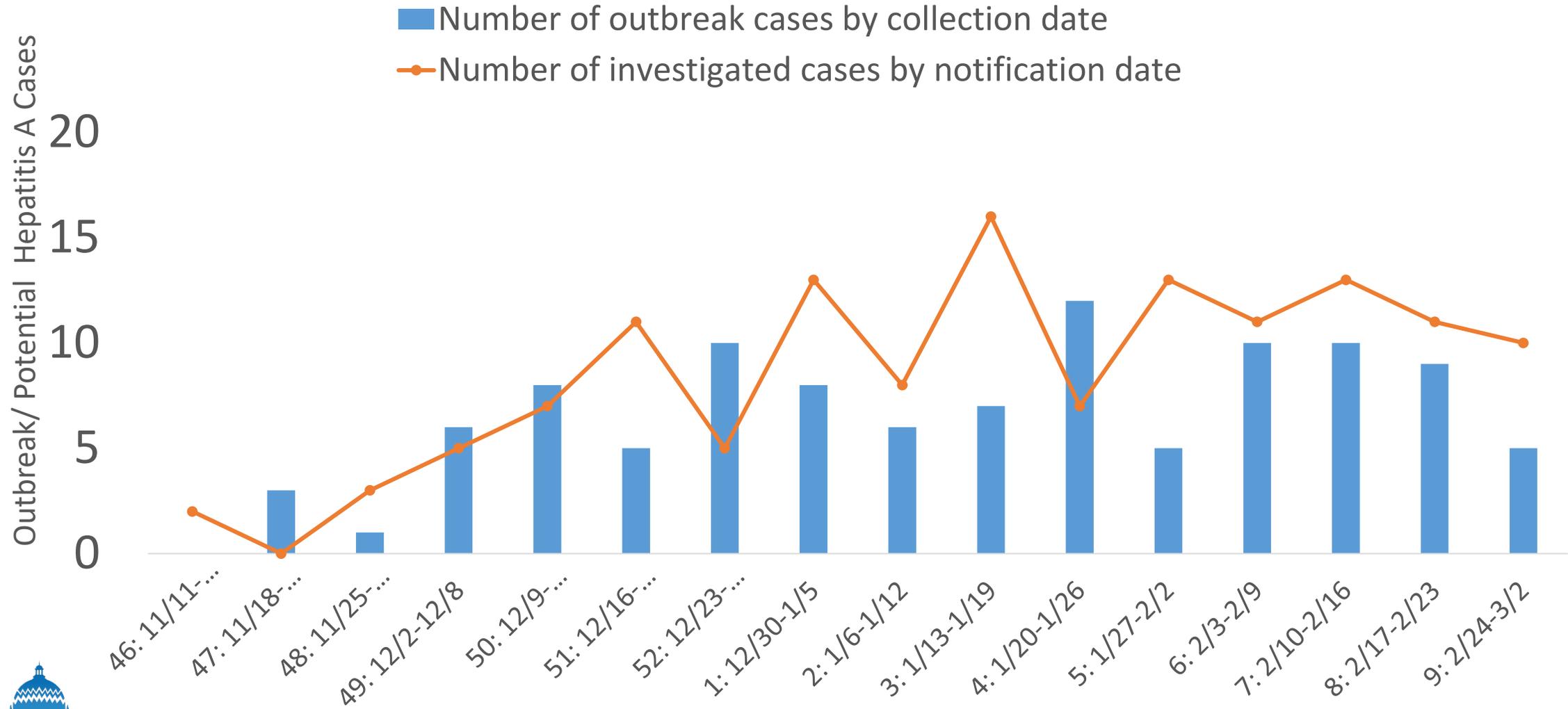
If question 1, 2, **or** 3 = YES: Vaccine indicated

If question 5 = NO **AND** Question 1, 2, or 3 = YES: Vaccine indicated

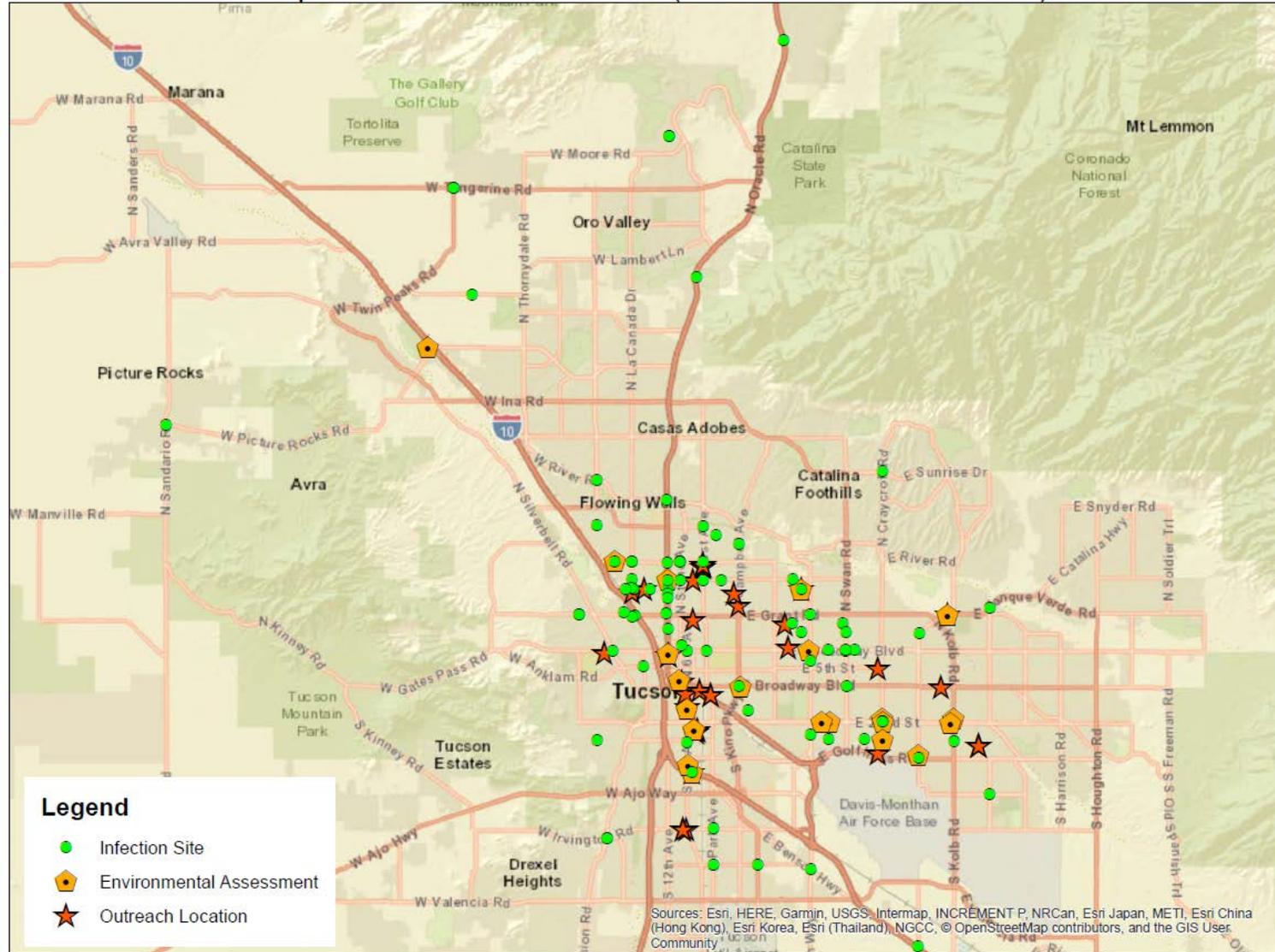
If question 4 **or** 5 = YES: Vaccine NOT indicated

Tool created by Dr. Bethany Bruzzi and Kathleen McCasland, MT, MBA for BUMC South

## Pima County Outbreak (Nov 2018 – Feb 2019)



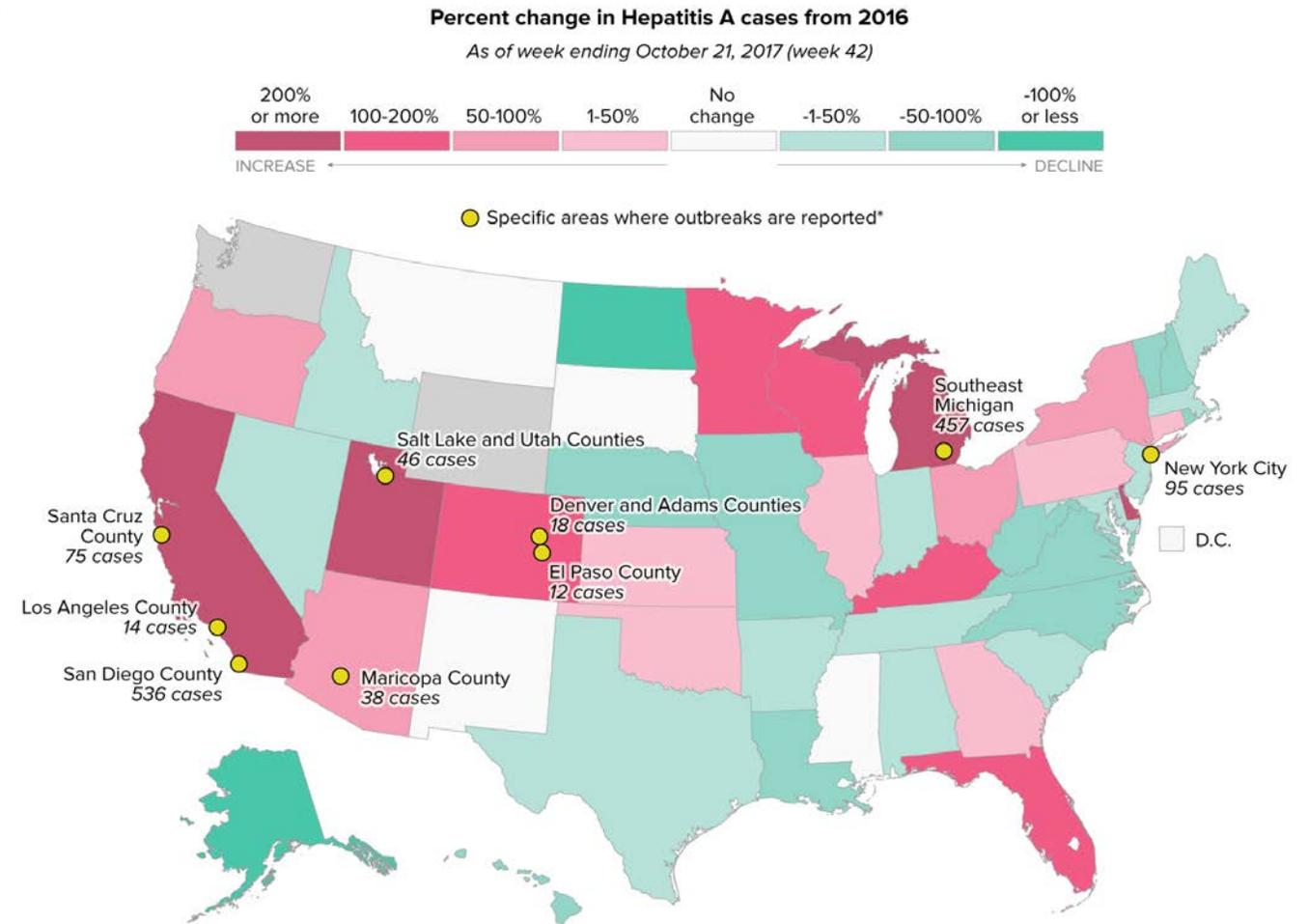
### Hepatitis A Outreach Efforts (11/01/2018 - 02/22/2019)



# Hepatitis A Trends

Pima County Hepatitis A Cases by Year	
2013	8
2014	5
2015	12
2016	13
2017	5
2018	58
2019 YTD	89

## The Uptick In Hepatitis A Cases Isn't Just In California



\* Health departments report case counts as of varying outbreak start dates in 2016 and 2017: Los Angeles: Aug. 2017-Oct. 31, 2017 San Diego: Nov. 2016-Oct. 26, 2017, Utah: May 8 2017-Oct. 22, 2017, Santa Cruz: April 1, 2017-Oct. 31, 2017. Year-to-date counts: New York City, Maricopa County, Salt Lake and Utah Counties, Denver, Adams and El Paso Counties

Note: Washington and Wyoming both recorded no cases at this point in the year in 2016, and 14 and 9 in 2017, respectively. Delaware, Kentucky and Minnesota case counts jumped percentage-wise, but had relatively few cases.  
Source: CDC, Santa Cruz County (data as of Oct. 31), San Diego County (data as of Oct. 26), Los Angeles County (data as of Oct. 31), Michigan Department of Health and Human Services (data as of Oct. 26), Utah Department of Health (data as of Oct. 30), Arizona Department of Health Services (data as of Oct. 29), Colorado Department of Public Health and Environment (data as of Oct. 27)

# Resources

**Mary Derby**

Mary.Derby@pima.gov

**Pima County Epidemiology Phone Line**

520-724-7797

[www.pima.gov/hep-a](http://www.pima.gov/hep-a)

[www.cdc.gov/hepatitis/hav/index.htm](http://www.cdc.gov/hepatitis/hav/index.htm)



[www.pima.gov/health](http://www.pima.gov/health)



Pima County Health Department



@PCHD



Pimacountyhealth

# Clinical Interventions

**Kristin Robinson-Lund**

Nurse Manager, North Clinic

# Target and risk populations

## Individuals who are experiencing:

- Homelessness
- Illicit drug use

## Common exposure areas:

- Substance rehabilitation facilities
- Pima County Adult Detention Center
- Homeless shelters
- Public parks and areas



# Post-exposure prophylaxis recommendations:

Indication/Age group	Risk category/Health status	Hepatitis A vaccine	Immune globulin
<12 mos	Healthy	No	0.1 mL/kg*
12 mos–40 yrs	Healthy	1 dose†	None
>40 yrs	Healthy	1 dose†	0.1 mL/kg§
≥12 mos	Immunocompromised or chronic liver disease	1 dose†	0.1 mL/kg¶
≥12 mos	Vaccine contraindicated**	No	0.1 mL/kg

# Pre-exposure protection recommendations:

Indication/Age group	Risk category/Health status	Hepatitis A vaccine	Immune globulin
<6 mos	Healthy	No	0.1–0.2 mL/kg§§§
6–11 mos	Healthy	1 dose¶¶¶	None
12 mos–40 yrs	Healthy	1 dose***	None
>40 yrs	Healthy	1 dose***	0.1–0.2 mL/kg§§§,†††
All ages	Immunocompromised or chronic liver disease	1 dose***	0.1–0.2 mL/kg§§§,†††
>6 mos	Persons who elect not to receive vaccine or for whom vaccine is contraindicated**	No	0.1–0.2 mL/kg§§§

# Recommendation caveats

- † A second dose is not required for post exposure prophylaxis; however, for long-term immunity, the hepatitis A vaccination series should be completed with a second dose at least 6 months after the first dose.
- § The provider's risk assessment should determine the need for immune globulin administration. If the provider's risk assessment determines that both vaccine and immune globulin are warranted, Hep A vaccine and immune globulin should be administered simultaneously at different anatomic sites
- ¶ Vaccine and immune globulin should be administered simultaneously at different anatomic sites. For more, visit:  
[https://www.cdc.gov/mmwr/volumes/67/wr/mm6743a5.htm?s\\_cid=mm6743a5\\_w](https://www.cdc.gov/mmwr/volumes/67/wr/mm6743a5.htm?s_cid=mm6743a5_w)

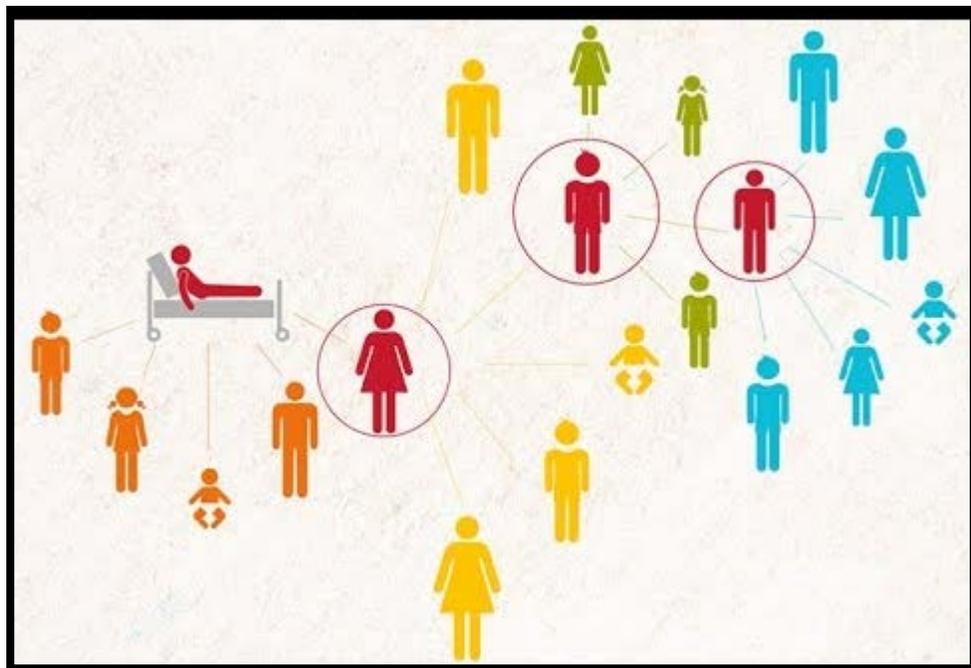
# PCHD Community-Based Outreach and Prevention Response:

- Hepatitis A vaccination outreach clinics at partner locations
- Mobile clinics targeting public parks and areas where cases have been identified
- Environmental sanitation assessment
- Education in clinics



# Ways you can protect your clients:

## Education



**KNOW THE ABC'S OF VIRAL HEPATITIS**

More than 4 million people in the US are living with viral hepatitis. Most don't know it!

Hepatitis A can be prevented with a safe, effective vaccine. **A**

Many people got infected with hepatitis B before the vaccine was widely available. **B**

Treatments are available that can cure hepatitis C. **C**

Take the CDC Online Risk Assessment to see if you should be vaccinated or tested for viral hepatitis:  
[www.cdc.gov/hepatitis/riskassessment](http://www.cdc.gov/hepatitis/riskassessment)

## Protect Yourself from Hepatitis A



### There has been an increase in cases of an illness called Hepatitis A "hep A."

Hep A is very easy to catch and can make you sick for a very long time. Some people who use drugs and/or are homeless have been hospitalized and have died from hep A.

#### Get Vaccinated!

**Today:** You have received the hep A vaccine today. Please return to a PCHD clinic or a healthcare provider in 6 months for a second dose.

Received: \_\_\_\_\_

Get 2nd Dose: \_\_\_\_\_

**Soon:** Visit one of our clinics to be vaccinated. The vaccine is a safe, fast shot given in the arm. You do not need to be able to pay.

#### South Clinic

1493 W Commerce Ct (Cardinal and Valencia)  
724-7900

#### North Clinic

3550 N 1st Ave (1st and Prince)  
724-2880

#### East Clinic

6920 E Broadway Blvd (Broadway and Kolb)  
724-9660

### What is Hepatitis A and Why Does it Matter if I Get It?

Hep A is caused by a virus (germ) that can easily spread from person-to-person. It can cause liver disease that can make you sick for several months. In some cases, people can die because of hep A. People who are homeless are at greater risk of getting this disease.

#### How does Hepatitis A spread?

- Touching objects or eating food that someone with hepatitis A infection handled
- Having sex with someone who has a hepatitis A infection
- Sharing needles, pipes, or other items to take drugs

#### How can you prevent getting hepatitis A?

- Get two shots of Hepatitis A vaccine
- Wash hands with soap and water after using the bathroom, and before eating food
- Don't have sex with someone who has hepatitis A infection
- Use your own towels, toothbrush & utensils
- Don't share food, drinks, tools or smokes with other people

**Call 724-7797 for more information or go to [www.pima.gov/hep-a](http://www.pima.gov/hep-a)**

Pima County Health Department

3950 S. Country Club Rd., Tucson, AZ 85714 • 520-724-7770 • [www.pima.gov/health](http://www.pima.gov/health)

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### What are the symptoms if I get hepatitis A?



Fever



Fatigue



Nausea



Loss of appetite



Jaundice-  
Yellowing of the  
eyes or skin



Stomach pain



Diarrhea



Vomiting



Dark urine,  
pale stools

# Wash Your Hands!

Stop the Spread of Germs



1

Start with warm or hot water



2

Use soap and make a lather



3 20 SEC.

Rub and scrub thoroughly for 20 seconds. Scrub palms, back of hands, between fingers and under nails.



4

Rinse well



5

Dry hands thoroughly



6

Use a paper towel to shut off the faucet

# ¡Lávese Las Manos!

No Propague los Gérmenes



1

Inicie con agua tibia o agua caliente



2

Use jabón y genere espuma



3 20 SEG.

Frote y restriegue a fondo por 20 segundos – restrigue las palmas, detrás de las manos, entre los dedos y debajo de las uñas.



4

Enjuague bien



5

Seque las manos completamente



6

Use una toalla de papel para cerrar el grifo

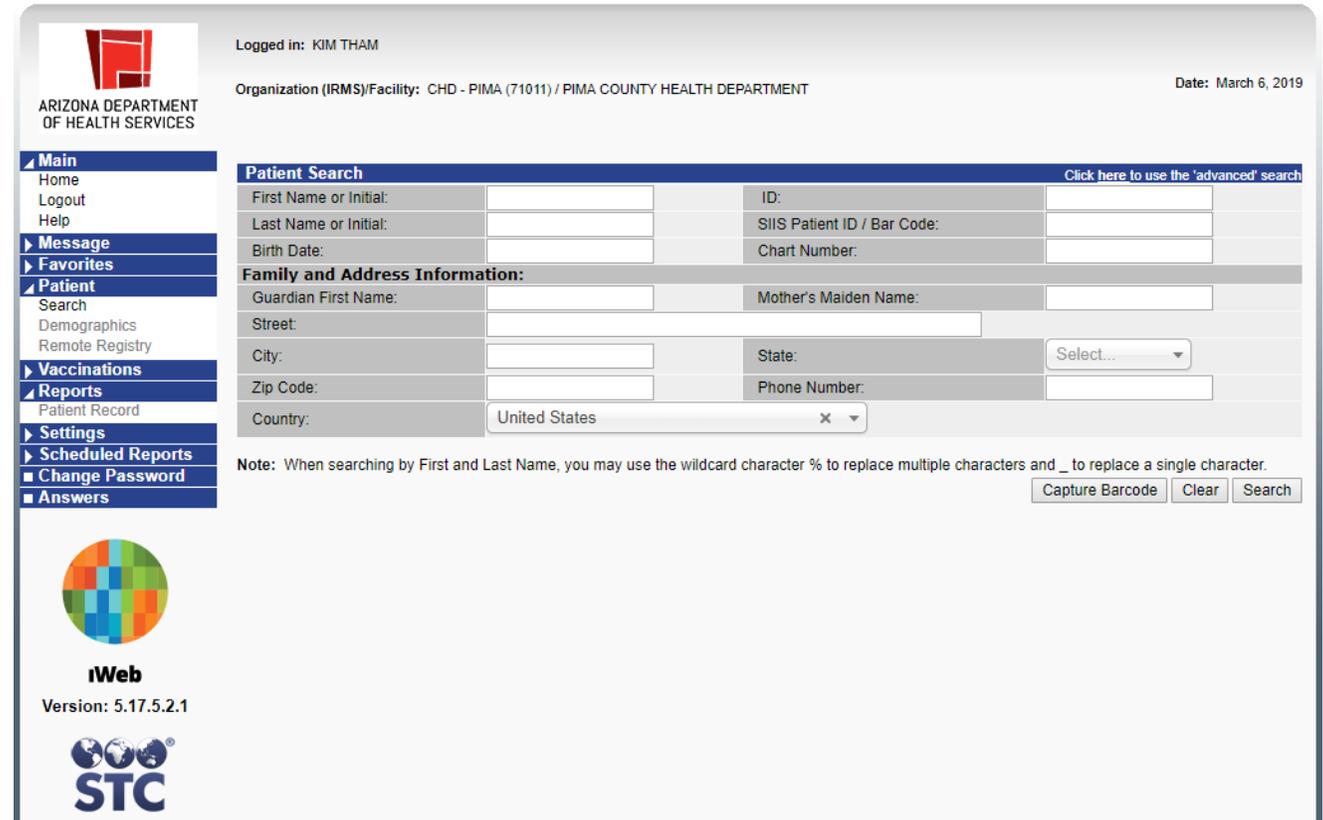
# Ways you can protect your clients:

## Intake screening and referral

- Arizona State Immunization Information System (ASIIS)

## Vaccination

- Host a PCHD clinic or offer vaccine



ARIZONA DEPARTMENT OF HEALTH SERVICES

Logged in: KIM THAM

Organization (IRMS)/Facility: CHD - PIMA (71011) / PIMA COUNTY HEALTH DEPARTMENT

Date: March 6, 2019

**Patient Search** [Click here to use the 'advanced' search](#)

First Name or Initial:	<input type="text"/>	ID:	<input type="text"/>
Last Name or Initial:	<input type="text"/>	SIIS Patient ID / Bar Code:	<input type="text"/>
Birth Date:	<input type="text"/>	Chart Number:	<input type="text"/>

**Family and Address Information:**

Guardian First Name:	<input type="text"/>	Mother's Maiden Name:	<input type="text"/>
Street:	<input type="text"/>		
City:	<input type="text"/>	State:	Select...
Zip Code:	<input type="text"/>	Phone Number:	<input type="text"/>
Country:	United States <input type="text"/>		

Note: When searching by First and Last Name, you may use the wildcard character % to replace multiple characters and \_ to replace a single character.

**iWeb**  
Version: 5.17.5.2.1

**STC**

# Sanitation Interventions

**David Ludwig**

Consumer Health and Food Safety Manager

# PCHD Consumer Health and Food Safety Efforts

- Providing hepatitis A prevention education to food permit holders
- Investigating suspected hepatitis A foodborne cases
- Conducting on-site environmental assessments in facilities associated with person confirmed to have hepatitis A



## Important Information for Food Managers/Operators



Handouts are being distributed to all food operations.

### There has been an increase in Hepatitis A

Some of these cases have been linked to food possibly served by fixed and mobile food establishments in Pima County.

*Hepatitis A usually spreads when a person unknowingly ingests the virus from objects, food, or drinks contaminated by small, undetected amounts of stool from an infected person. Hepatitis A contamination of food, including frozen and undercooked food, can happen at any point, growing, harvesting, processing, handling, and even after cooking.*

# Ways to prevent the spread of hepatitis A

## Staff protection

- Food handlers, sanitation workers, and other professionals directly serving high risk individuals are recommended to receive the hepatitis A vaccine
- Use appropriate standard precautions – proper handwashing, gloves



# Ways to prevent the spread of hepatitis A

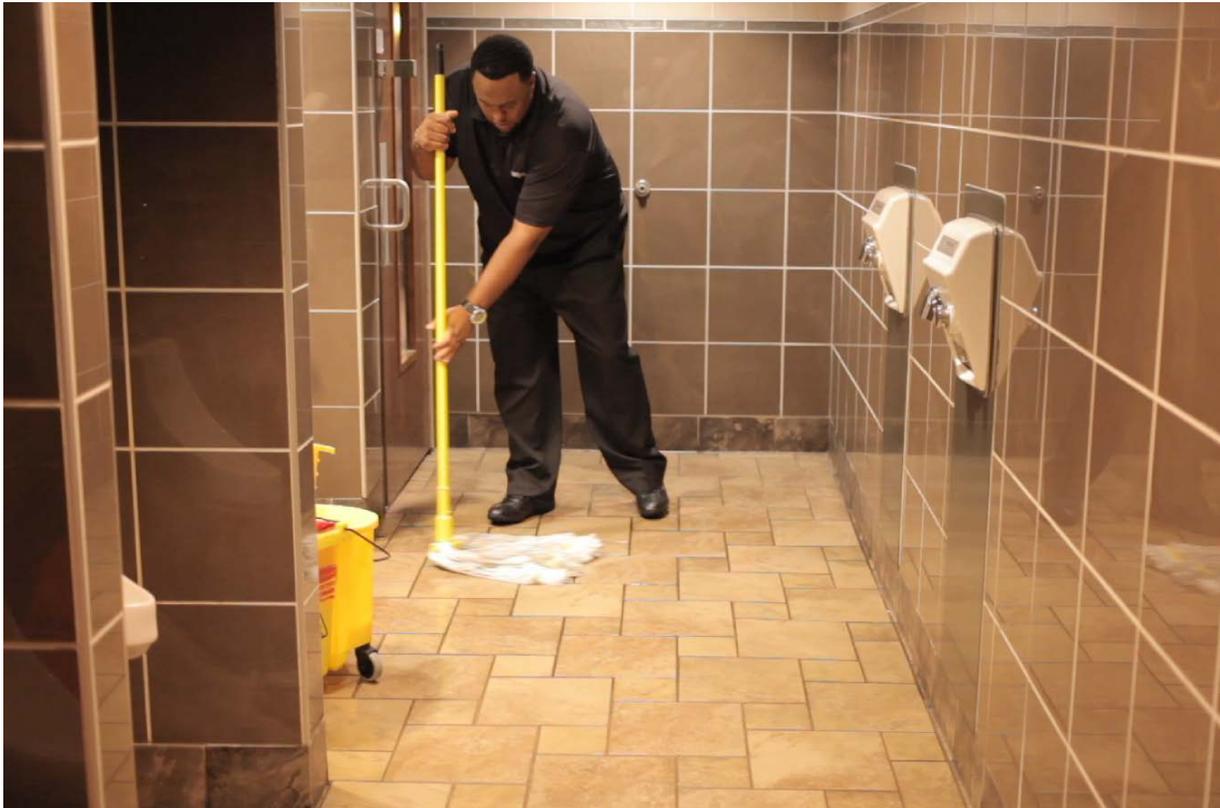
## Augment sanitation

- Use disinfectant products and procedures that are effective against hepatitis A
- Chlorine bleach at 5000ppm (1 + 2/3 cups bleach in 1 gallon water)
- Always use in a well ventilated space













Date: \_\_\_\_\_

Area	5:00am	8:00am	11:00am	2:00pm	5:00pm	8:00pm	11:00pm
Floor							
Sinks							
Mirrors							
Toilet							
Paper							
Toilets							
Urinals							
Dryers							
Towels							
Trash							
Other							

# Ways to prevent the spread of hepatitis A

## Prevention Education and Resources

- Promote handwashing and sanitation
- Distribute information and hygiene kits



# Education Materials

- Hepatitis A: Cleaning and Disinfection Guidance
- Protect Yourself From hepatitis A
- Wash Your Hands



# Hepatitis A: Cleaning and Disinfection Guidance



## What is Hepatitis A?

Hepatitis A is a liver infection caused by the hepatitis A virus. It is highly contagious and is usually transmitted by the fecal-oral route, either through person-to-person contact or consumption of contaminated food or water.

Contamination can occur when infected persons do not wash their hands properly after going to the bathroom and then touch other objects or food items.

Surfaces that are frequently touched should be cleaned and sanitized often:

- Toilet Room Surfaces
- Light Switch Plates High Chairs
- Kitchen Surfaces
- Phones
- Tables and Chairs
- Doorknobs
- Recreation Equipment
- Computer Keyboards
- Railings
- Wheelchairs and Walkers
- Remote Controls

## Cleaning to Prevent the Spread of Hepatitis A

### Use Effective Disinfectant Chemicals on Exposed Surfaces

- Chlorine Bleach is the best way to kill HAV. To create a 5000 ppm solution mix: 1 and 2/3 cups bleach to 1 gallon water.
- Mix and use the chlorine solution promptly
- Allow 1 minute of contact time and then rinse with water

- Replace bottles of opened bleach every 30 days
- Discard any unused diluted mixtures
- Use for stainless steel, food/mouth contact items, tile floors, nonporous surfaces, counters, sinks and toilets

### Other Disinfectants

To determine if a product is effective against hepatitis A, review the product label or specification sheet and ensure it states effective against HAV or norovirus.

A list of disinfectants identified as effective against HAV and norovirus is available at [www.plma.gov/hep-a](http://www.plma.gov/hep-a)

### Remember to

- Wear gloves and protect your clothing
- Use chemicals in well-ventilated areas
- Avoid contact between incompatible chemicals
- For surfaces that are corroded or damaged by bleach, use another product effective against HAV

## EVERYONE Should Practice Good Hand Washing and Hygiene

Thoroughly wash hands and arms with soap and water for at least 20 seconds;

### Before

Engaging in food preparation and working with non-prepackaged food, clean equipment and utensils

Putting on disposable gloves to start working with food or patients

Dispensing or serving food, or handling clean tableware and serving utensils in the food service area.

### During

Food prep, as often as necessary to remove dirt and contamination

Food prep when switching tasks and when switching between working with raw food and working with ready-to-eat food to prevent cross-contamination

### After

Using the bathroom

Coughing, sneezing, using a handkerchief or disposable tissue, using tobacco, eating or drinking

Handling soiled equipment or utensils

Engaging in other activities that contaminate hands

Touching your own or another person's bare human body parts

Ensure hand washing signs are posted in the appropriate locations.

## Cleaning Spills of Vomit or Feces

- Block-off area immediately
- Put on personal protective equipment, including two sets of gloves, masks and gowns
- Clean up visible debris using disposable absorbent material (paper towels, absorbent pads, etc)
- Discard soiled items carefully in a leak-proof plastic bag
- Disinfect area and objects surrounding the contamination with an appropriate disinfectant effective against HAV
- Take off outer set of gloves, gown and mask, in that order, and discard before exiting contaminated clean-up area
- Place discarded PPE in a leak-proof plastic bag
- Wearing the inner set of gloves, transport bag to a secure trash container; do not allow the bag to come into contact with clothing

- Thoroughly wash your hands after handling any contaminated material, trash or waste

## Surface Specific Tips

### Toys

Toys that enter a child's mouth must be disinfected, rinsed thoroughly, and air dried or run through a dishwasher at the highest temperature setting

Remove visible debris on softer toys that have been soiled and launder at the highest temperature setting. Discard if necessary.

### Linens, Clothing, Textiles

Keep contaminated and uncontaminated items separate

Wash in a pre-wash cycle, then use a regular wash cycle with detergent, and dry at the highest temperature setting

### Food Surfaces

After disinfection, rinse food prep area with water  
Prevent chemical contact with food during cleaning  
Secure chemicals away from food after cleaning

### Medical Equipment

Medical equipment used for infected patients should either be dedicated to that room or be thoroughly disinfected upon removal from the room

Selection of cleaning agent should be consistent with the equipment manufacturer's recommendations

### Contact the Health Department if you need help or have questions about this guidance:

(520) 724-7908 for food establishments or operations

(520) 724-7797 for general questions about hepatitis A

Visit: [www.plma.gov/hep-a](http://www.plma.gov/hep-a)

Pima County Health Department

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#### Get Vaccinated!

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Yellowing of the  
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Stomach pain



Diarrhea



Vomiting



Dark urine,  
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HANDOUT 3

# Wash Your Hands!

## Stop Spreading Germs

**1**  Start with warm or hot water

**2**  Use soap and make a lather

**3** **10-15 SEC.**  Rub and scrub thoroughly for 10 - 15 seconds. Scrub palms, back of hands, between fingers and under nails.

**4**  Rinse well

**5**  Dry hands thoroughly

**6**  Use a paper towel to shut off the faucet



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VOLANTE 3

# ¡Lávese Las Manos!

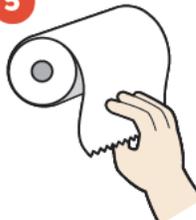
## No Propague los Gérmenes

**1**  Inicie con agua tibia o agua caliente

**2**  Use Jabón y genere espuma

**3** **10-15 SEC.**  Frote y restriegue a fondo por 10 a 15 segundos – restriegue las palmas, detrás de las manos, entre los dedos y debajo de las uñas.

**4**  Enjuague bien

**5**  Seque las manos completamente

**6**  Use una toalla de papel para cerrar el grifo



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A Healthy Pima County. Everyone. Everywhere. Everyday.

# Resources

**David Ludwig**

David.Ludwig@pima.gov

**Gary Frucci**

[Gary.Frucci@pima.gov](mailto:Gary.Frucci@pima.gov)

**Pima County Epidemiology Phone Line**

520-724-7797

[www.pima.gov/hep-a](http://www.pima.gov/hep-a)

[www.cdc.gov/hepatitis/hav/index.htm](http://www.cdc.gov/hepatitis/hav/index.htm)



[www.pima.gov/health](http://www.pima.gov/health)



Pima County Health Department



@PCHD

# Roundtable Discussion

**Mark Person**

Community Mental Health & Addiction Program Manager

Thank you!