APIC Grand Canyon

State of the State

January 22, 2016

Arizona Department of Health Services

Health and Wellness for all Arizonans

Agenda

- **Welcome**
  - Ken Komatsu
- **MEDSIS/MU**
  - Teresa Jue/Sara Imholte
- **Hepatitis B & C**
  - Clarisse Tsang
- **Vaccine Preventable Disease**
  - Susan Robinson
- **Vector/RMSF**
  - Hayley Yaglom
- **Influenza**
  - Kristen Herrick
- **Ebola**
  - Kristen Herrick/Eugene Livar
- **HAI**
  - Rachana Bhattarai/Geoff Granseth
- **STD**
  - Ryan Kreisberg
- **HIV Surveillance**
  - Dolly Tchio
- **TB**
  - Amanda Baker
- **Foodborne**
  - Bria Hamlet
- **Cocci**
  - Aisha Rafiq
- **Questions**

Arizona Administrative Code

Title 9. Chapter 6.

Article 2. Communicable Disease and Infestation Reporting

- 7 sections
- "reporting rules" for Healthcare Facilities, Laboratories, Pharmacies
  - R9-6-202
  - R9-6-204
  - R9-6-205

http://apps.azsos.gov/public_services/Title_09/9-06.pdf

APIC Grand Canyon Update

January 22nd, 2016

Arizona Department of Health Services

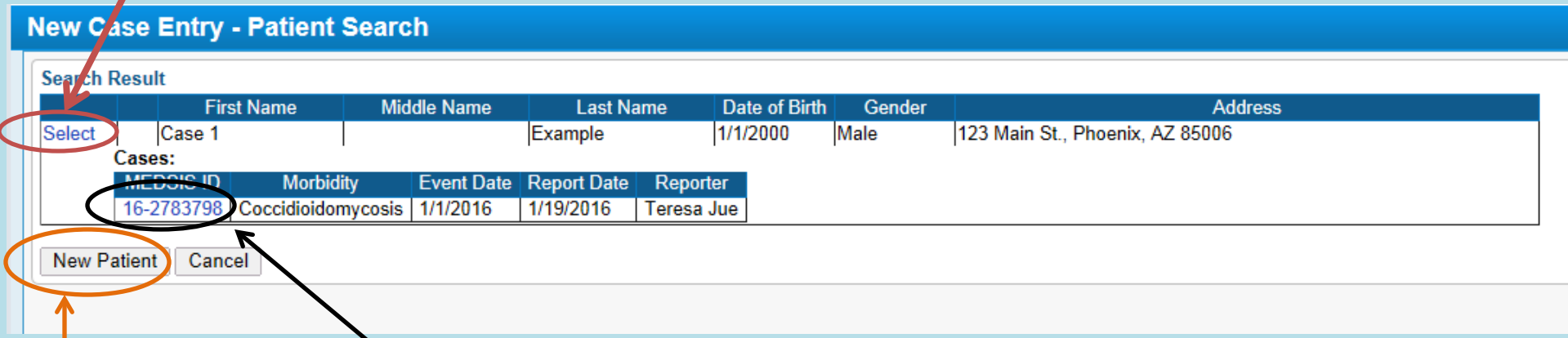
Health and Wellness for all Arizonans


New Year,
New Features!
WALL
Photo by meddygarnet (CC 2.0; 2015)

Patient Search

- Required search prior to new case entry
- Allows users to enter new cases for patients that were previously reported
- Automatically brings in existing patient demographic information (addresses, phone numbers, etc.)

Click to create a new case for the existing patient.

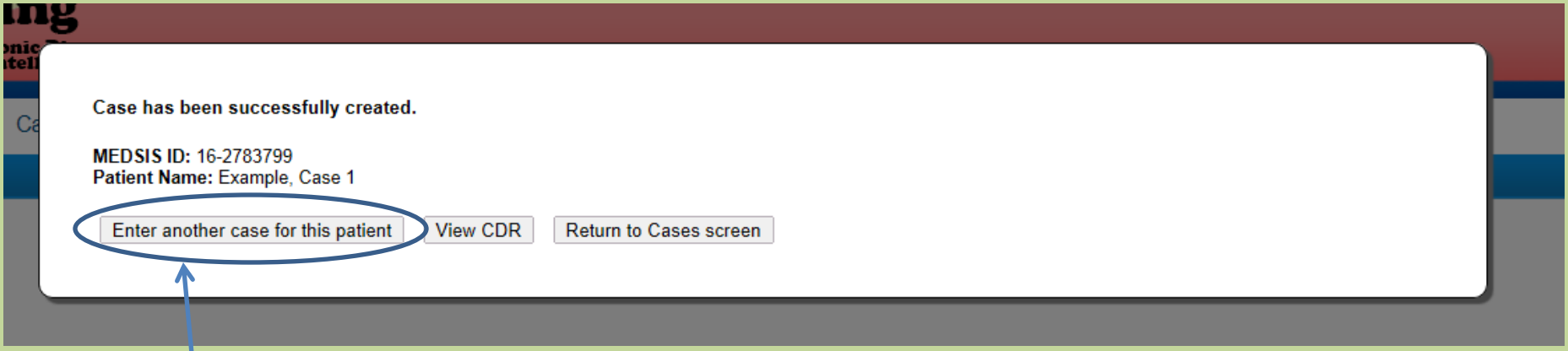


Click to view the existing communicable disease report (CDR)

Click to create a new patient and case record

Option to create additional cases

- Pop up after a case is created in MEDSIS
- Allows users to enter new cases for patients that were previously reported
- Automatically brings in existing patient demographic information (addresses, phone numbers, etc.)



Click here to create another case for the same patient.

What's next??

Training will be available for the new multiple morbidity feature during the last week of January. Stay tuned for announcements from your local MEDSIS Liaisons!

New feature will be available after January 29th, 2016!

Photo by meddygarnet(CC 2015)

What's next??

1st MEDSIS IP Workgroup to be scheduled during 1st quarter 2016!

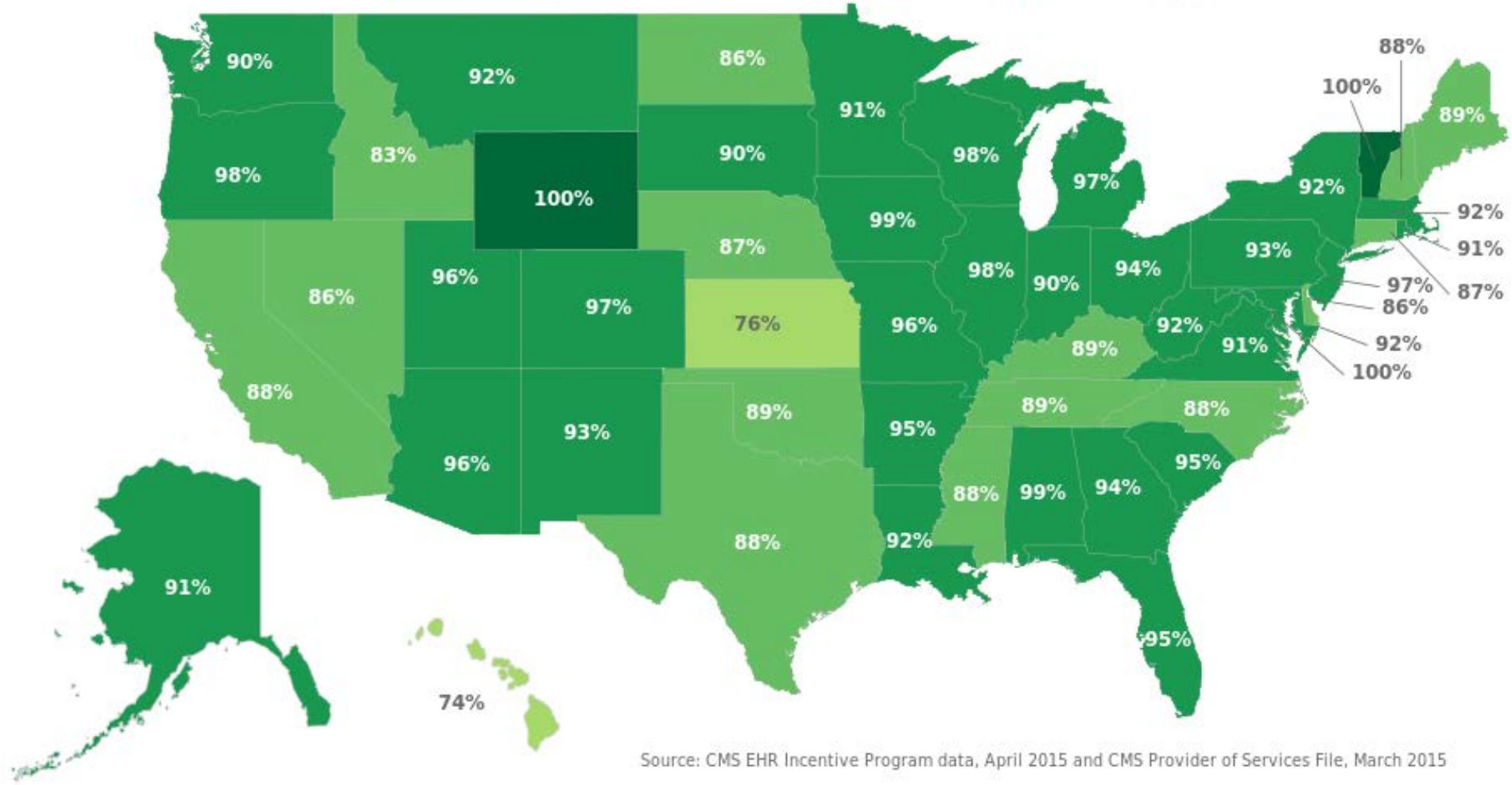
If you're interested in participating in this on-going workgroup to provide feedback on what you would like to see in MEDSIS, please contact the MEDSIS Help Desk at:

MEDSISHelpDesk@siren.az.gov

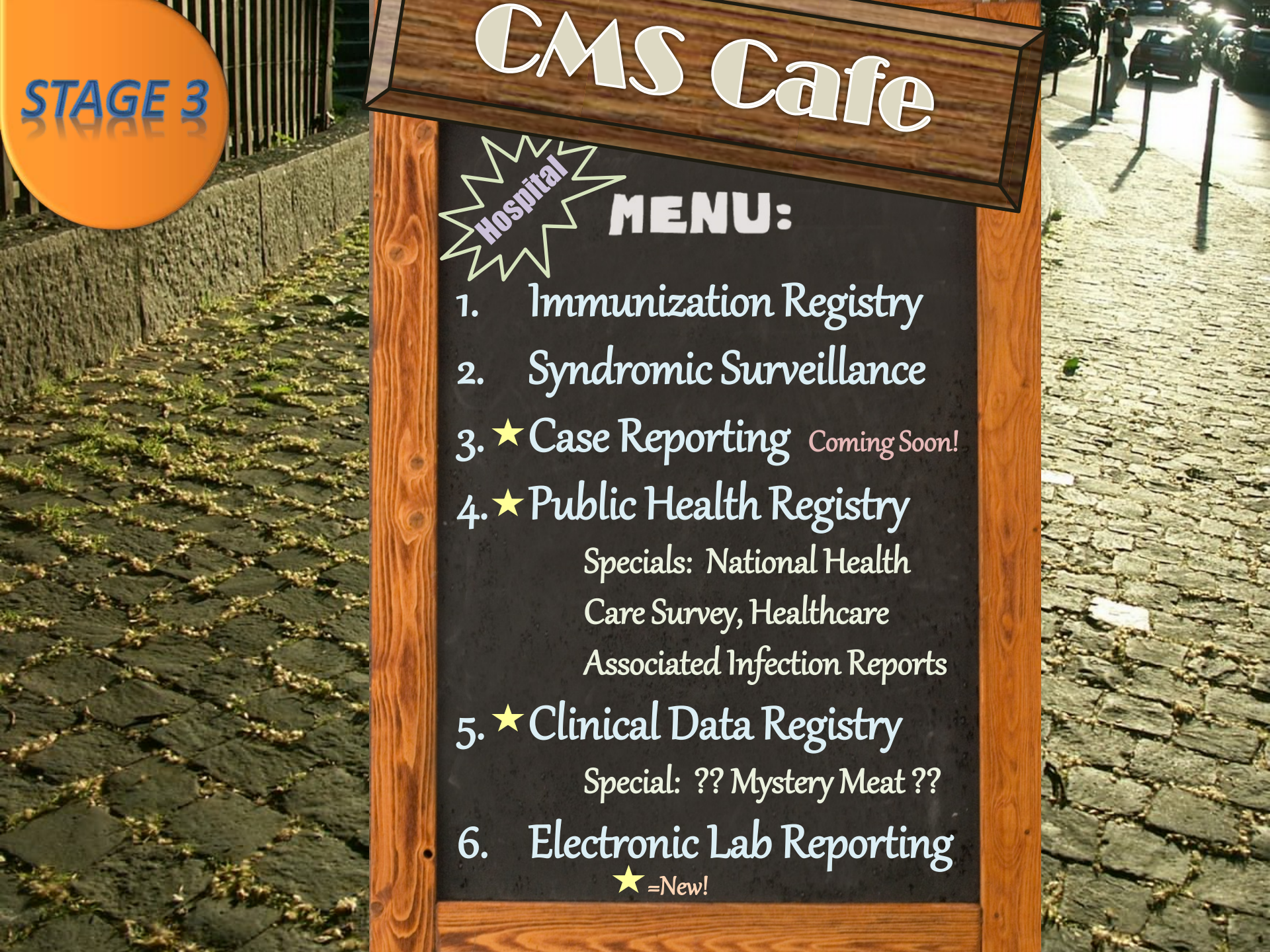
Photo by meddygarnet(CC 2015)

Meaningful Use and ADHS

Hospitals Demonstrating Meaningful Use | April 2015



Source: CMS EHR Incentive Program data, April 2015 and CMS Provider of Services File, March 2015


STAGE 3
CMS Cafe
Hospital
MENU:
1. Immunization Registry
2. Syndromic Surveillance
3. ★Case Reporting Coming Soon!
4. ★Public Health Registry
Specials: National Health Care Survey, Healthcare Associated Infection Reports
5. ★Clinical Data Registry
Special: ?? Mystery Meat ??
6. Electronic Lab Reporting
★=New!

Immunization Registry

Status

- ✓ ASIIS currently accepting submissions from Hospitals and EPs

What

Electronic reports of immunizations administered are sent to ASIIS (Stage 3: electronic queries of vaccine status can be made)

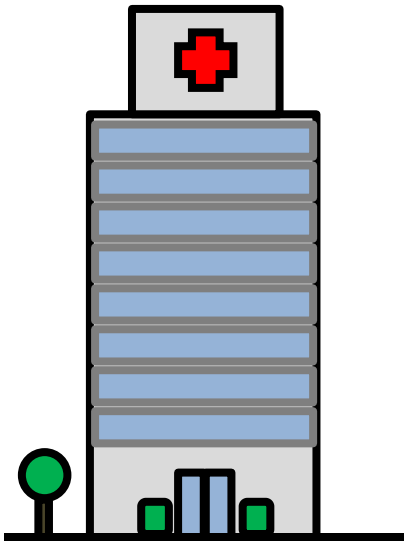
Syndromic Surveillance

Status

✓ ADHS currently accepting submissions from Hospitals

What

Electronic reports of chief complaints, diagnoses and basic demographics for all patient visits



Electronic Lab Reporting

Status

✓ ADHS currently accepting submissions from Hospitals

What

Electronic lab reports integrated into PH disease surveillance systems like MEDSIS

NEW!

Case Reporting

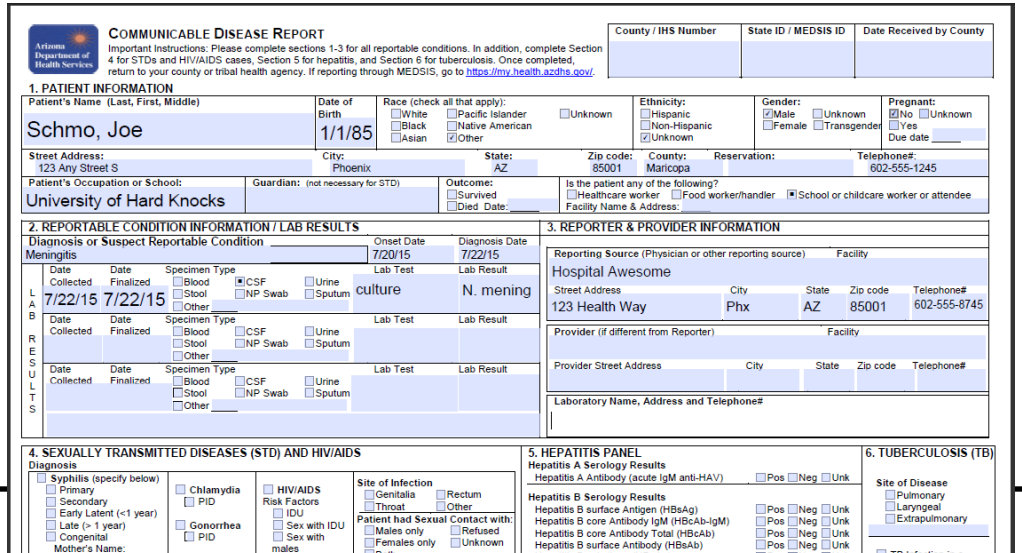
STAGE 3

Status

X ADHS currently NOT accepting submissions – Future!

What

Electronic reports of diseases reported by IPs. Also includes electronic queries from public health for the investigation.



COMMUNICABLE DISEASE REPORT

Important Instructions: Please complete sections 1-3 for all reportable conditions. In addition, complete Section 4 for STDs and HIV/AIDS cases, Section 5 for hepatitis, and Section 6 for tuberculosis. Once completed, return to your county or tribal health agency. If reporting through MEDSIS, go to https://my.health.azdhs.gov/.

County / IHS Number | State ID / MEDSIS ID | Date Received by County

1. PATIENT INFORMATION

Patient's Name (Last, First, Middle): Schmo, Joe | Date of Birth: 1/1/85 | Race (check all that apply): White, Black, Asian, Pacific Islander, Native American, Other, Unknown | Ethnicity: Hispanic, Non-Hispanic, Unknown | Gender: Male, Female, Unknown, Transgender | Pregnant: No, Yes, Unknown, Due date

Street Address: 123 Any Street S | City: Phoenix | State: AZ | Zip code: 85001 | County: Maricopa | Reservation: | Telephone#: 602-555-1245

Patient's Occupation or School: University of Hard Knocks | Guardian: (not necessary for STD) | Outcome: Survived, Died Date: | Is the patient any of the following? Healthcare worker, Food worker/handler, School or childcare worker or attendee | Facility Name & Address:

2. REPORTABLE CONDITION INFORMATION / LAB RESULTS

Diagnosis or Suspect Reportable Condition: Meningitis | Onset Date: 7/20/15 | Diagnosis Date: 7/22/15

LAB RESULTS

Date Collected	Date Finalized	Specimen Type	Lab Test	Lab Result
7/22/15	7/22/15	CSF	culture	N. mening

3. REPORTER & PROVIDER INFORMATION

Reporting Source (Physician or other reporting source): Hospital Awesome | Facility

Street Address: 123 Health Way | City: Phx | State: AZ | Zip code: 85001 | Telephone#: 602-555-8745

Provider (if different from Reporter) | Facility

Provider Street Address | City | State | Zip code | Telephone#

Laboratory Name, Address and Telephone#

4. SEXUALLY TRANSMITTED DISEASES (STD) AND HIV/AIDS

Diagnosis: Syphilis (specify below) — Primary, Secondary, Early Latent (<1 year), Late (> 1 year), Congenital, Mother's Name: | Chlamydia, PID | Gonorrhea, PID | HIV/AIDS, Risk Factors: IDU, Sex with IDU, Sex with males | Site of Infection: Genitalia, Rectum, Throat, Other | Patient had Sexual Contact with: Males only, Females only, Refused, Unknown

5. HEPATITIS PANEL

Hepatitis A Serology Results: Hepatitis A Antibody (acute IgM anti-HAV) — Pos, Neg, Unk

Hepatitis B Serology Results: Hepatitis B surface Antigen (HBsAg); Hepatitis B core Antibody IgM (HBcAb-IgM); Hepatitis B core Antibody Total (HBcAb); Hepatitis B surface Antibody (HBsAb) — Pos, Neg, Unk

6. TUBERCULOSIS (TB)

Site of Disease: Pulmonary, Laryngeal, Extrapulmonary

Public Health Registry

Status

✗ ADHS is not accepting from Hospitals, but CDC may be soon

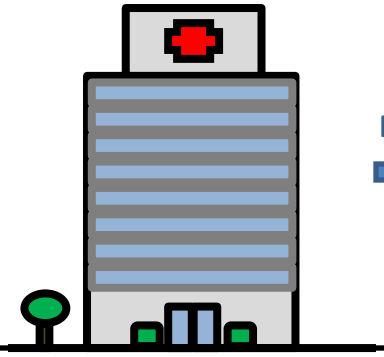
✓ ADHS accepting cancer submissions from ambulatory settings

What

-ADHS Cancer Registry from ambulatory settings only

-Antimicrobial Use and Resistance to NHSN NEW!

-National Health Care Surveys NEW!



National Healthcare Safety Network

National Health Care Survey

NEW!

Clinical Data Registry

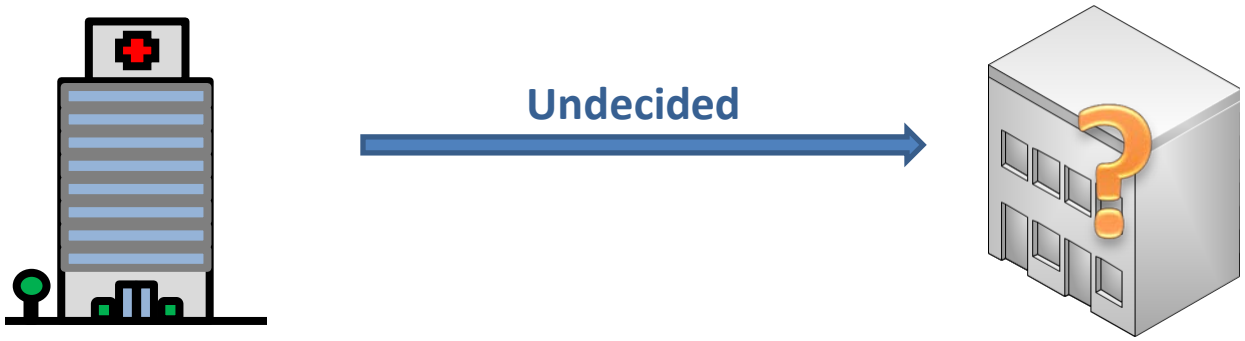
STAGE 3

Status

X No standards yet

What

Electronic reports to a non-public health registry, such as at a national specialty society



Note: Currently can send data to a non-public health registry under the “specialized registry” category.

Questions?????

MeaningfulUse@azdhs.gov

www.azdhs.gov/meaningful-use

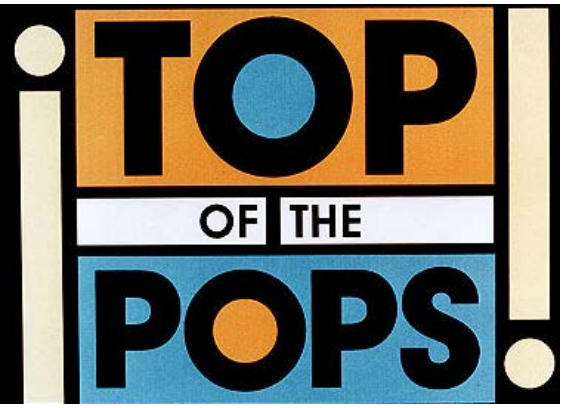
Hepatitis B & C in AZ

Who has Hep?

APIC State of the State, January 22, 2016

Clarisse Tsang, MPH
Viral Hepatitis Prevention Coordinator/Senior Epidemiologist


By Bill Halls/ CC BY-SA 2.0



Top Reported Infectious Diseases in AZ

Chlamydia

Influenza

Hepatitis C

Valley fever

Gonorrhea

Invasive MRSA

Salmonella

Hepatitis B

http://www.azdhs.gov/phs/oids/data/

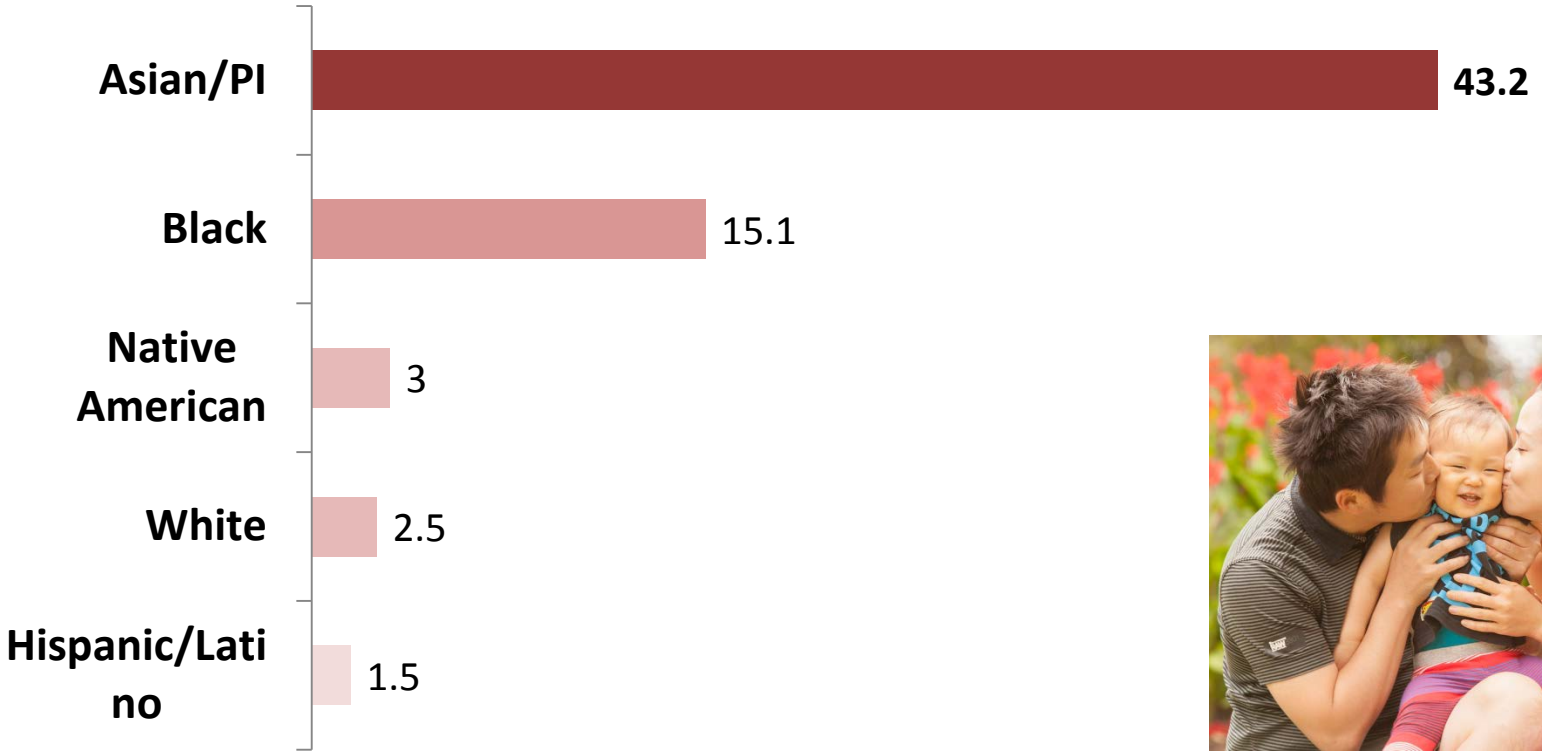
HEPATITIS B

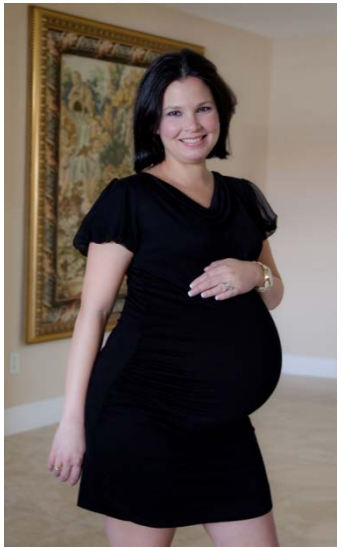
Hepatitis B in AZ

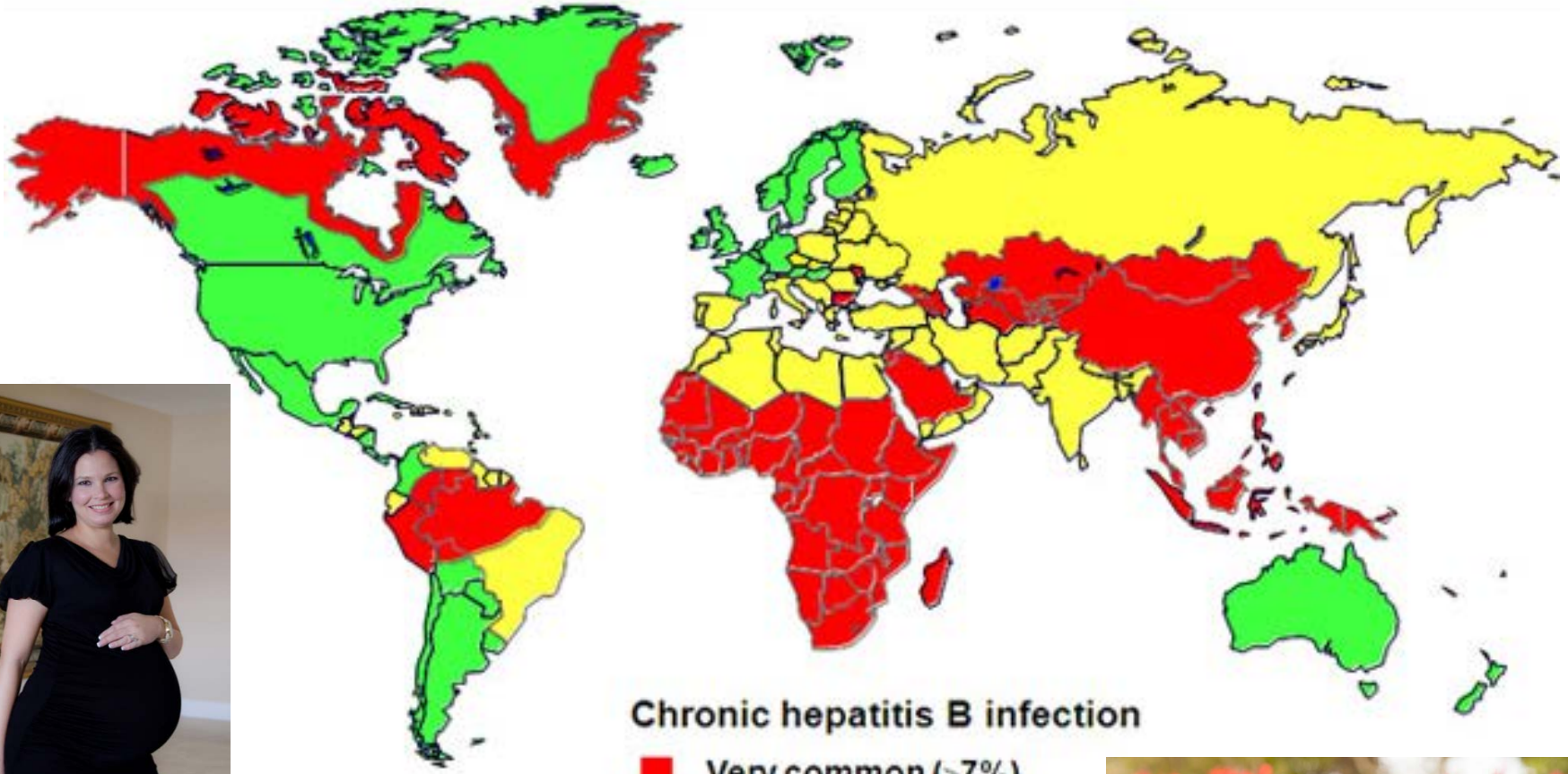
150 acute/year

893 chronic/year

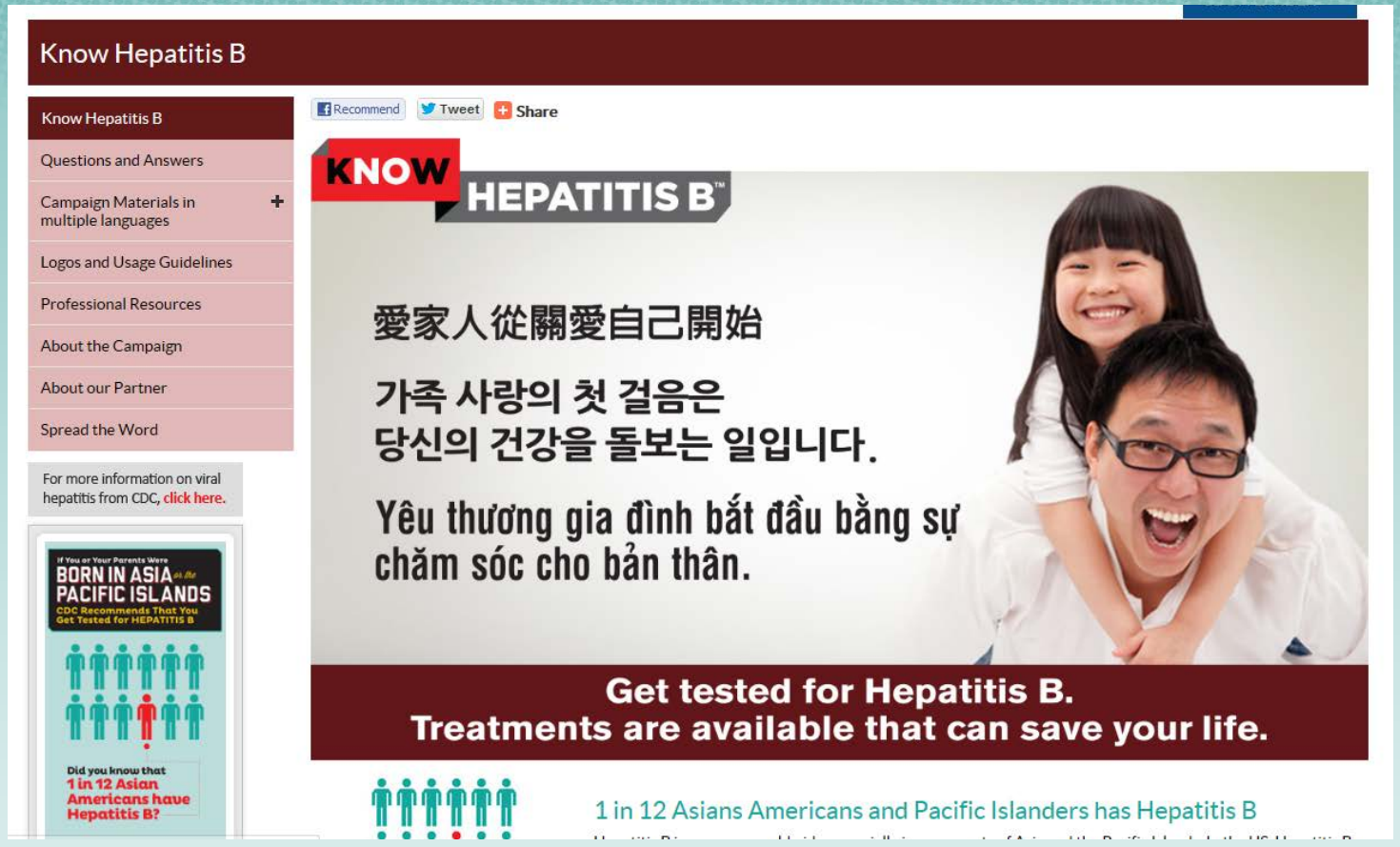
Chronic Hepatitis B in AZ







CDC Know Hepatitis B Campaign



English
Chinese
Korean
Vietnamese
Burmese
Hmong
Khmer
Lao

http://www.cdc.gov/knowhepatitisB/

KNOW MORE HEPATITIS

GET TESTED FOR HEPATITIS B

IT COULD SAVE YOUR LIFE.

WHAT IS HEPATITIS B?

HEPATITIS B — LIVER CANCER caused by the HEPATITIS B VIRUS.

HEPATITIS B OFTEN DOESN'T CAUSE SYMPTOMS.
Many people can live with Hepatitis B for many years without feeling sick.

LIVER CANCER — If left untreated, it can lead to serious liver problems, **INCLUDING LIVER CANCER.**

DID YOU KNOW?

1 IN 12 — **1 IN 12 ASIAN AMERICANS** is infected with Hepatitis B and most don't know it.

Most people born in Asia who have Hepatitis B were infected as **INFANTS OR YOUNG CHILDREN.**

Hepatitis B is the **LEADING CAUSE OF LIVER CANCER** among Asian Americans.

U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, www.cdc.gov

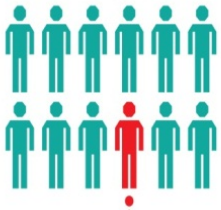
KNOW HEPATITIS B — CDC.GOV/KNOWHEPATITISB

Hep B United — hepbunited.org

If You or Your Parents Were

BORN IN ASIA *or the* PACIFIC ISLANDS

CDC Recommends That You Get Tested for HEPATITIS B



Did you know that **1 in 12 Asian Americans have Hepatitis B?**

2 out of every 3 Asian Americans with Hepatitis B **don't know they are infected**

People with Hepatitis B often have **NO SYMPTOMS**

Up to 25% of people with Hepatitis B **Develop serious liver problems**

#1 — Hepatitis B is the **leading cause of liver cancer** for Asian Americans

Rx — **But, treatments are available** that can save your life

Loving your family starts with caring for yourself.

If you or your parents were born in Asia or the Pacific Islands, talk to your doctor about getting tested for Hepatitis B. It could save your life.

U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

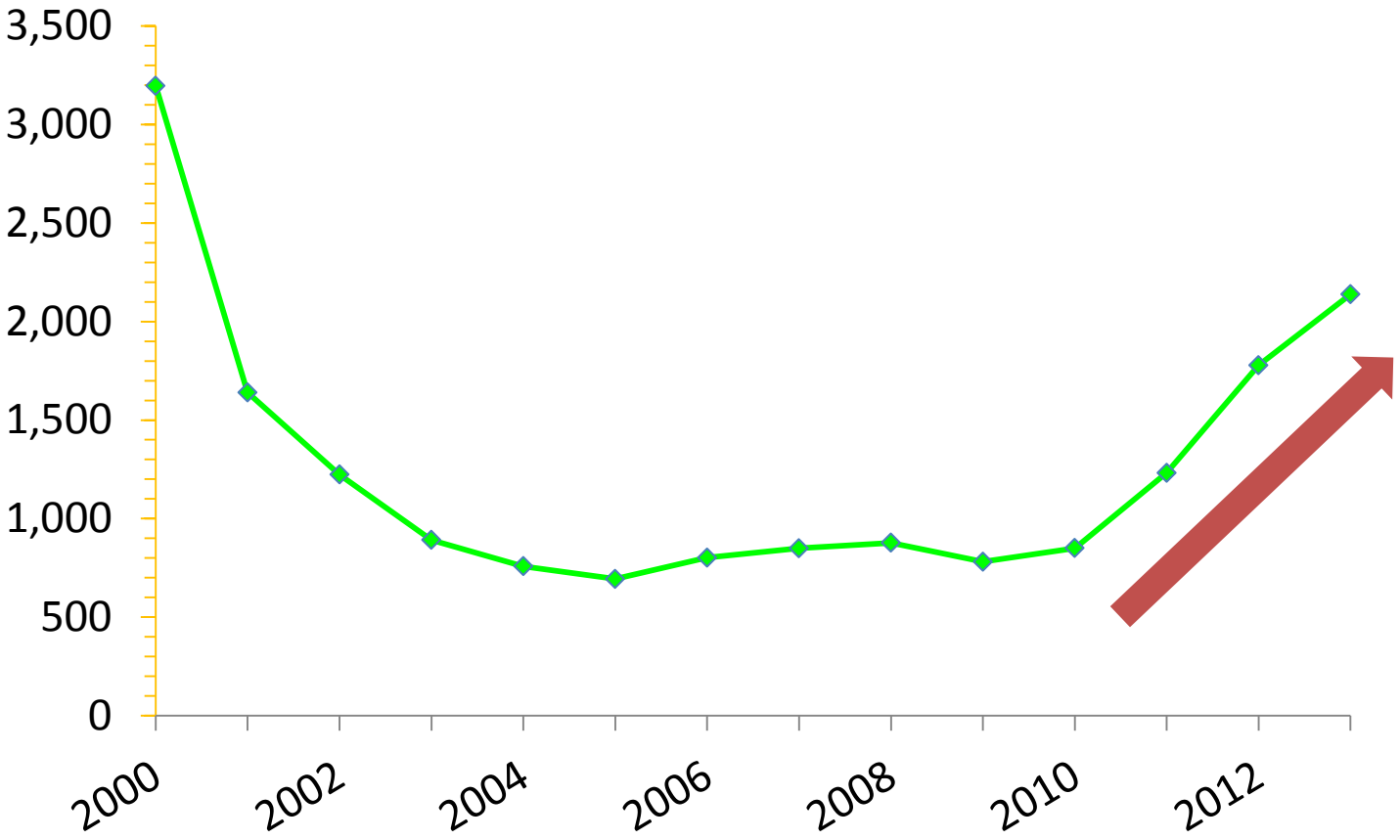
KNOW HEPATITIS B — CDC.GOV/KNOWHEPATITISB

Hep B United

HEPATITIS C

Rising Numbers

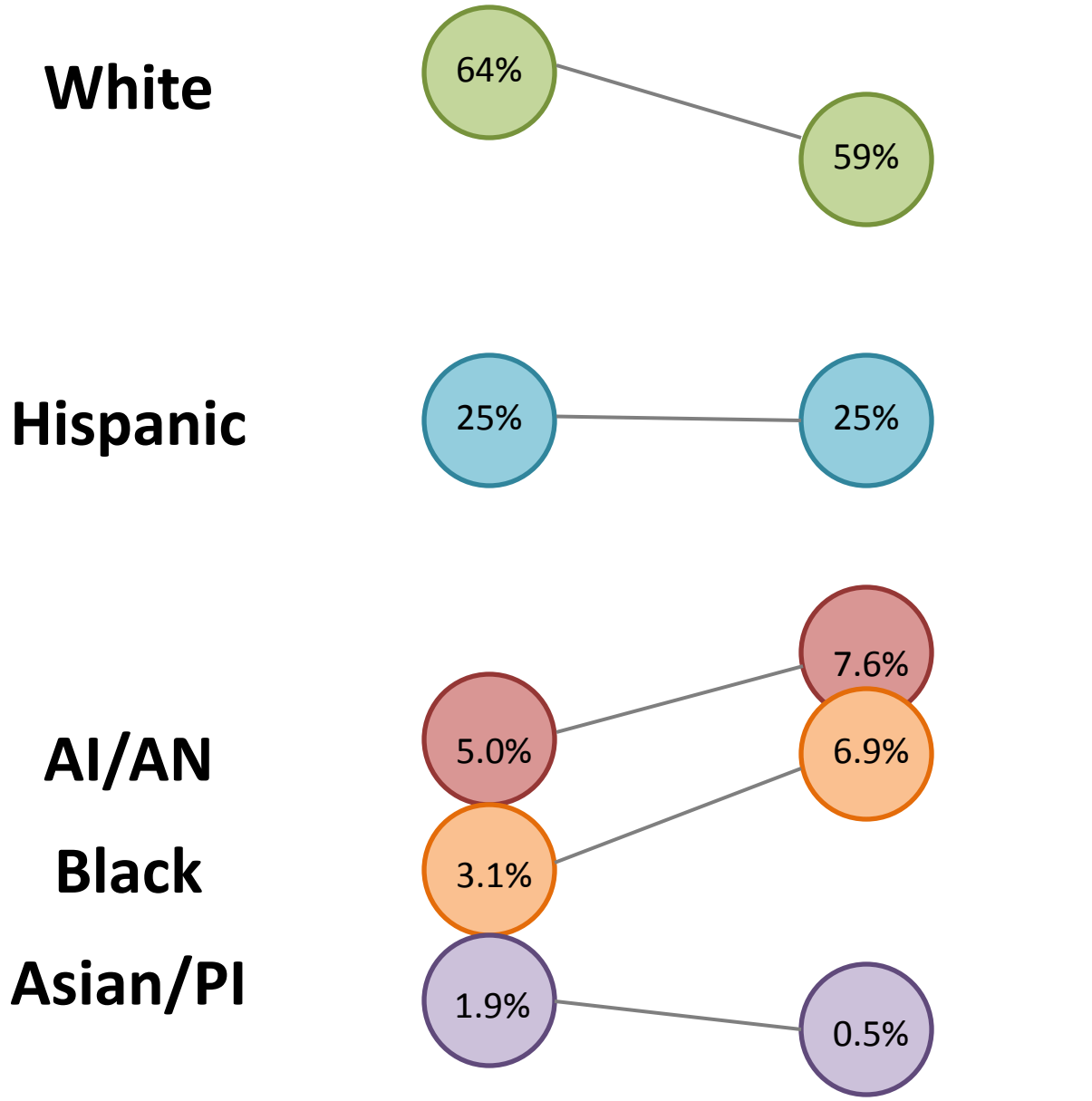
Acute Hepatitis C in the U.S.*



*Not all states report HCV to CDC

CDC: http://www.cdc.gov/hepatitis/statistics/

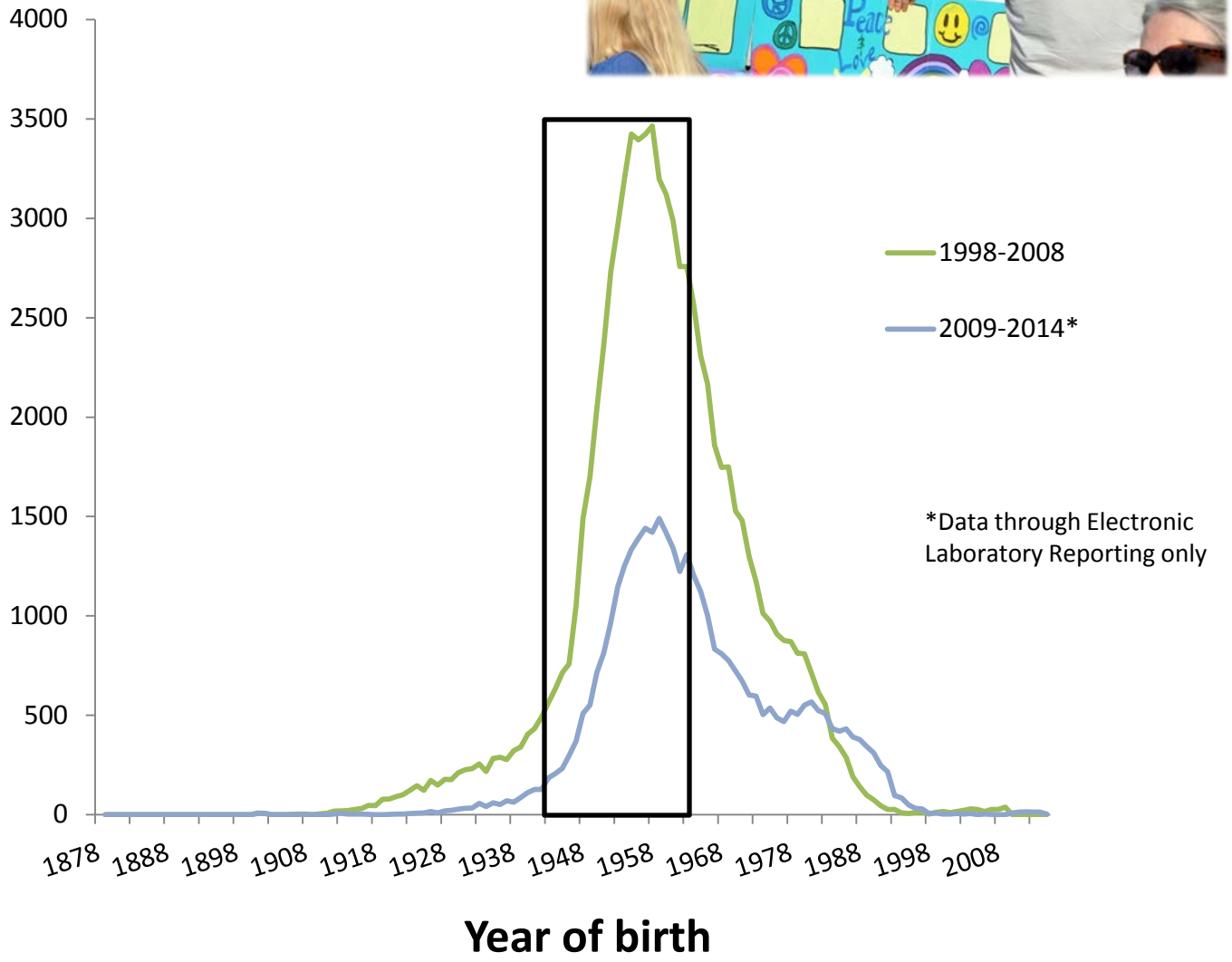
Hepatitis C by Race/Ethnicity in AZ

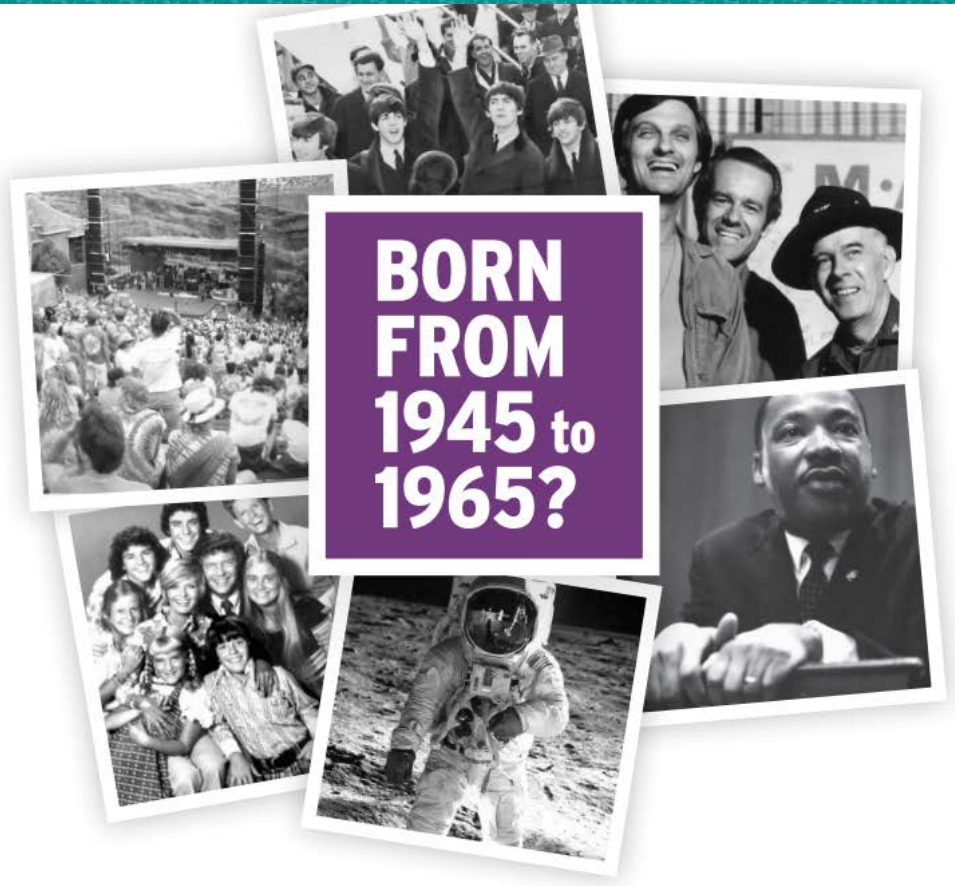


Hepatitis C in AZ

~10,000/year

66% male





BABY BOOMERS HAVE THE HIGHEST RATES OF HEPATITIS C.

Talk to your doctor about getting tested.
Early detection can save lives.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

www.cdc.gov/knowmorehepatitis

KNOW MORE HEPATITIS

Publication No. 221235

CDC Know More Hepatitis Campaign

http://www.cdc.gov/knowmorehepatitis/

KNOW MORE HEPATITIS

Did you know people born from 1945-1965 are 5 times more likely to have Hepatitis C?

A blood test is the only way to know.
Talk to your doctor about getting tested. It could save your life.

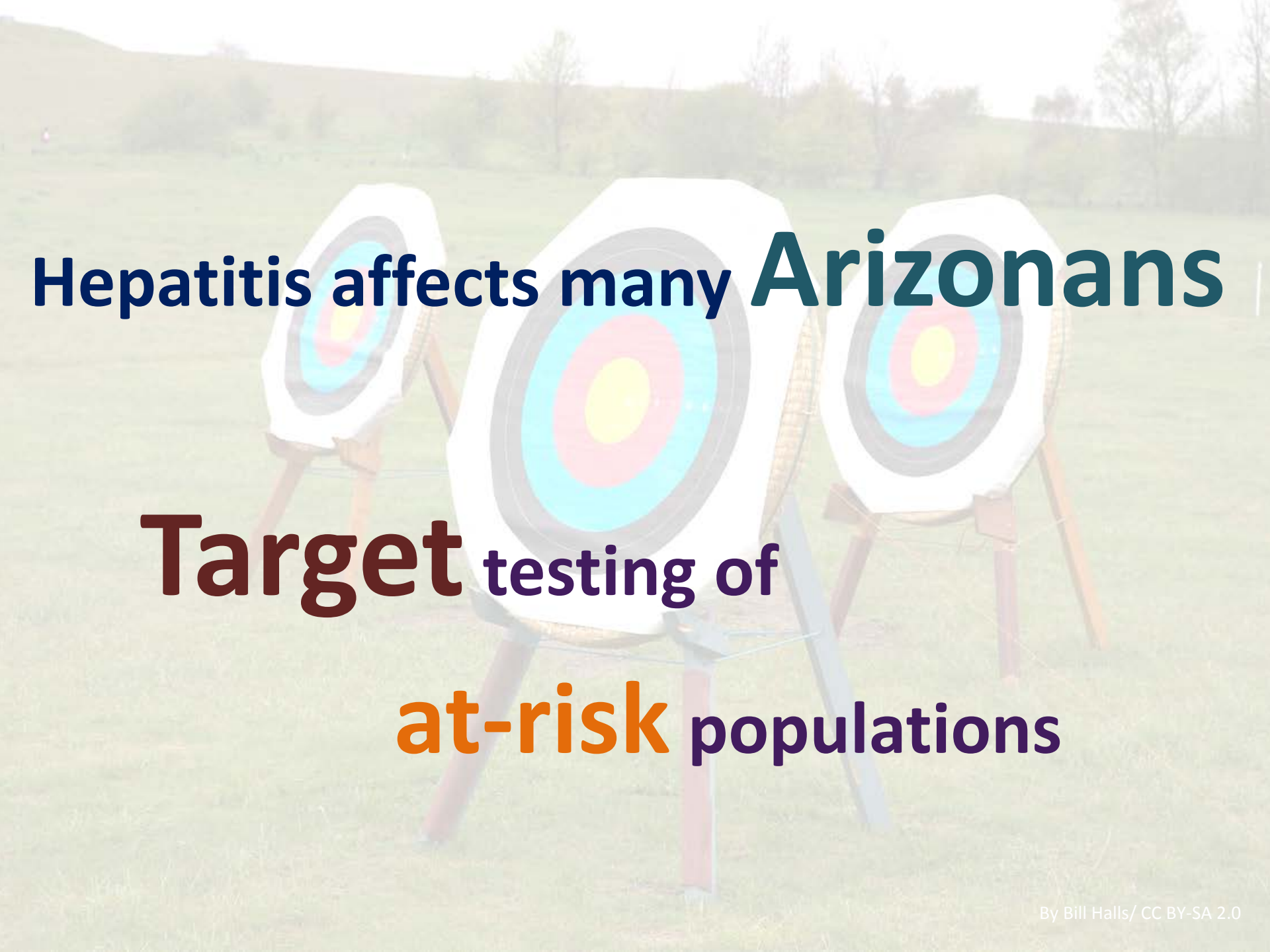
U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

www.cdc.gov/knowmorehepatitis

KNOW MORE HEPATITIS

Publication No. 221781

Where do we go from here?



Hepatitis affects many Arizonans

Target testing of

at-risk populations

Did you know…?

ADHS HCV Rapid Antibody Testing Program

ADHS ADAP Formulary includes HCV medications

Stakeholder input needed!

astho™

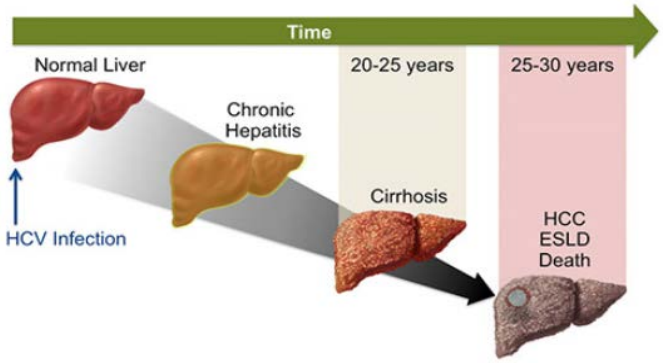
Harnessing Data to Launch
Viral Hepatitis Epidemiologic Profiles

Resources

Viral Hepatitis Serology Training Videos

http://www.cdc.gov/hepatitis/resources/professionals/training/serology/training.htm

Hepatitis C Online Training



http://www.hepatitisc.uw.edu/

CDC Viral Hepatitis Website

http://www.cdc.gov/hepatitis/

Viral Hepatitis Summit Presentations

http://azdhs.gov/preparedness/epidemiology-disease-control/hepatitis/index.php#hepatitis-summit

Clarisse.Tsang@azdhs.gov
602-364-3817

Viral Hepatitis Program

- Home
- About Viral Hepatitis
- Hepatitis A
- Hepatitis B
- Hepatitis C
- Other Types of Virus Hepatitis
- Hepatitis Awareness Month

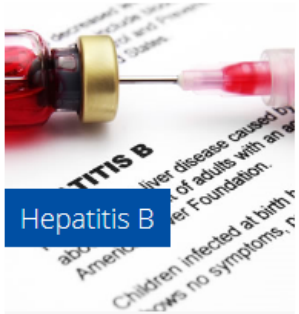
Arizona Department of Health Services

ADHS Viral Hepatitis Website
www.HepatitisAZ.org

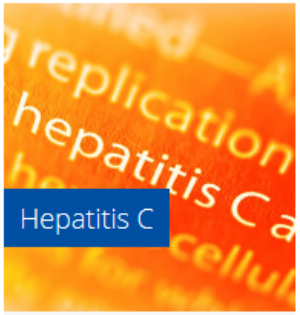
Hepatitis Program - Home

May is Hepatitis Awareness Month! Find out where to get tested. Also read CDC's MMWR on the ongoing outbreak of HIV associated with injection drug use in which 84.4% are co-infected with hepatitis C!

Learn more about this foodborne disease that affects the liver.



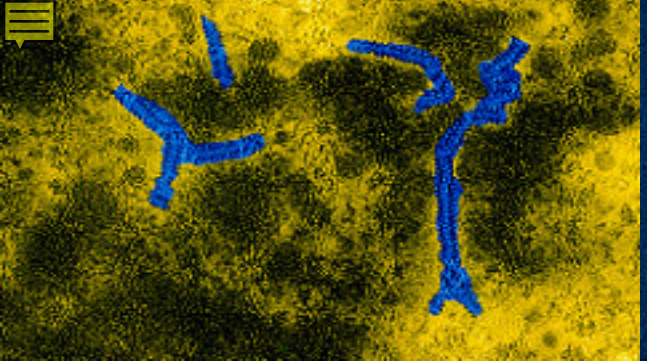
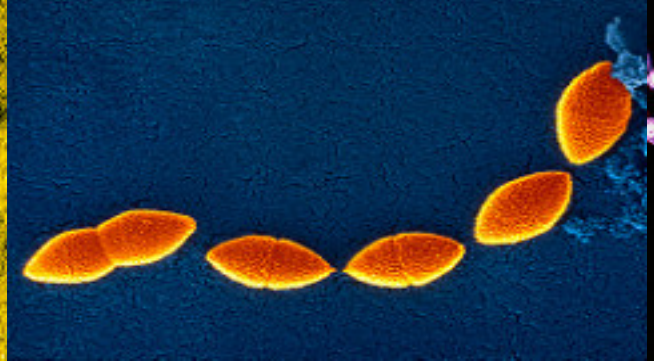
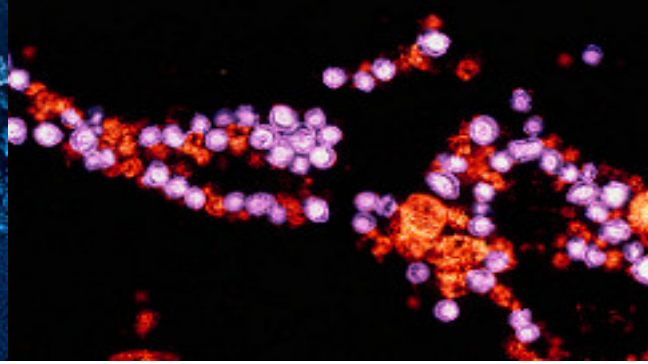
Find out more about this bloodborne pathogen that affects the liver.



Information about this common disease that is the leading cause of liver cancer.

Info about lesser-known forms of viral hepatitis that also affect the health of the liver.

The Viral Hepatitis Program is located within the Office of Infectious Disease Services, under the Bureau of Epidemiology and Disease Control. The goal of the Viral Hepatitis Program is to increase awareness amongst those at risk for viral hepatitis about the disease, to detect hepatitis cases and link them to care, to improve education amongst healthcare providers to test at-risk populations, to investigate potential hepatitis exposures and implement control measures, to improve surveillance and understanding of viral hepatitides in Arizona. The Viral Hepatitis Program works with local, state, and federal partners in implementing the goals of the national action plan to combat the silent epidemic of viral hepatitis.

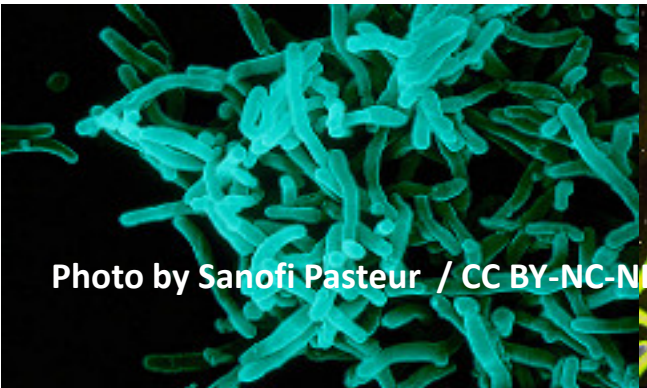




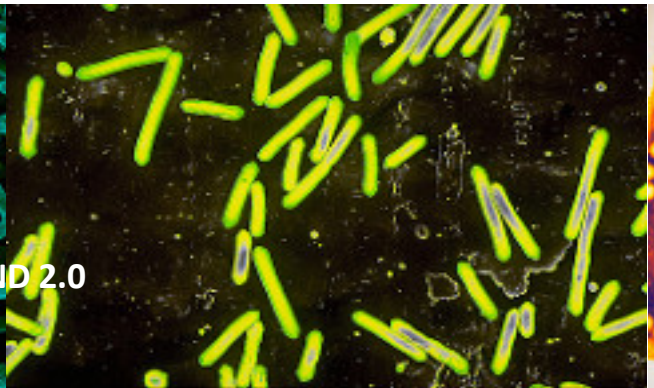
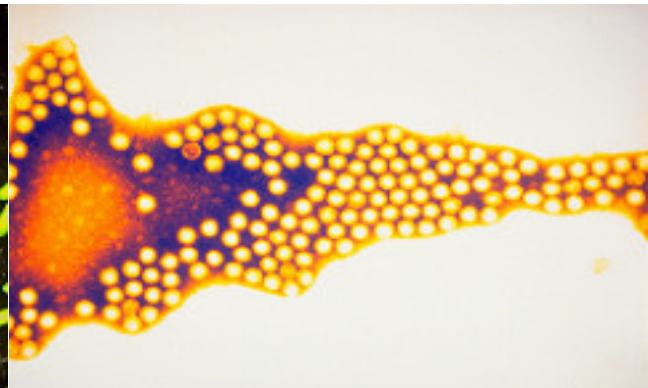
Vaccine Preventable Diseases

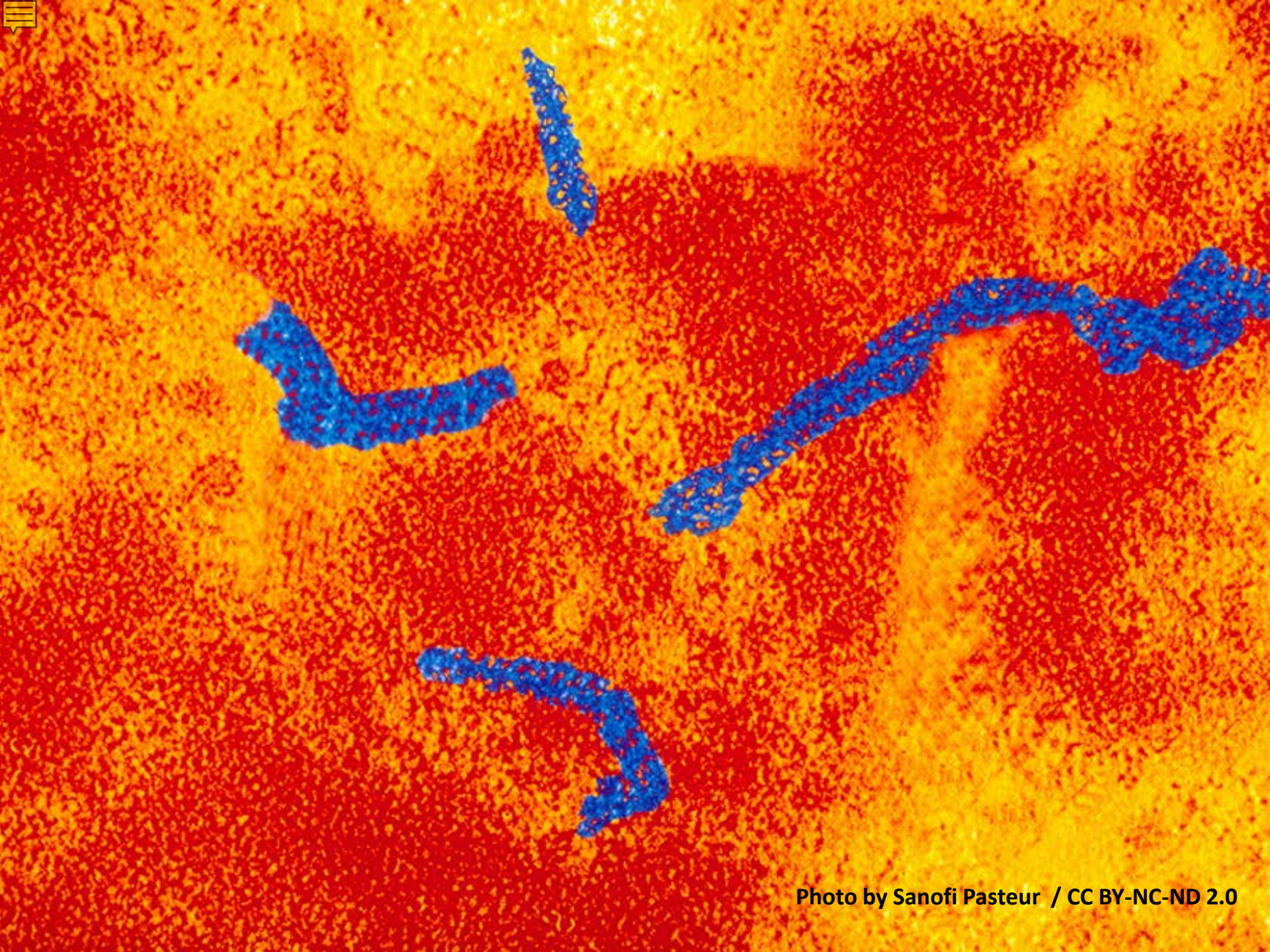
Susan Robinson, MPH

Office of Infectious Disease Services

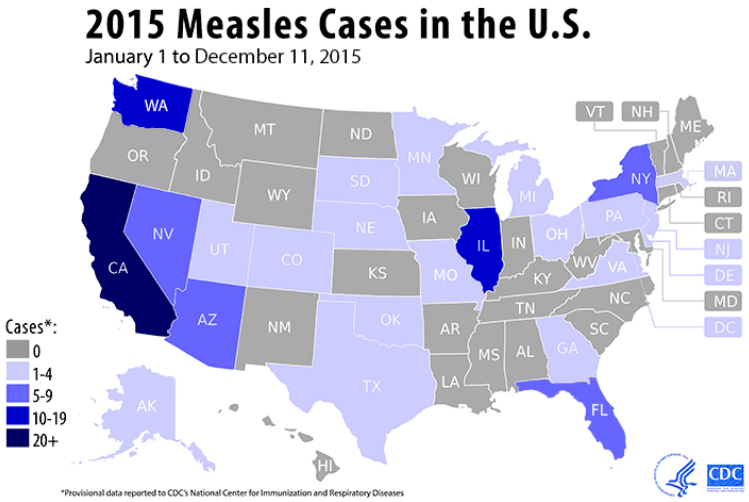
Arizona Department of Health Services





Measles 2015



The United States experienced a record number of measles cases during 2014, with 667 cases from 27 states reported to CDC's Nationa Immunization and Respiratory Diseases (NCIRD). This is the greatest number of cases since measles elimination was documented in the

Measles Cases and Outbreaks

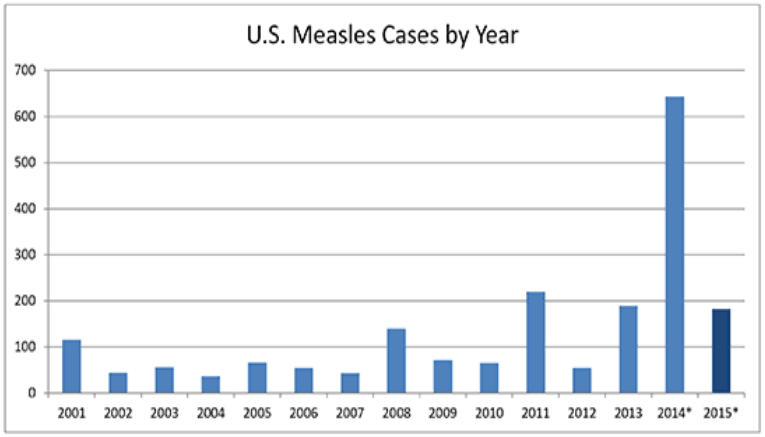
January 1 to December 11, 2015*

189 Cases

reported in 24 states and the District of Columbia: Alaska, Arizona, California, Colorado, Delaware, Florida, Georgia, Illinois, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Jersey, New York, Nevada, Ohio, Oklahoma, Pennsylvania, South Dakota, Texas, Utah, Virginia, Washington

5 Outbreaks

representing 80% of reported cases this year



*Provisional data reported to CDC's National Center for Immunization and Respiratory Diseases

CDC

Arizona Measles Outbreak 2015

CA.GOV California Department of Public Health CDPH

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en Español

- Su salud en su idioma

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- Birth, Death, & Marriage Certificates
- Licensing and

Home

California Department of Public Health Confirms Measles Case

Date: 1/7/2015

Number: 15-002

Arizona Measles Outbreak 2015

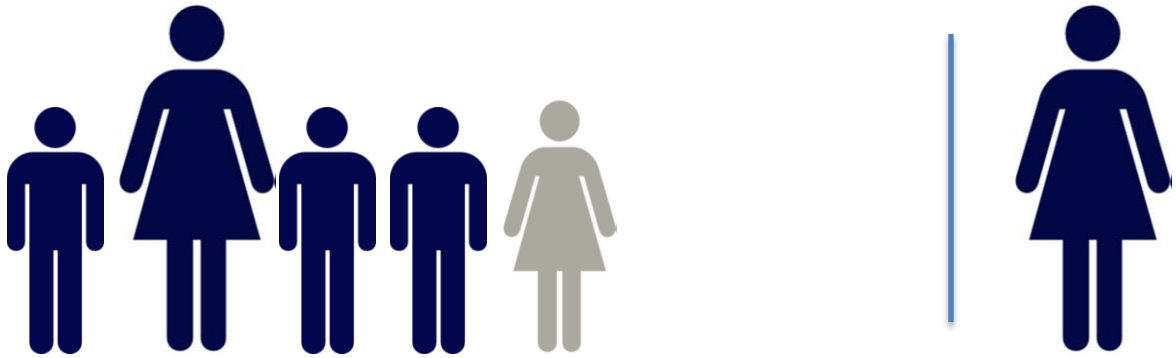
1/2/2015

Arizona Measles Outbreak 2015

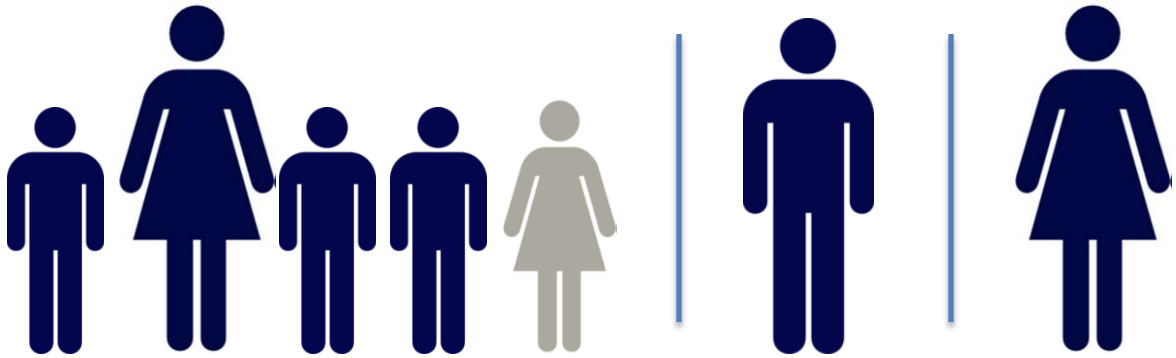
1/3/2015

Arizona Measles Outbreak 2015

1/10/2015 – 1/11/2015



Arizona Measles Outbreak 2015

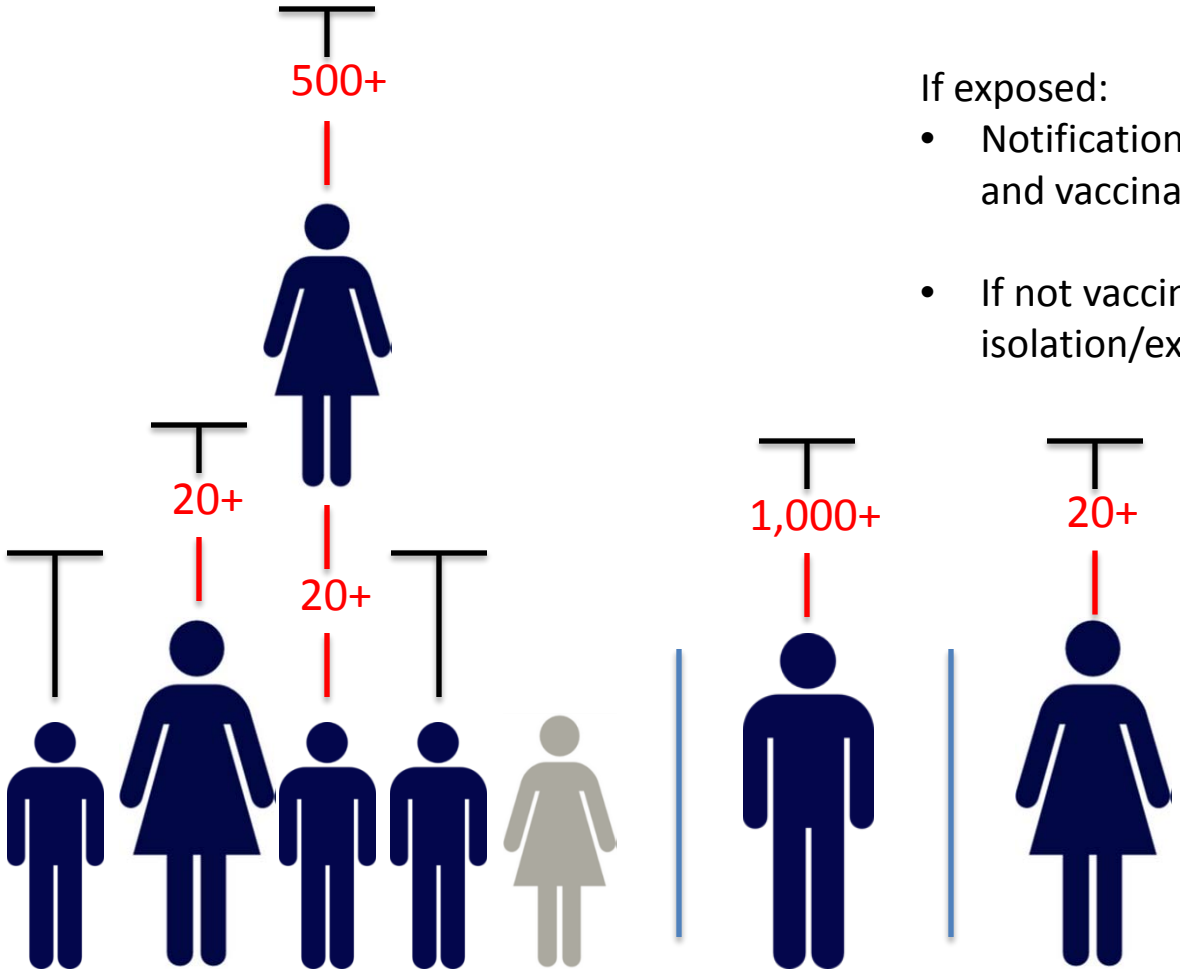


⊤ Indicates no further transmission

Red indicates number of exposed

If exposed:

- Notification made, regarding exposure and vaccination status
- If not vaccinated asked to do a 21 day isolation/exclusion from school/work



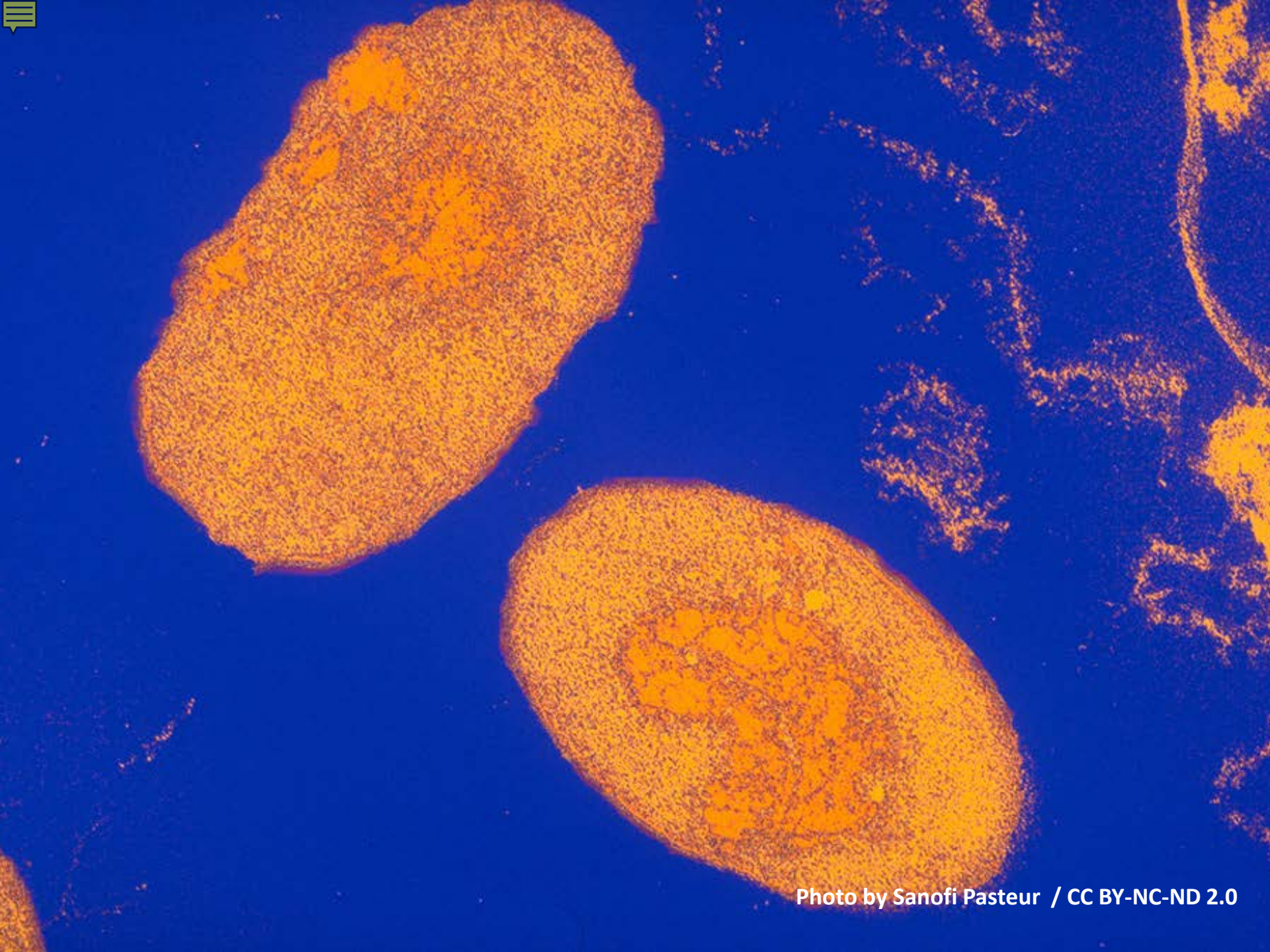
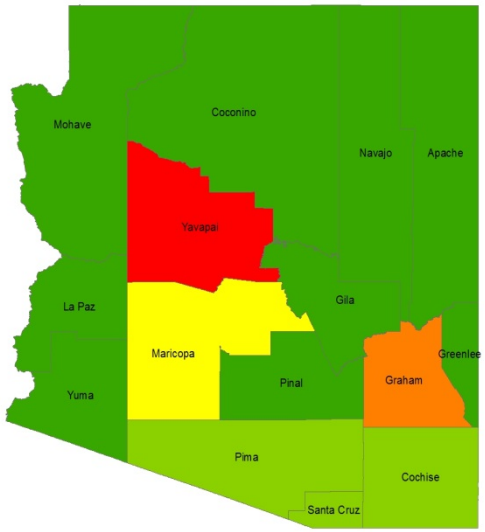


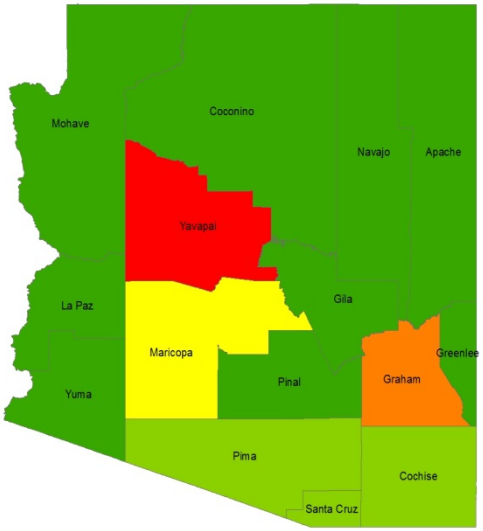
Photo by Sanofi Pasteur / CC BY-NC-ND 2.0



2010

Rates (per 100,000) Pertussis

- Under 3.7
- 3.7 - 7.6
- 7.6 - 12.9
- 12.9 - 18.3
- Over 18.3



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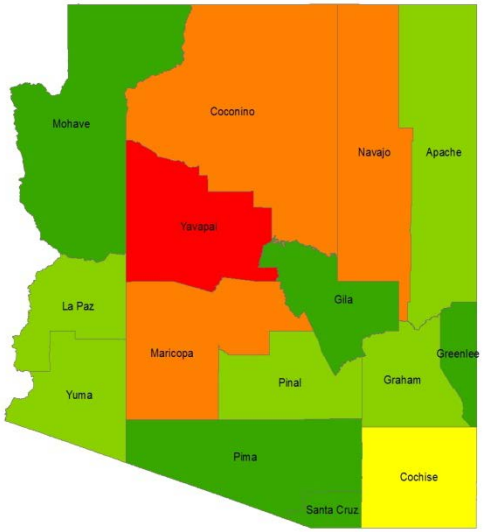

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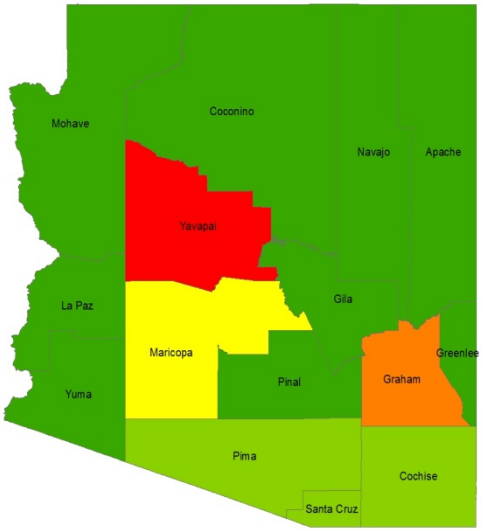

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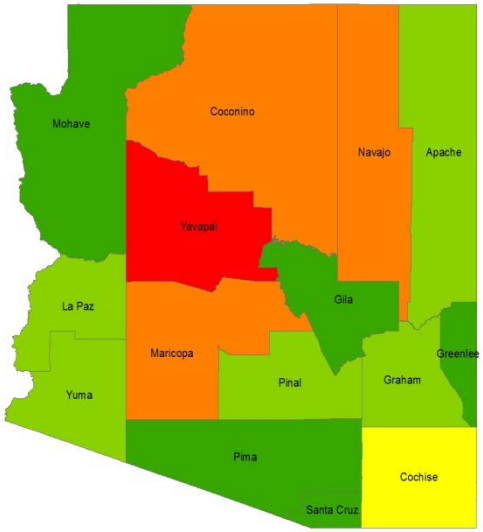

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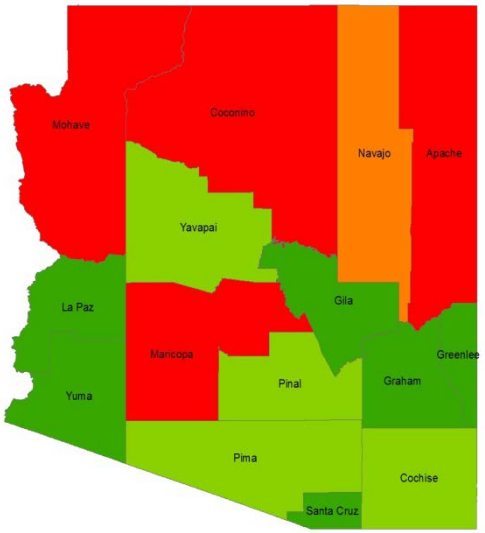

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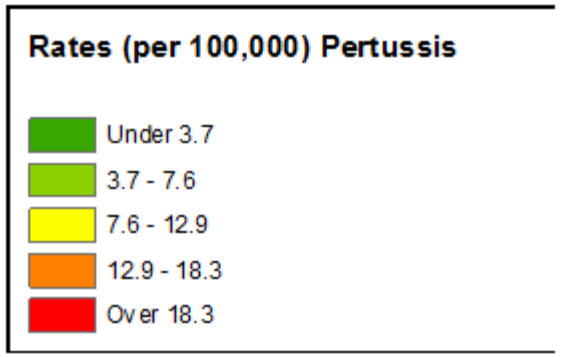

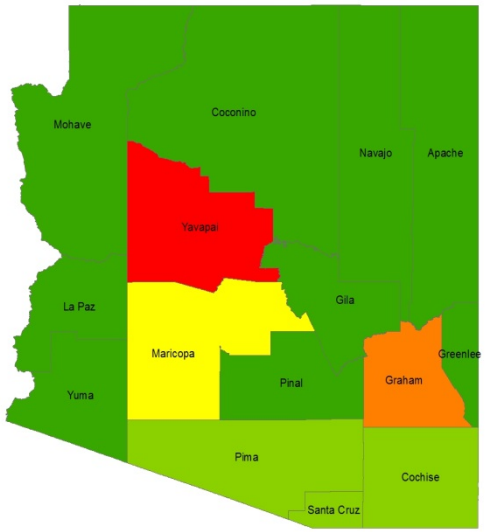

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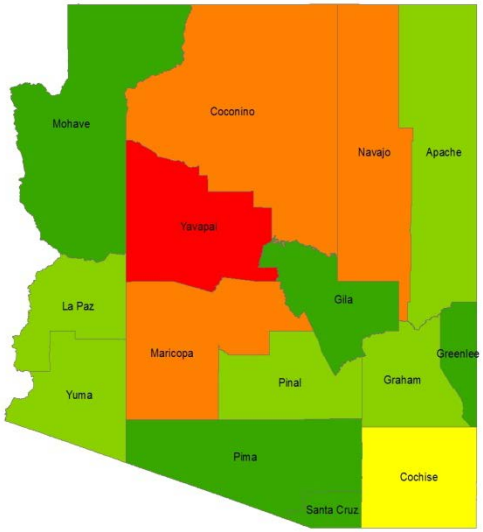

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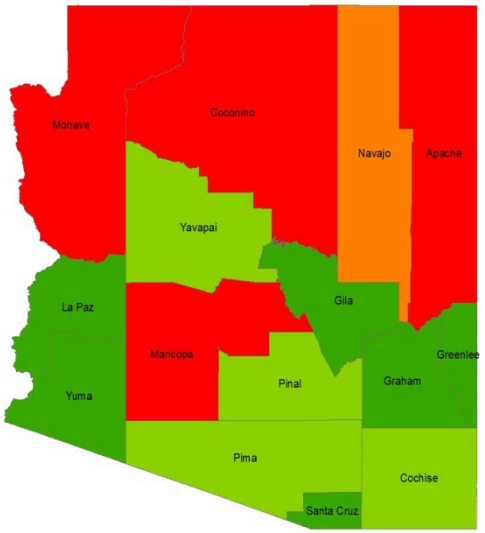

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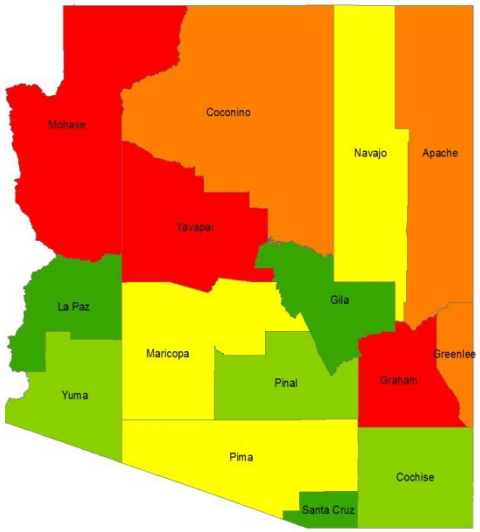

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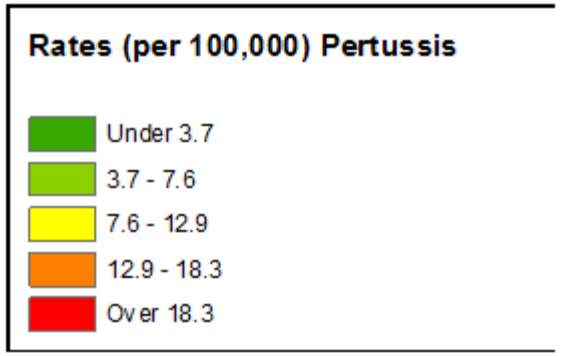

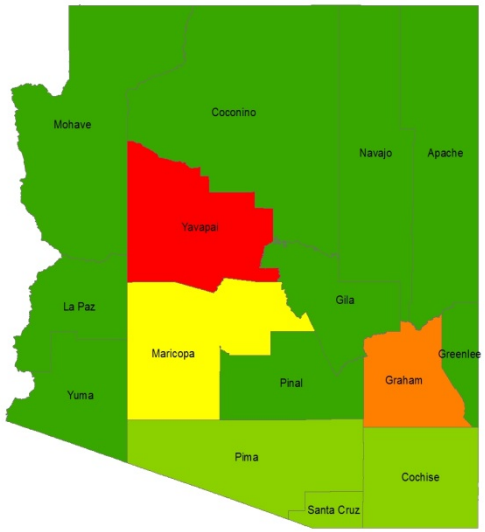

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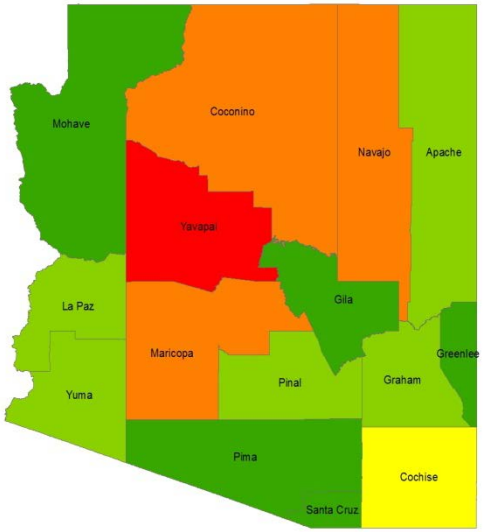

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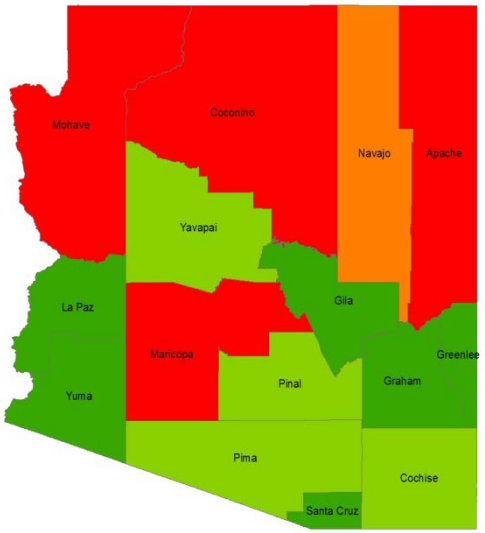

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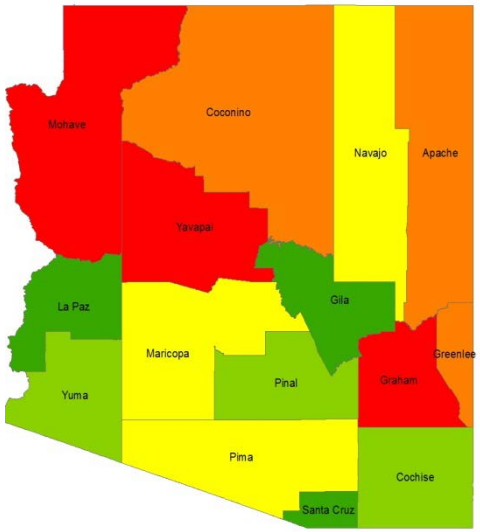
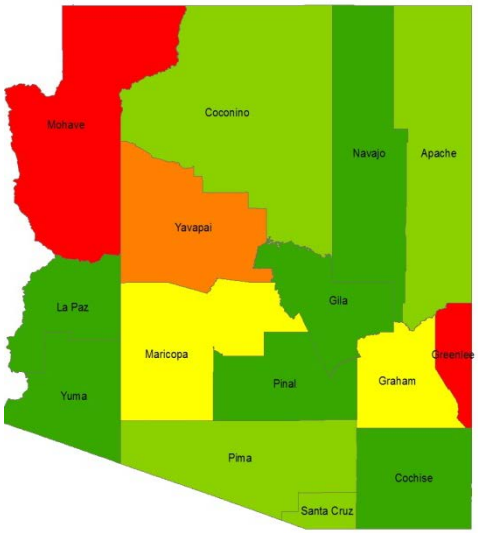


2013



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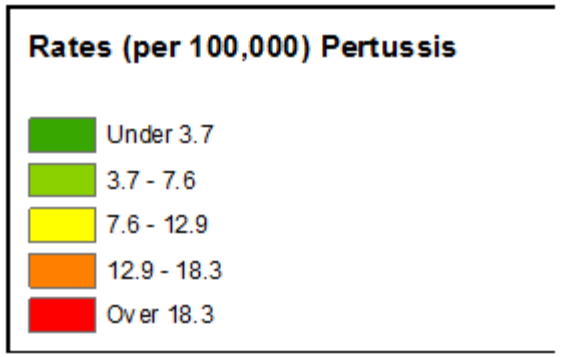

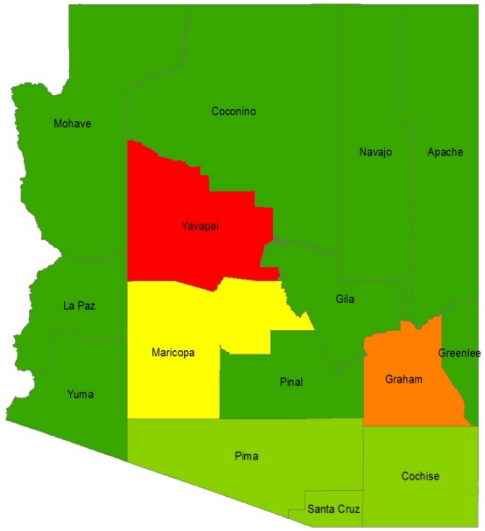

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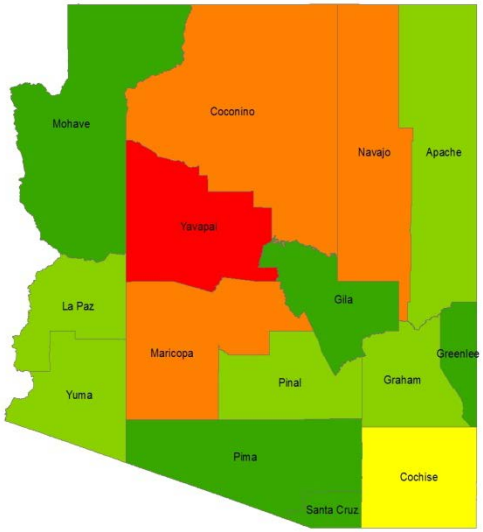

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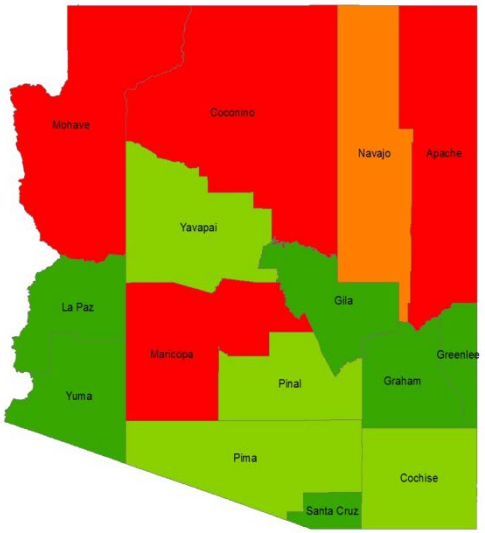
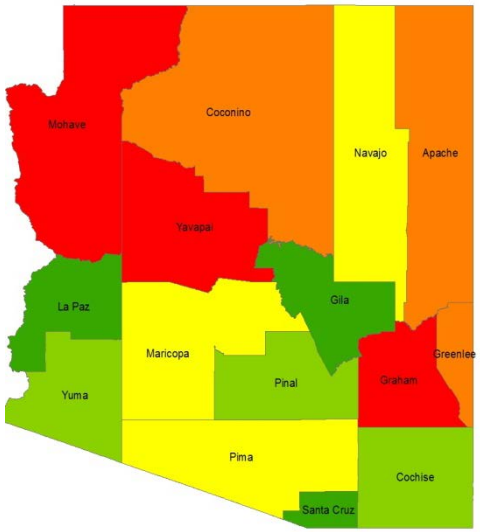
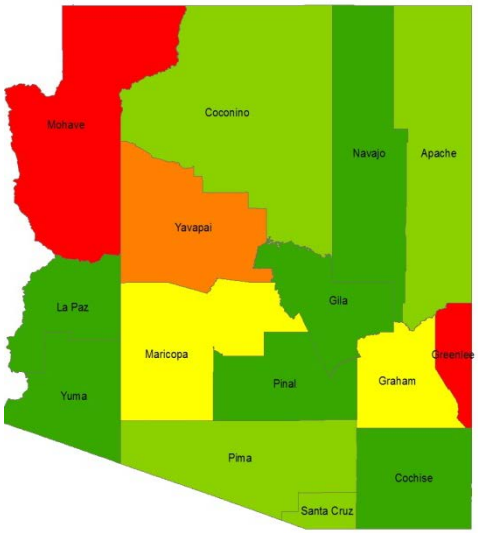


2012



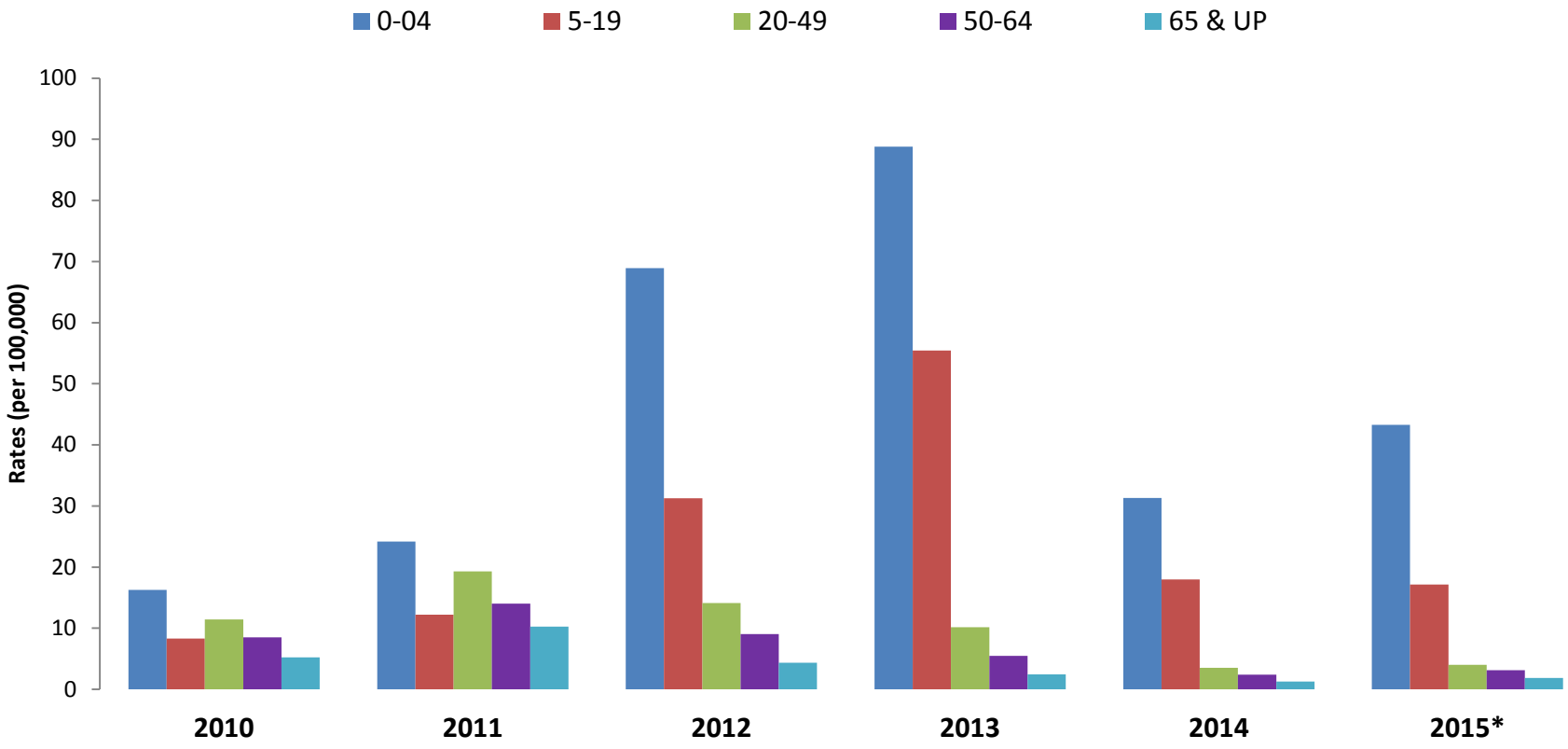
2013



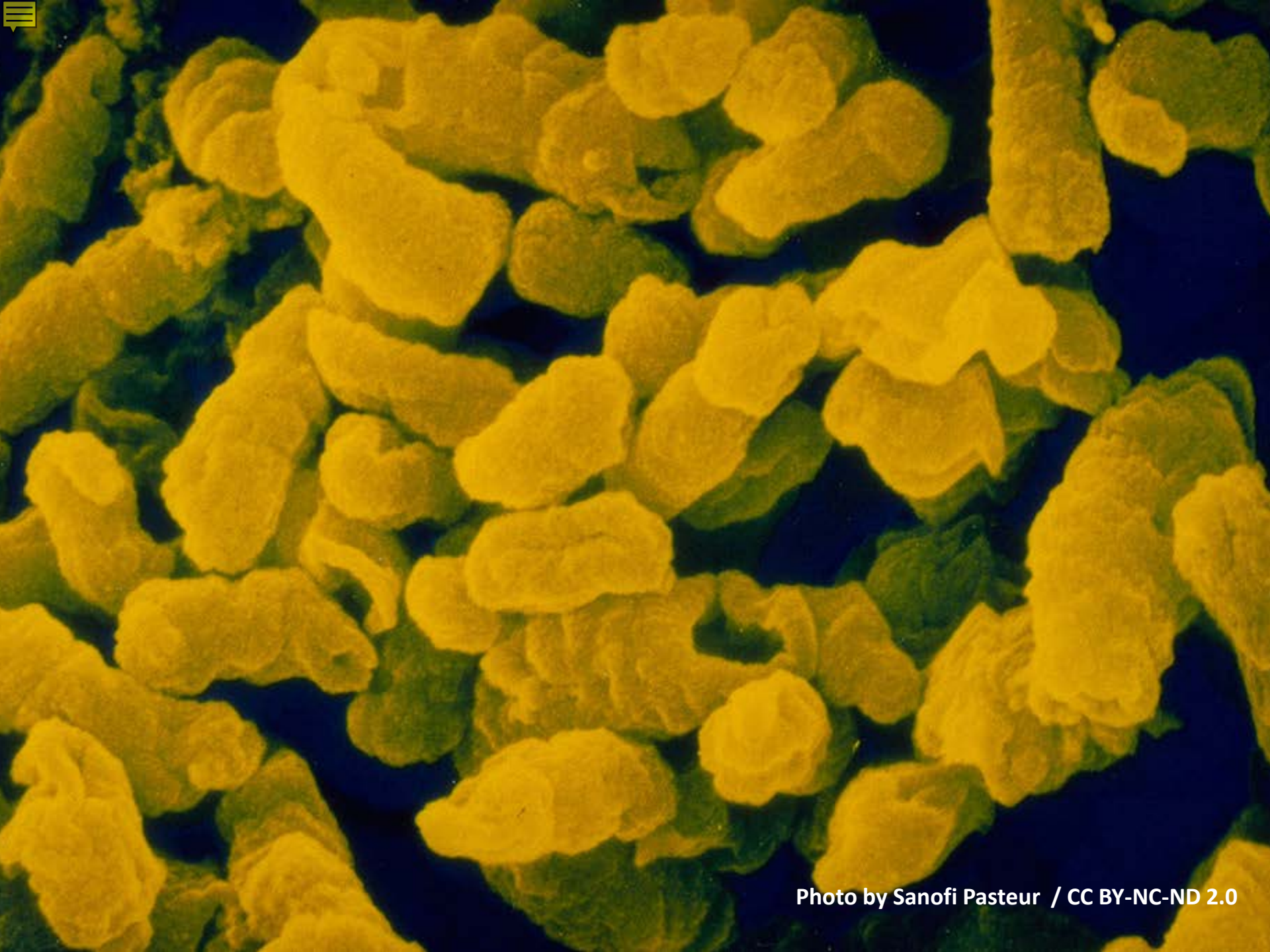
2014

2015

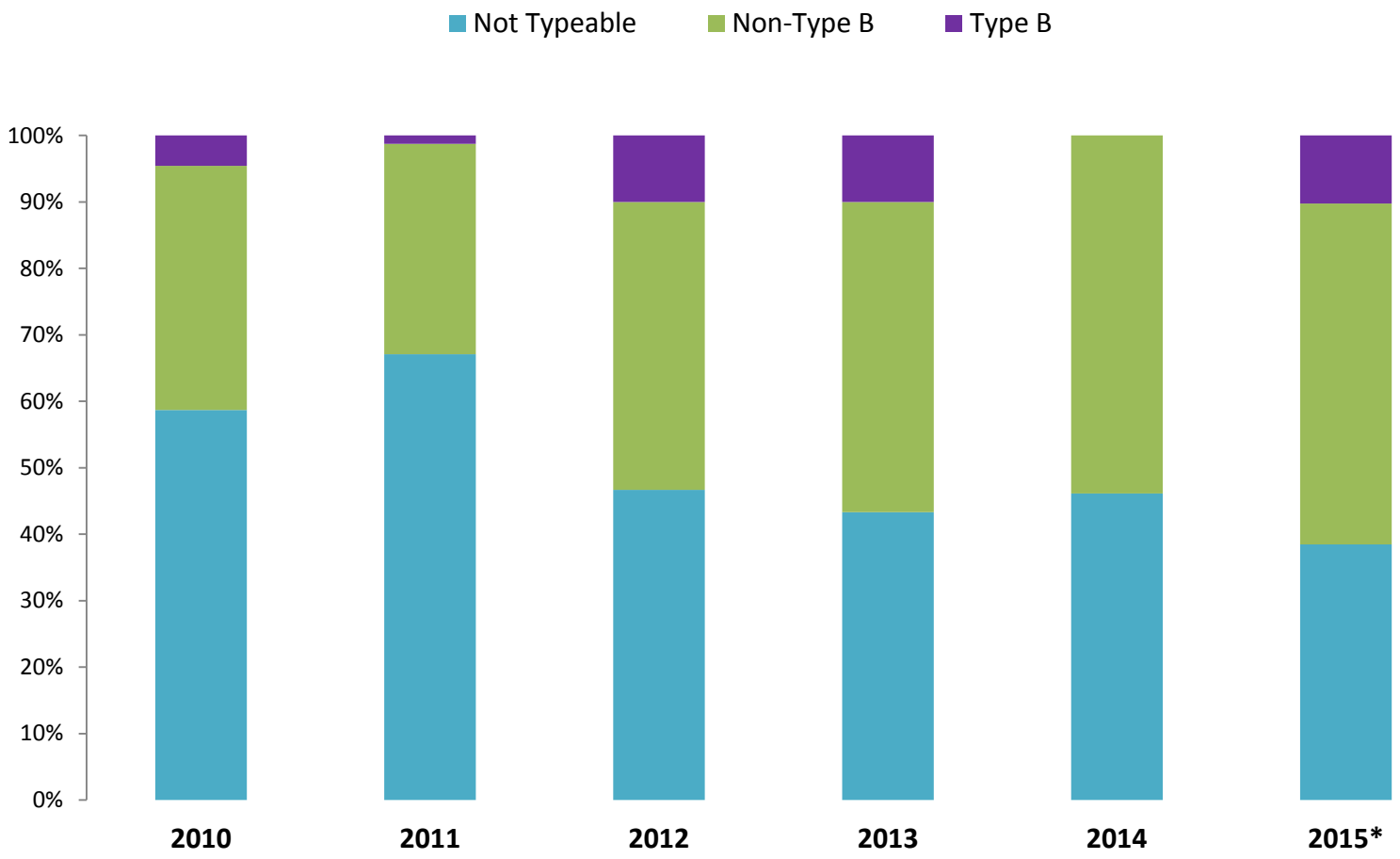
Rates (per 100,000) per age group for Pertussis 2010-2015*



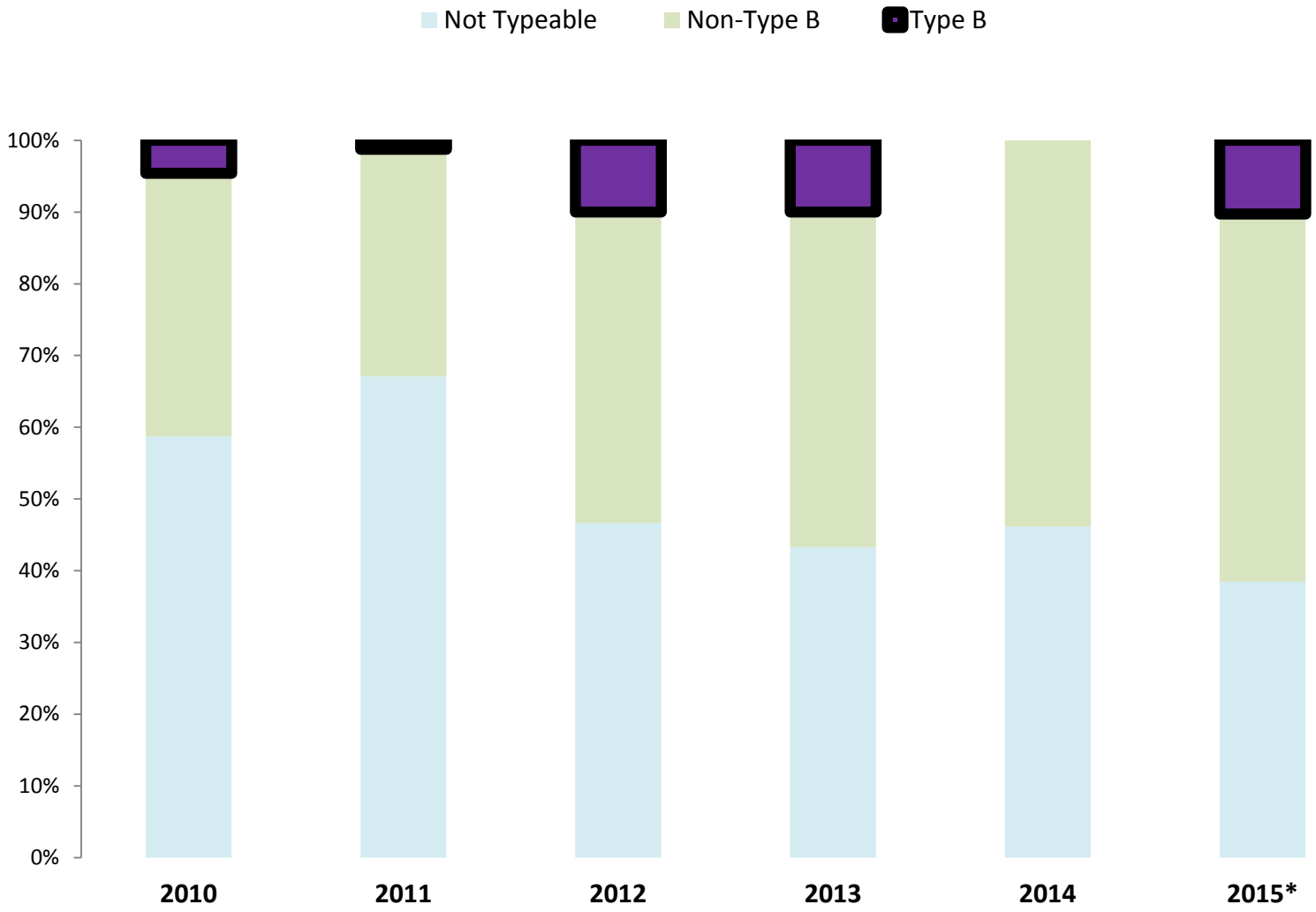
*All 2015 data is preliminary and 2015 rates were calculated using 2014 population numbers



Proportion of cases of invasive *Haemophilus influenzae* that were typed 2010-2015



*All 2015 data is preliminary



*All 2015 data is preliminary

Number of *Haemophilus influenzae* type B under 5 years of age

2010:
- Coconino County and Maricopa County

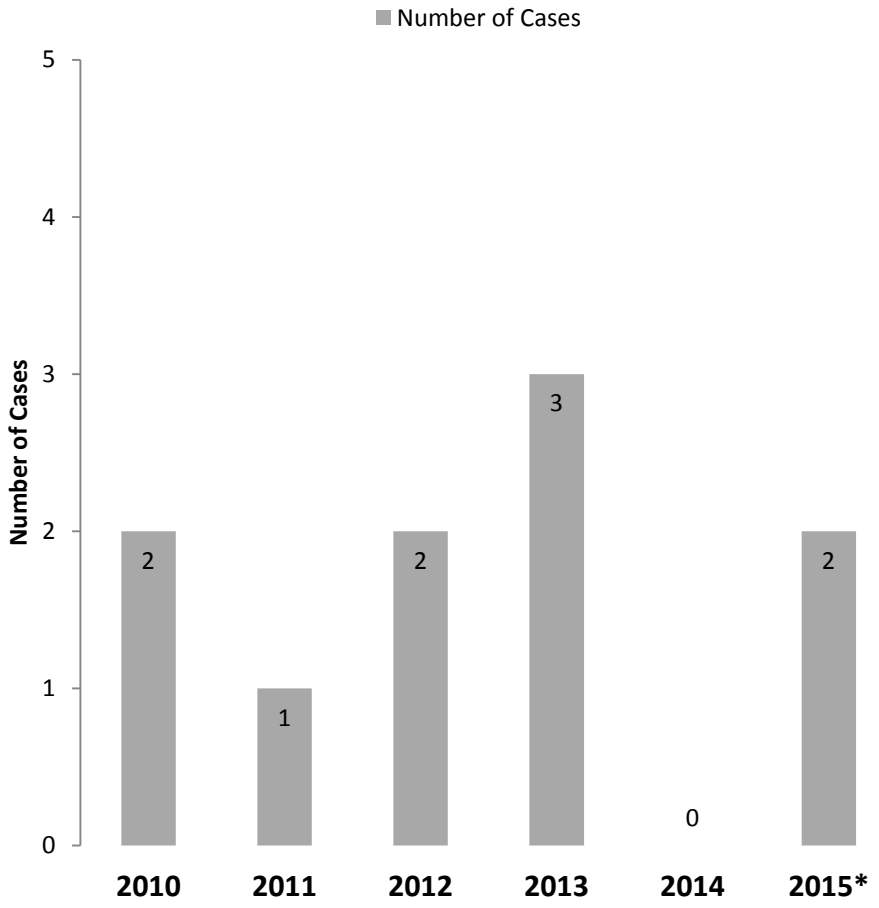
2011:
- Maricopa County

2012:
- Apache County and Maricopa County

2013:
- Navajo County, Maricopa County and Mohave County

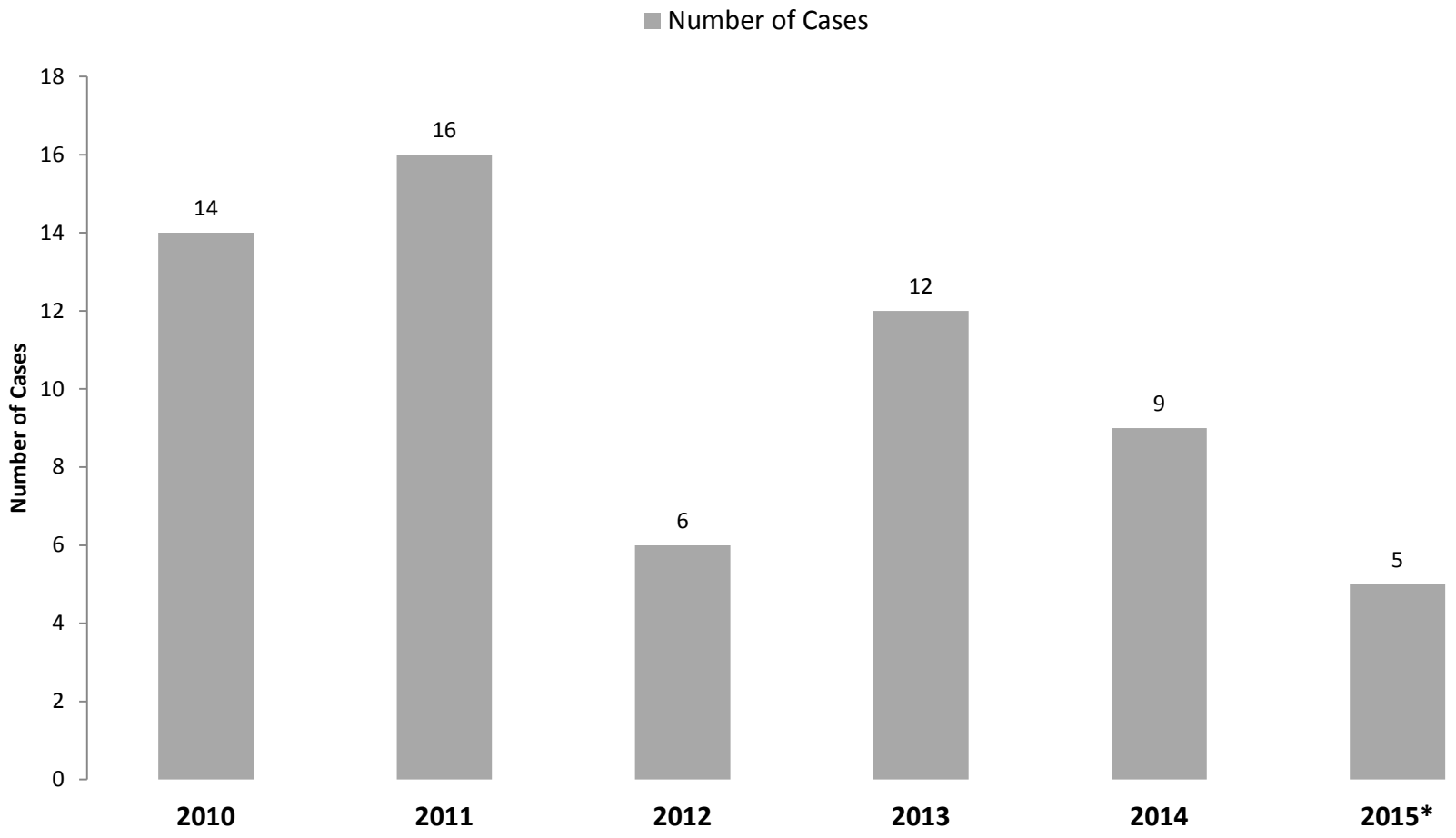
2014:
- N/A

2015:
- Apache County and Maricopa County



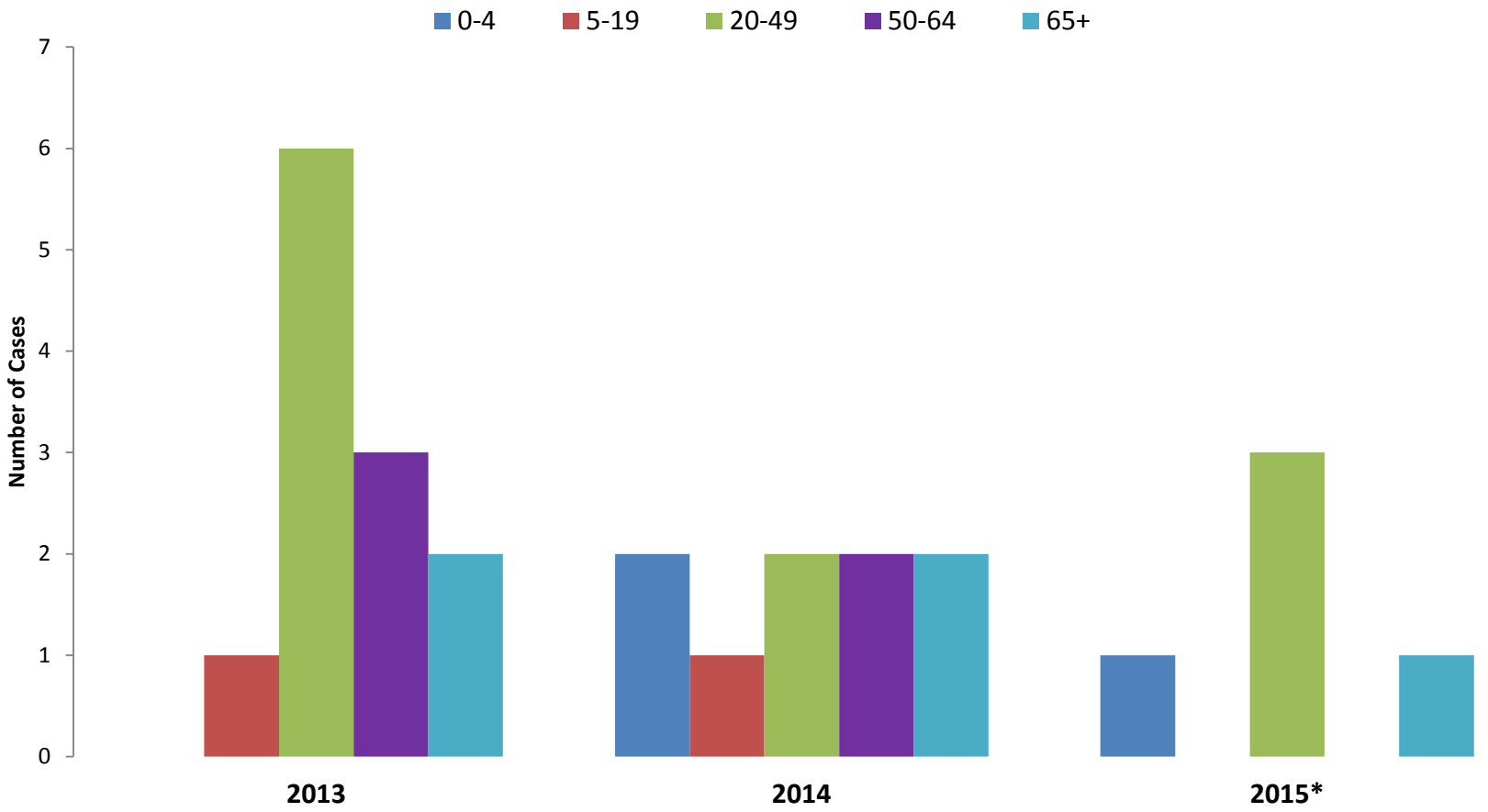
*All 2015 data is preliminary and 2015 rates were calculated using 2014 population numbers

Number of cases per year for invasive Meningococcal Disease



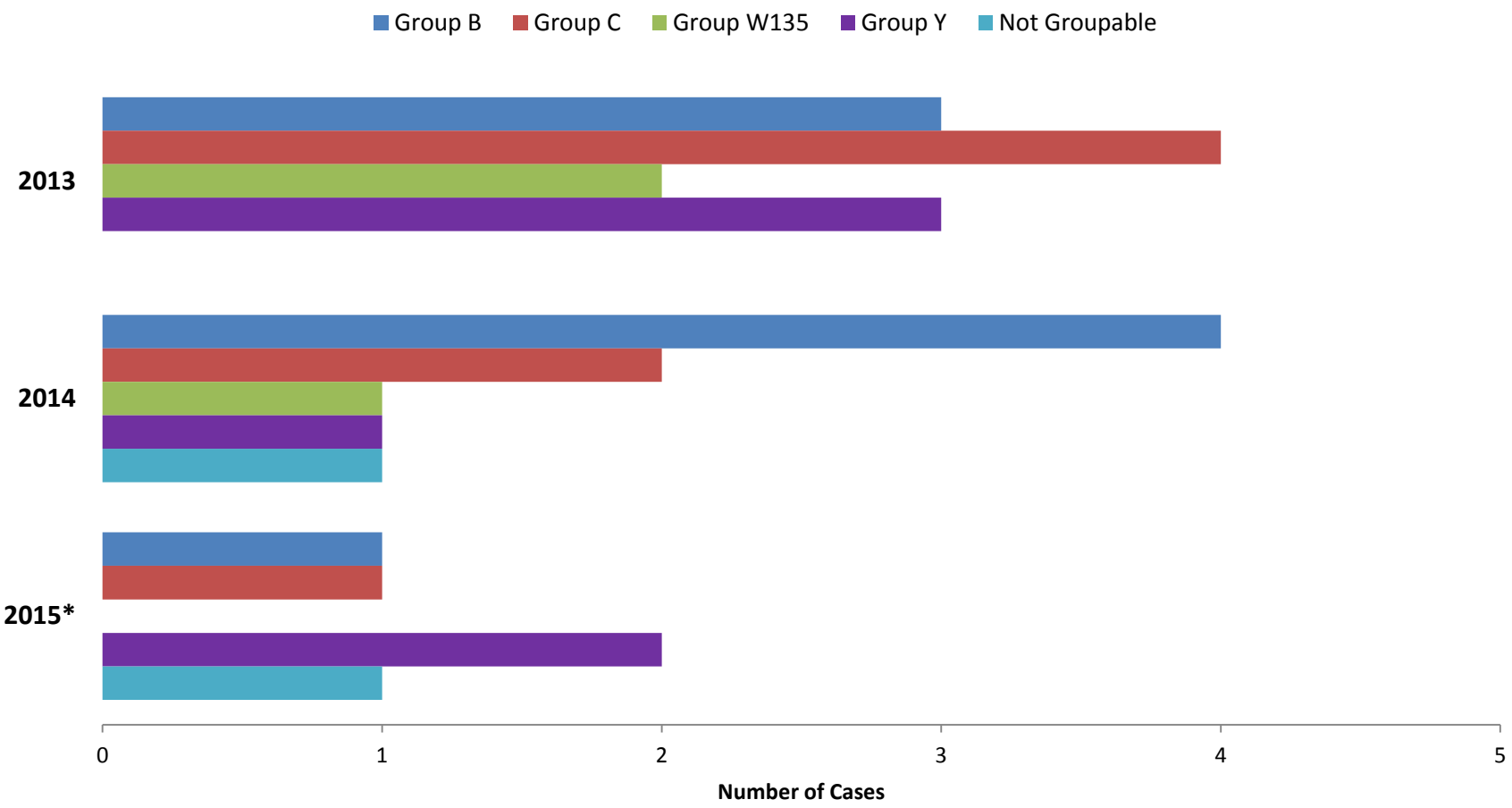
*All 2015 data is preliminary and 2015 rates were calculated using 2014 population numbers

Number of cases of invasive Meningococcal Disease by age group 2013-2015



*All 2015 data is preliminary

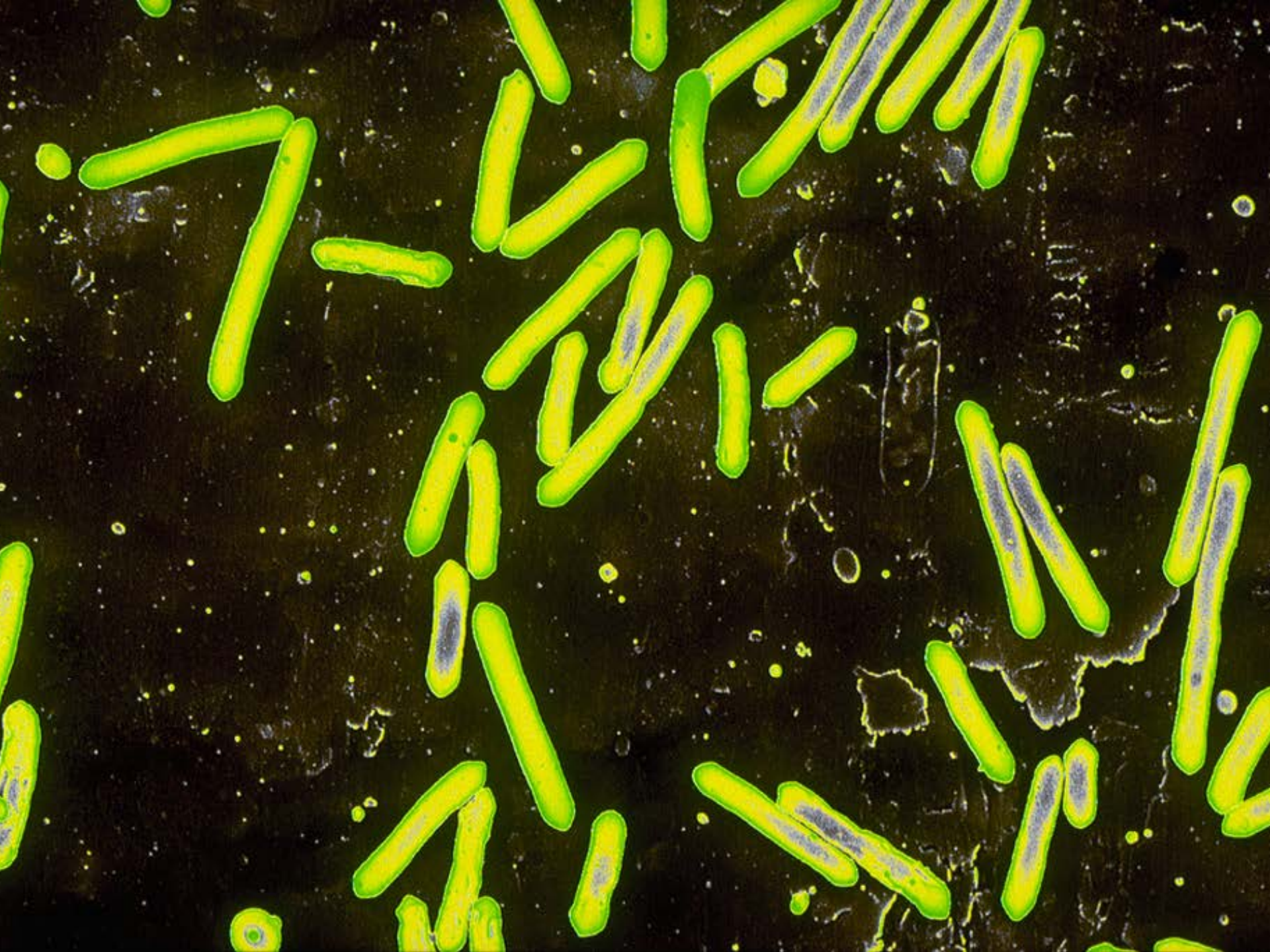
Number of cases of invasive Meningococcal Disease by serogroup 2013-2015



*All 2015 data is preliminary

Meningococcal Serotype B Vaccination

- 2 vaccines have been licensed by the FDA
  - Bexsero®
    - 2 doses; at least 1 month apart
  - Trumenba®
    - 3 doses; 2nd dose 2 months after the 1st and 3rd dose 6 months after the 1st
- Recommended for individuals 10 years and older that are at high risk
  - damaged or removed spleen, complement component deficiency, individuals taking eculizumab (Soliris®), microbiologist working with N. *meningitidis, or serogroup B meningococcal disease outbreak*
- Permissive use for individuals 16-23 years of age

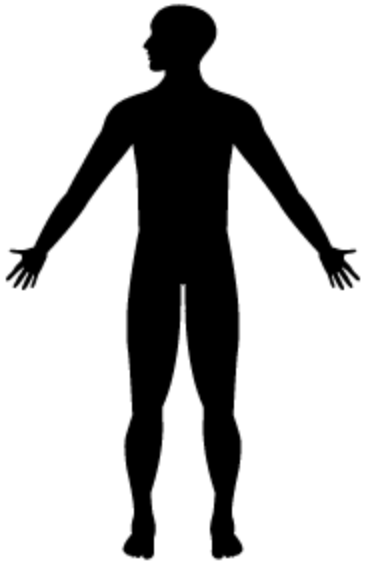


5 tetanus cases in Arizona over the past 5 years

Background history:

- History of drug abuse
  - Heroin and amphetamine

2015 Case



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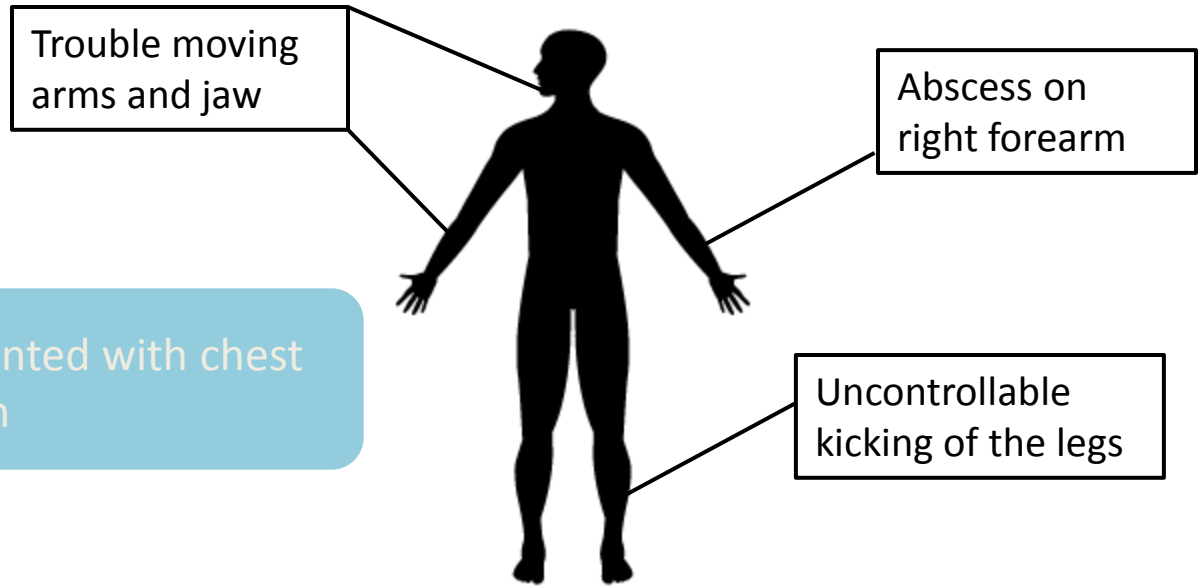
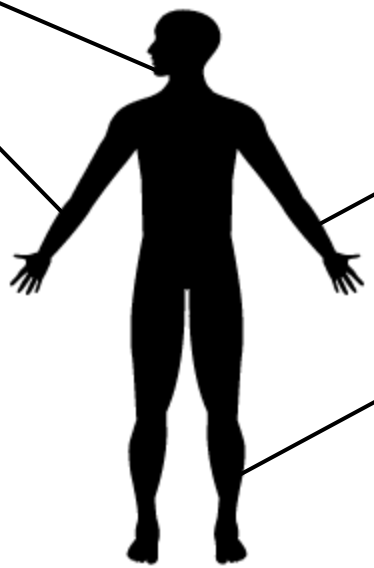


Initially presented with chest and back pain

5 tetanus cases in Arizona over the past 5 years

Background history:
- History of drug abuse
  - Heroin and amphetamine

Trouble moving arms and jaw



Abscess on right forearm

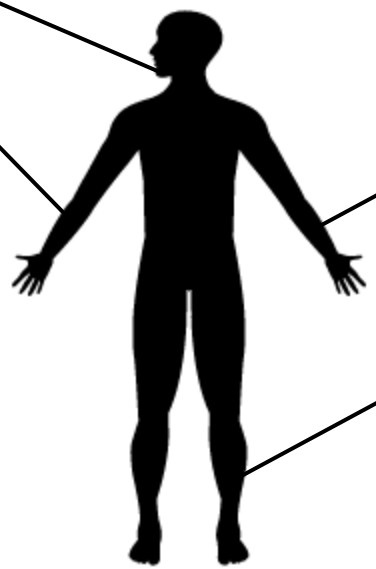
Initially presented with chest and back pain

Uncontrollable kicking of the legs

Unknown vaccination status

5 tetanus cases in Arizona over the past 5 years

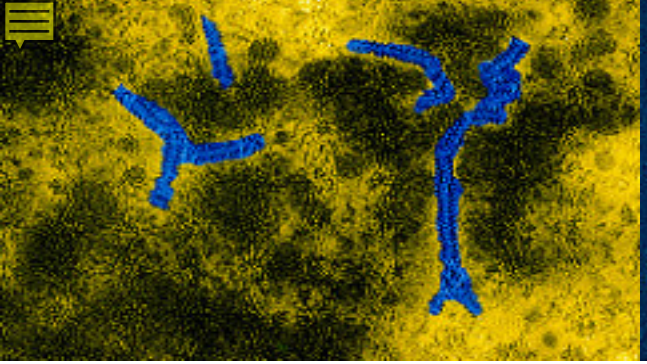
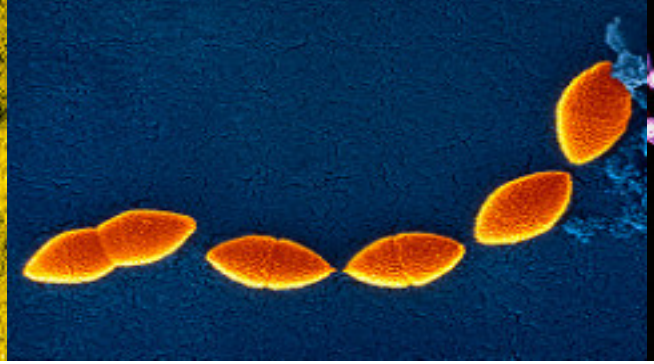
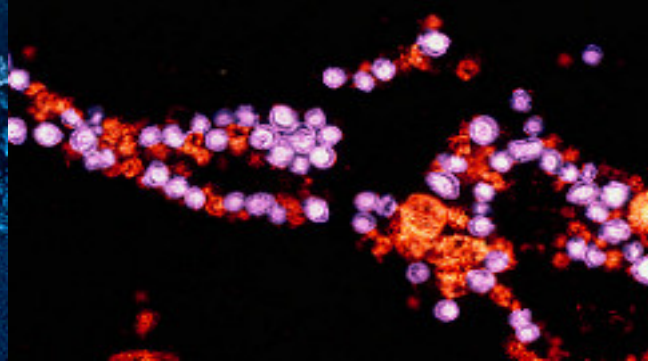
Background history:
- History of drug abuse
  - Heroin and amphetamine



Initially presented with chest and back pain

Unknown vaccination status

Remained in hospital for nearly 2 months

Questions?

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Susan Goodykoontz

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480-364-4043

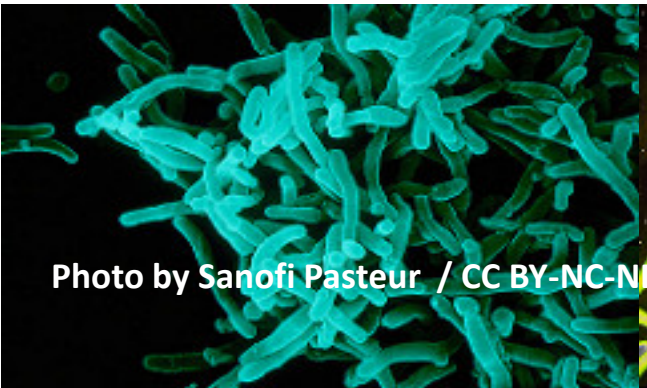
Resources

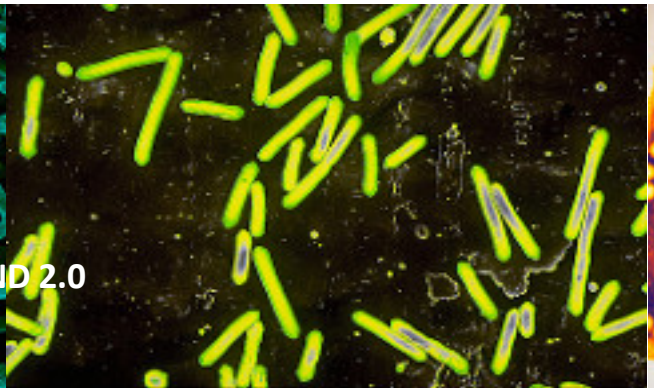
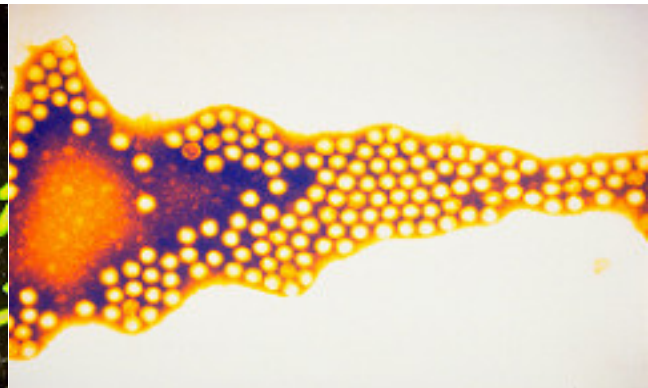
Measles Surveillance Toolkit for Healthcare Settings

- http://www.azdhs.gov/documents/preparedness/epidemiology-disease-control/measles/measles-surveillance-toolkit.pdf

ADHS website

- http://www.azdhs.gov/phs/oids/index.htm



VECTOR-BORNE AND ZOONOTIC DISEASE UPDATES

Hayley D. Yaglom, MS, MPH
Epidemiologist
Office of Infectious Disease Services
Arizona Department of Health Services

Arizona Department of Health Services

Mosquito-borne Diseases

CHIKUNGUNYA, DENGUE, AND ZIKA….OH MY!

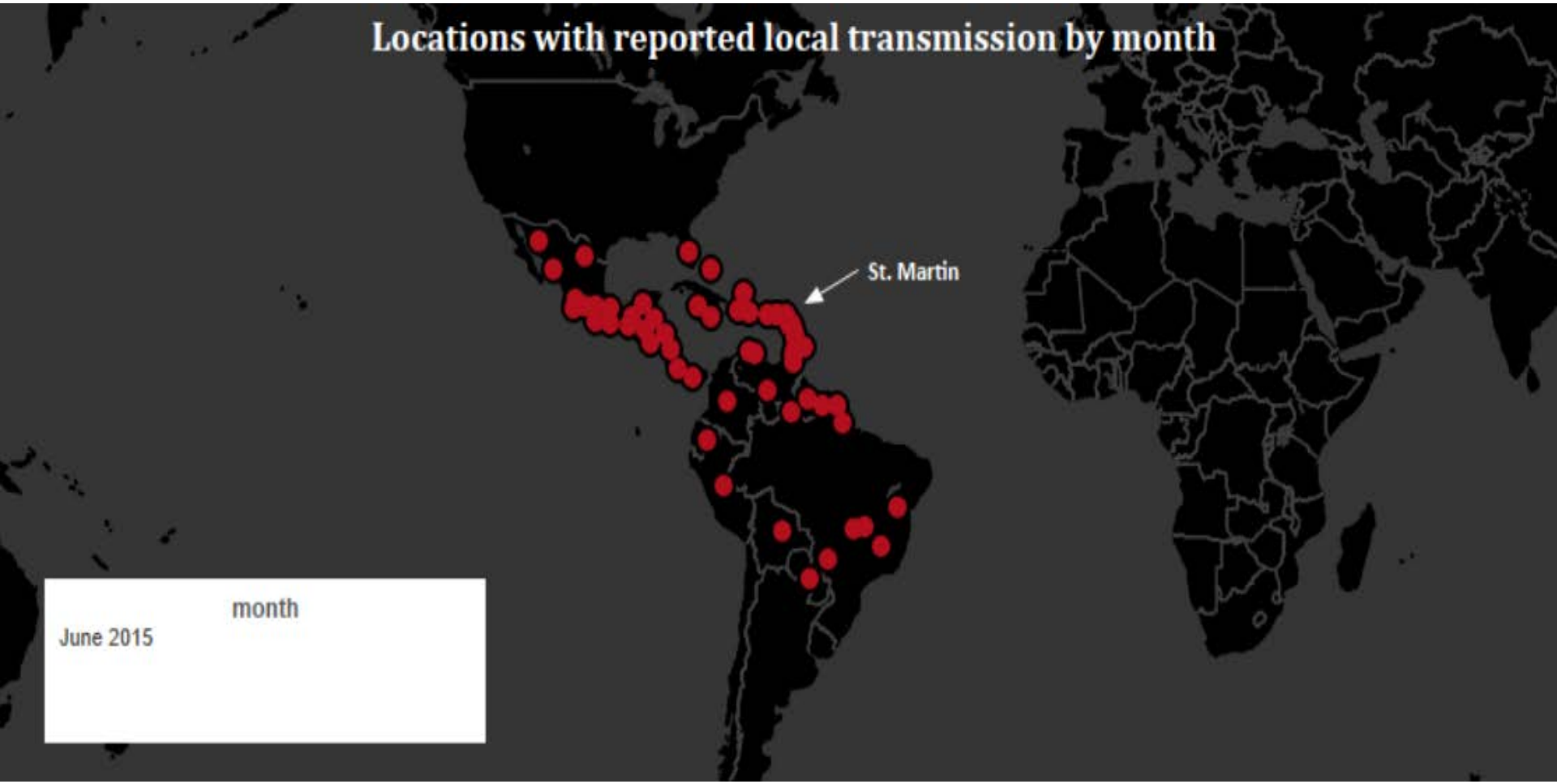
- ✓Fever
- ✓**Severe joint pain**
- ✓Joint swelling
- ✓Muscle pain
- ✓Headache
- ✓Rash

Chikungunya Virus

- Transmitted by mosquitoes
  - *Aedes aegypti*
  - *Aedes albopictus*
- Alphavirus

December 2013


Locations with reported local transmission by month
St. Martin
month
June 2014


Locations with reported local transmission by month
St. Martin
month
June 2015

SDPnoticias.com

November 10, 2015

EDICIONES LOCALES

Sonora registra 90 casos confirmados de chikungunya

REDACCIÓN SDPNOTICIAS.COM mar 10 nov 2015 11:38

No se trata de una alerta por el número de casos del padecimiento.

México.- Hay 90 casos de fiebre **chikungunya** en Sonora, informó su **sistema de salud**, quien descartó que esta situación se considere de alarma o emergencia por las **personas contagiadas**.

De acuerdo con el titular de la dependencia estatal, **Gilberto Ungson Beltrán**, no se trata de una alerta por el número de casos del padecimiento, puesto que es una situación prevista, en función de la incidencia de **casos de dengue**.

En entrevista con *Notimex*, comentó que el mosco transmisor del dengue también transmite la fiebre chikungunya, debido que el insecto tiene la capacidad genética de **transmitir** ambos padecimientos, de ahí la necesidad de atacarlo para evitar la proliferación de más casos.

El mismo mosco llamado **Aedes Aegypti** también transmite una tercera enfermedad denominada zika, la cual afortunadamente no se ha presentado en México.

CHIKUNGUNYA: What is local transmission?

A person with no recent history of travel to an area with the virus who gets bitten by a mosquito infected with chikungunya virus where they live, work or play.

A mosquito bites a person who is sick with chikungunya and picks up the virus from the infected person's blood.

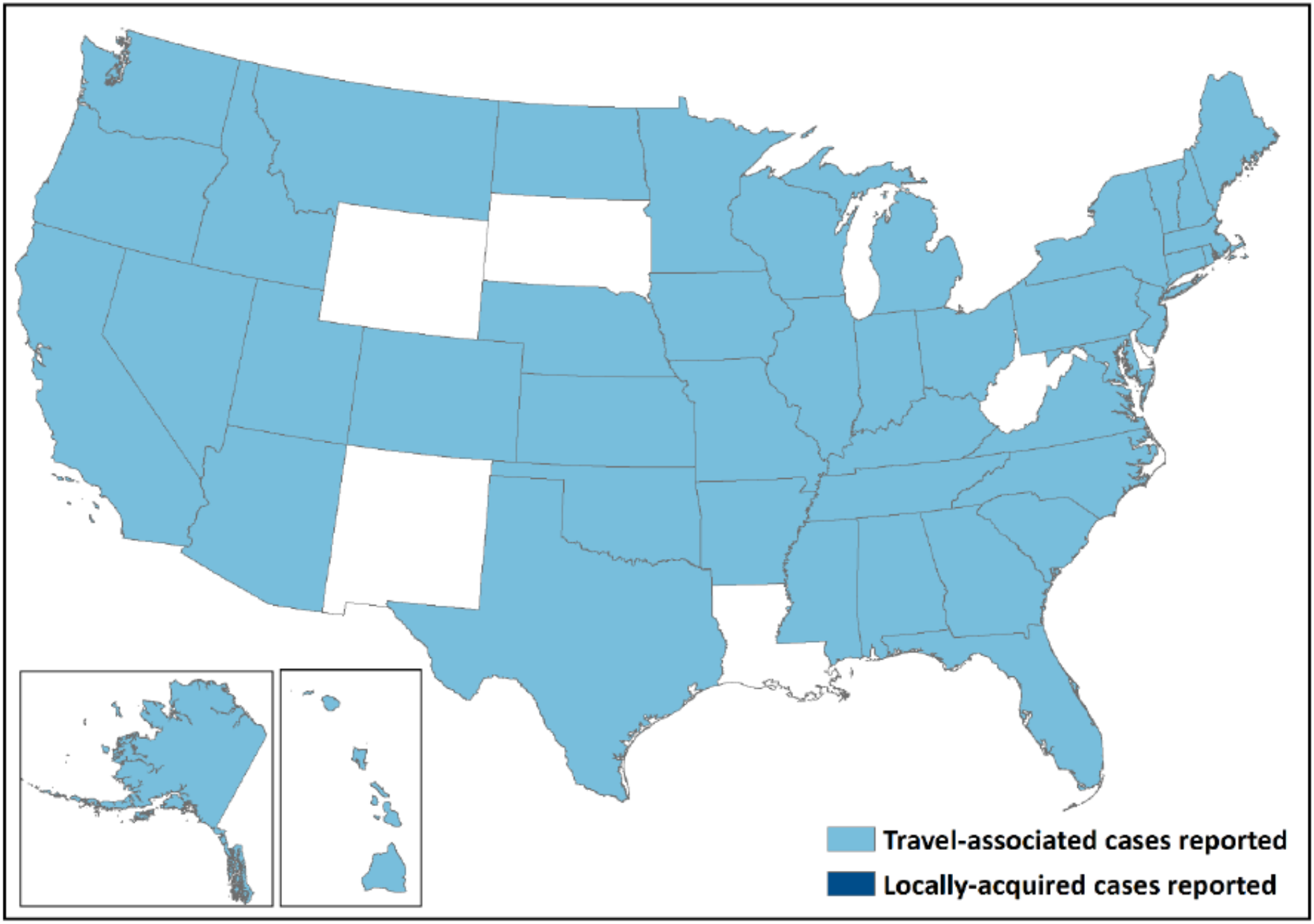
Infected mosquitoes can then spread the virus to other people through bites.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

For more information: www.cdc.gov/chikungunya

CS249628-A

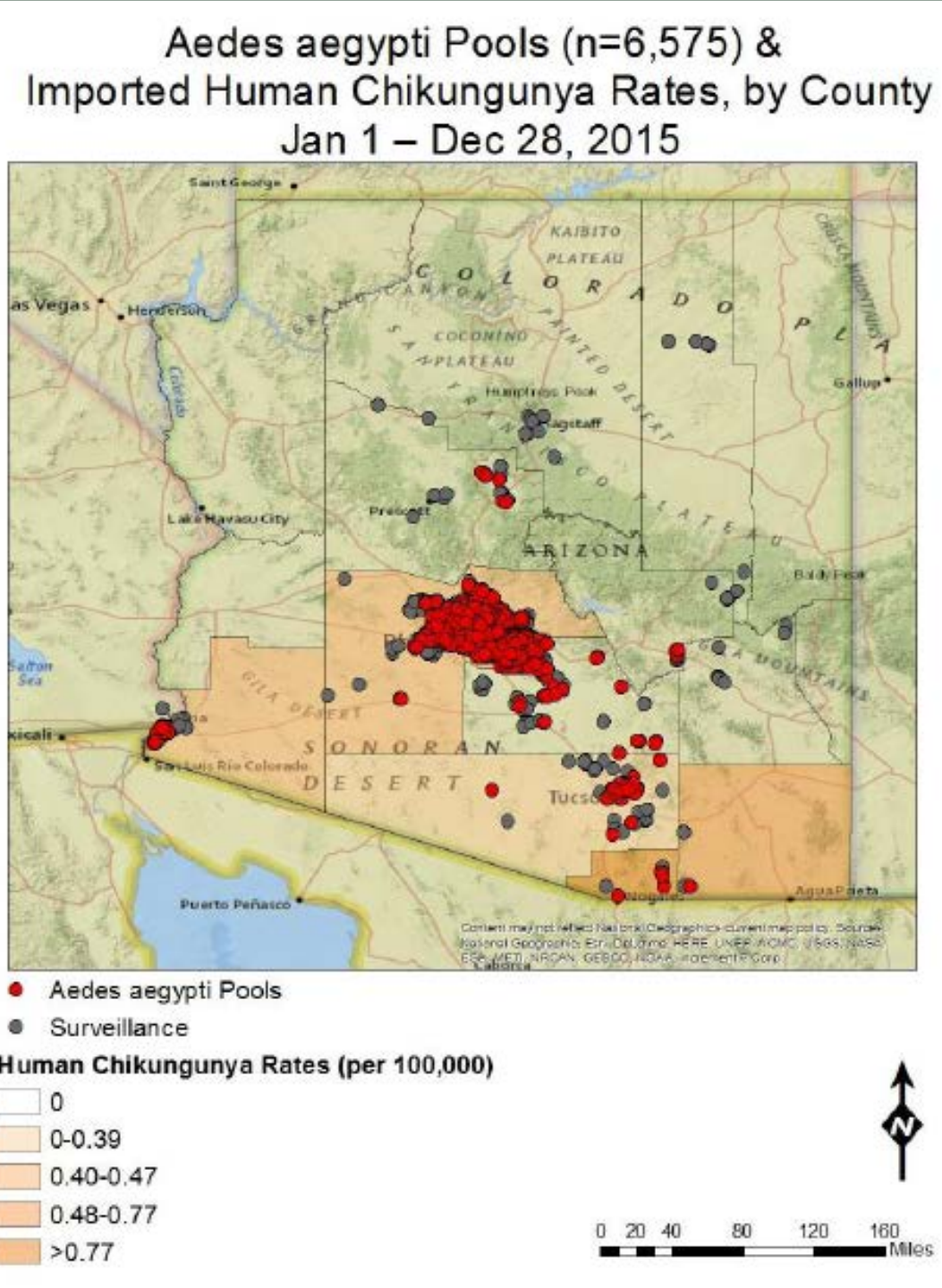
Figure. States reporting chikungunya virus disease cases – United States, 2015 (as of January 12, 2016)

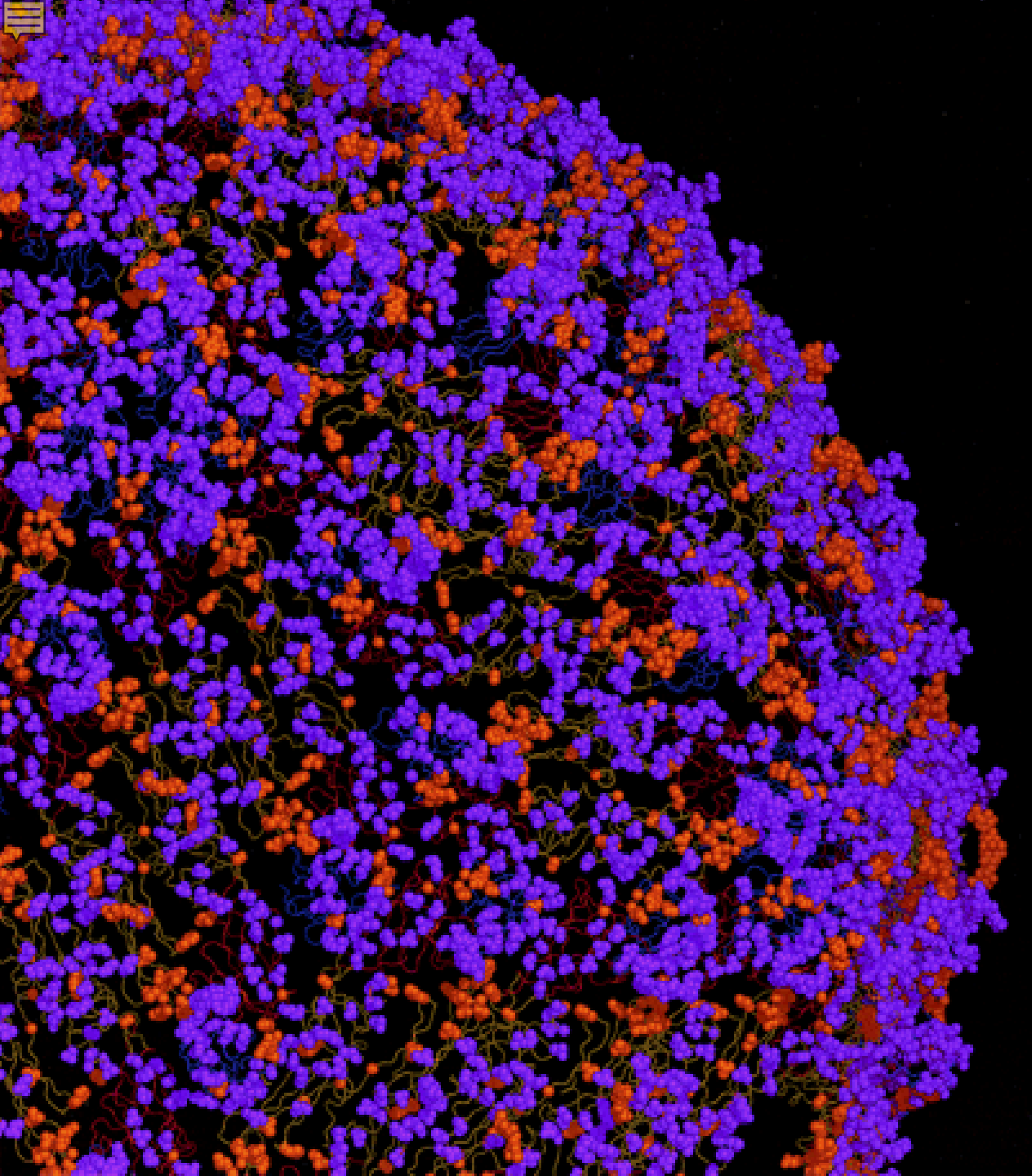


Arizona

2014— 17 cases

2015—25 cases





Dengue

RNA virus

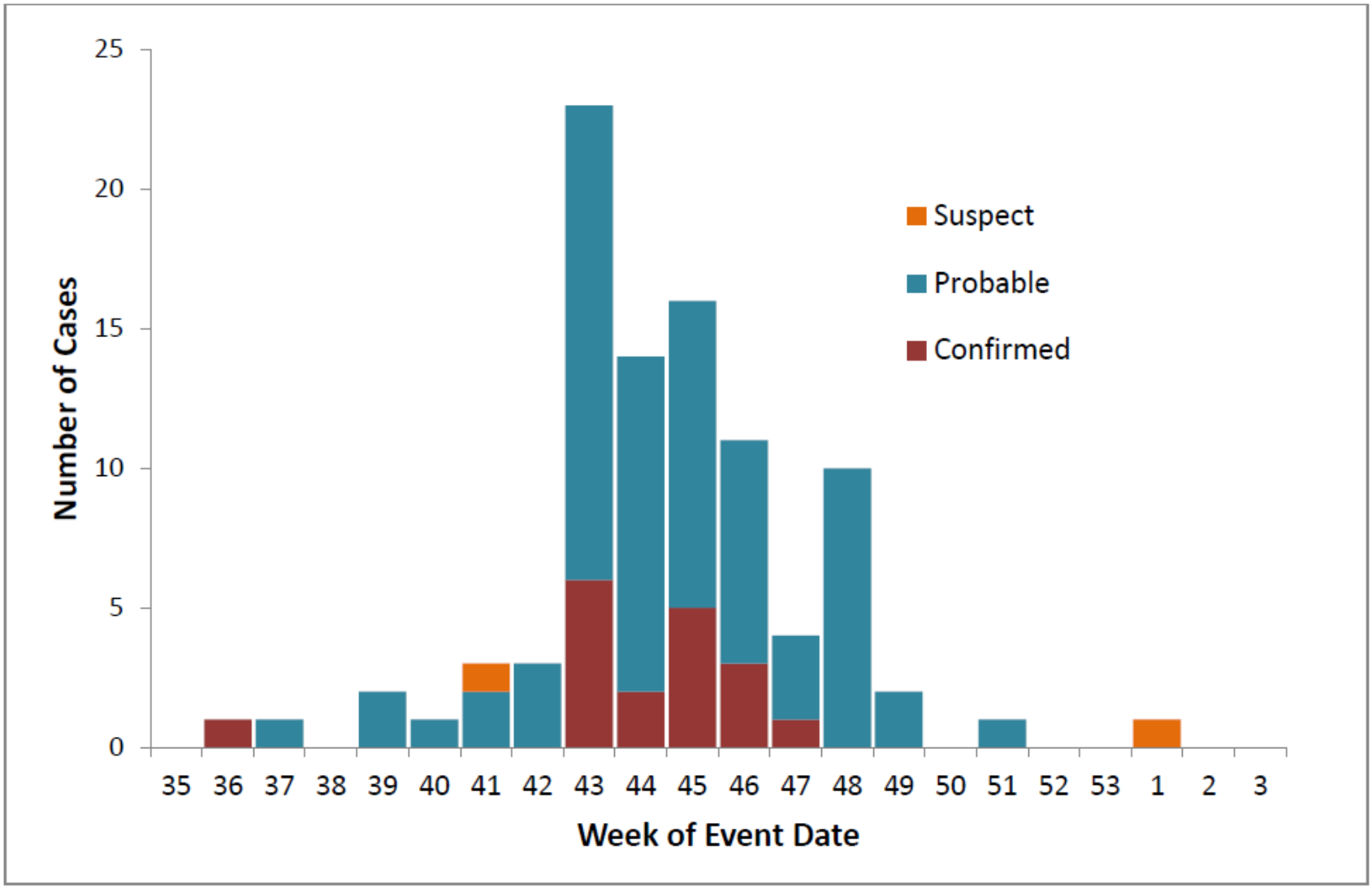
4 serotypes (I-IV)

1981—

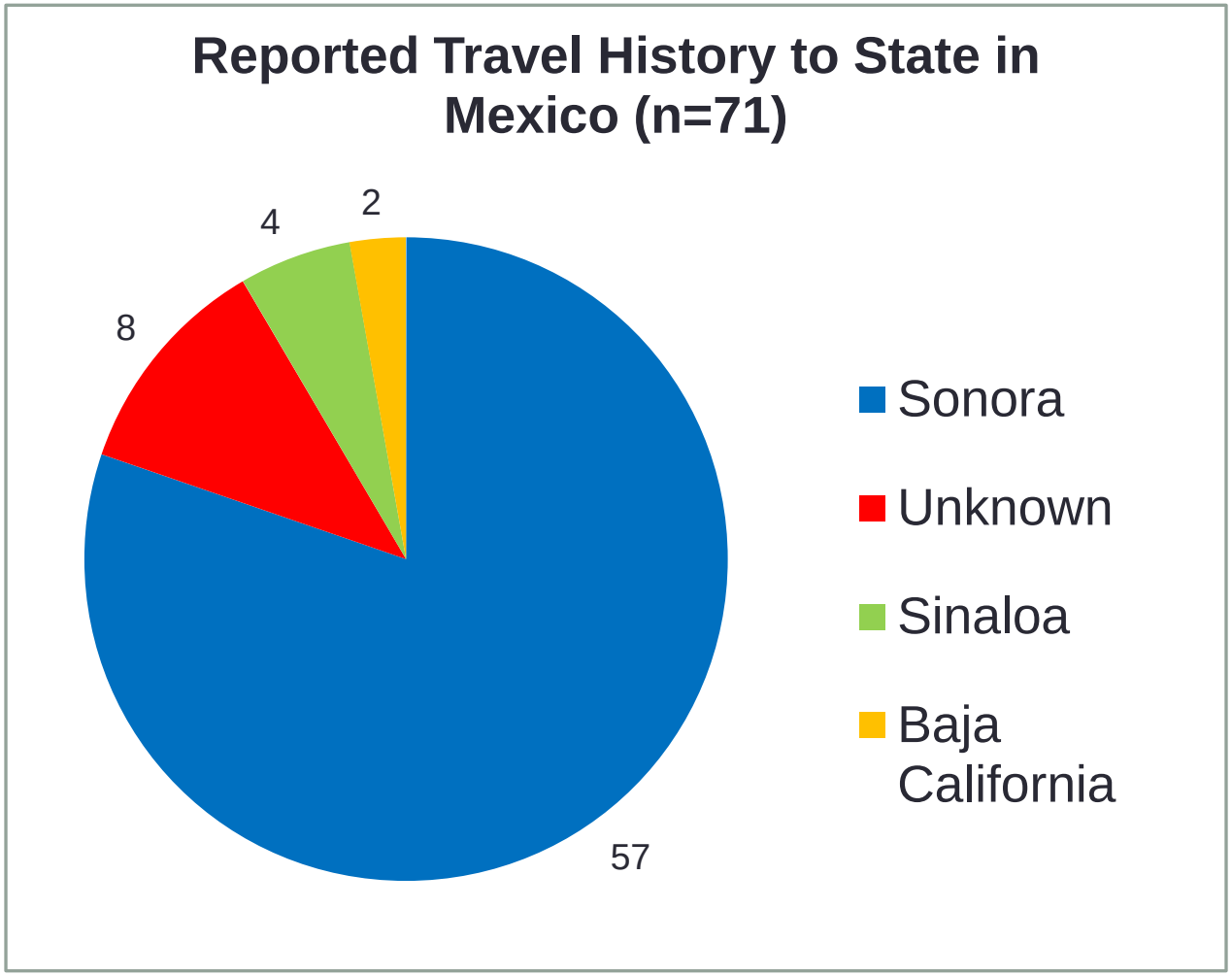
first appeared in western hemisphere


California
Arizona
New Mexico
Oklahoma
Texas
Sonora
Chihuahua
Coahuila
Sinaloa
Durango
Nuevo Leon
Tamaulipa
Zacatecas
Baja California Norte
Baja California Sur
San Ysidro
Campo
Calexico
Andrade
San Luis
Lukeville
Aros Ranch
Sasabe
Nogales
Lochiel
Naco
Douglas
Columbus
Ysleta
El Paso
Fabens
Fort Hancock
Presidio
Del Rio
Eagle Pass
Laredo
Zapata
Roma
Rio Grande City
Progresso
Brownsville
0 100 200 miles
0 100 200 kilometers

Arizona Imported Dengue Cases, September–December 2014 (n = 92)



Arizona Imported Dengue Cases Travel History to Mexico



2013— 4 cases

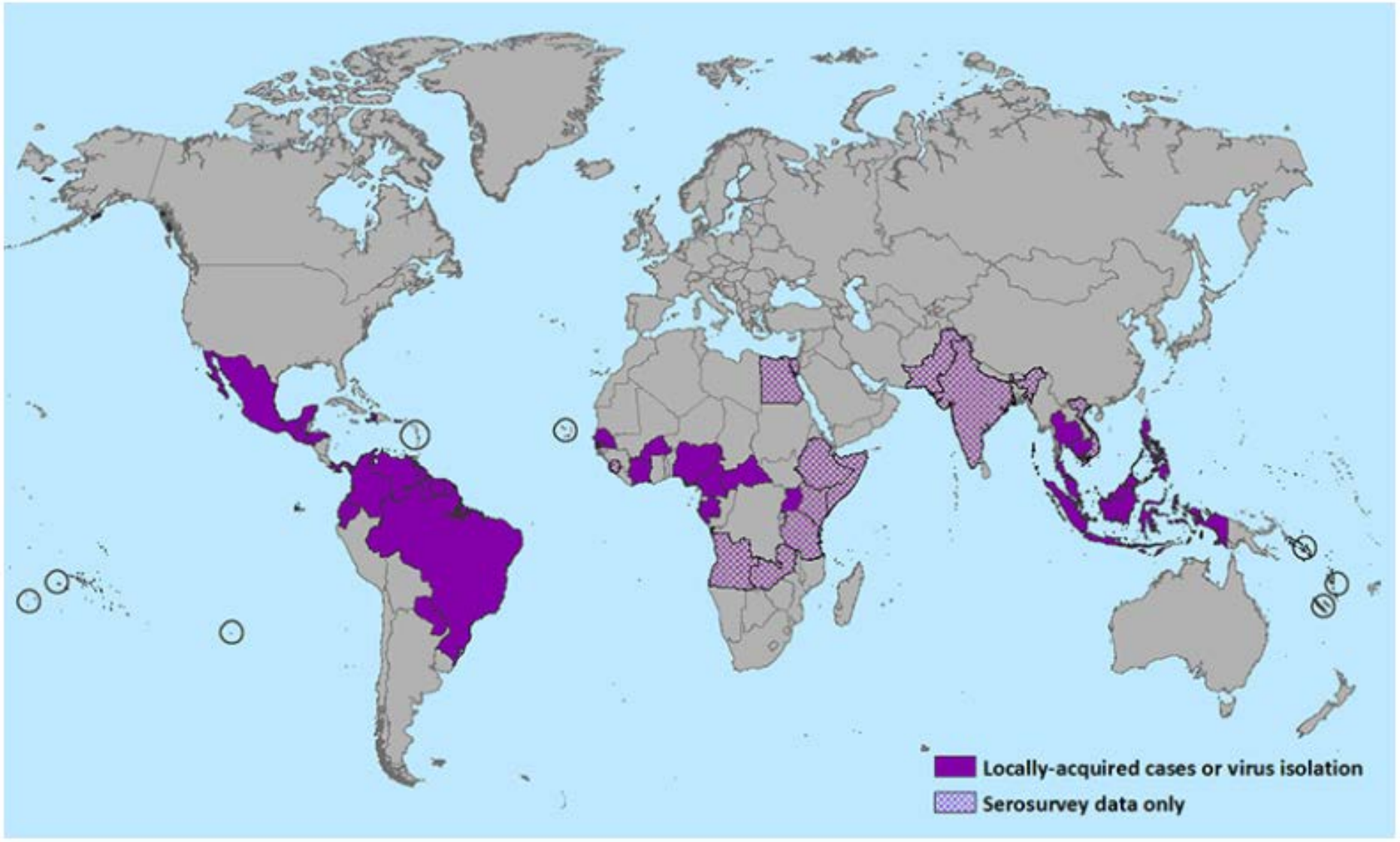
2014— 92 cases

2015—24 cases

Zika Virus

- Mosquito-borne flavivirus
- Fever, joint pain, eye inflammation, and rash
- Spread in Africa and Pacific Islands

Countries that have past or current evidence of Zika virus transmission (as of January 2016)



HEALTH

C.D.C. May W *tries With Zika Virus*

By DONALD G. McNEIL Jr. JAN. 13, 201

Zi

A p s been confirmed as

Hawaii Baby Zika Virus In

A pregnant woman like deformities in her newb

Zika Virus:
What you need to know

Zika is:

- A virus spread through *Aedes* species mosquito bites. *Aedes* mosquitoes also spread dengue and chikungunya viruses.
- A risk to anyone traveling to a region of the world where Zika virus is found.

Global risk

Outbreaks have occurred in parts of Africa, Southeast Asia, and the Pacific Islands. In May 2015, Brazil reported the first outbreak of Zika virus in the Americas.

Zika virus is not currently found in the United States. However, cases of Zika have been previously reported in returning travelers.

For information on where Zika virus is found, see: http://www.cdc.gov/zika/geo/index.html.

Traveling? For country-specific travel information and recommendations, visit www.cdc.gov/travel.

Signs and symptoms of Zika virus disease (Zika)

- Symptoms usually begin 3—7 days after being bitten by an infected mosquito.
- Common symptoms include fever, rash, joint pain, or red eyes. Other symptoms include muscle pain, headache, pain behind the eyes, and vomiting.
- The illness is usually mild with symptoms lasting for several days to a week.
- Severe disease is uncommon. Deaths have not been reported.

CDC

CS258142C September 22, 2015

2015 Great Arizona Mosquito Hunt

- ADHS, Maricopa County, and University of Arizona partnership
- Worked with **high schools** statewide to set oviposition traps

Travel history

Symptoms

Viremic period

Mosquito exposure

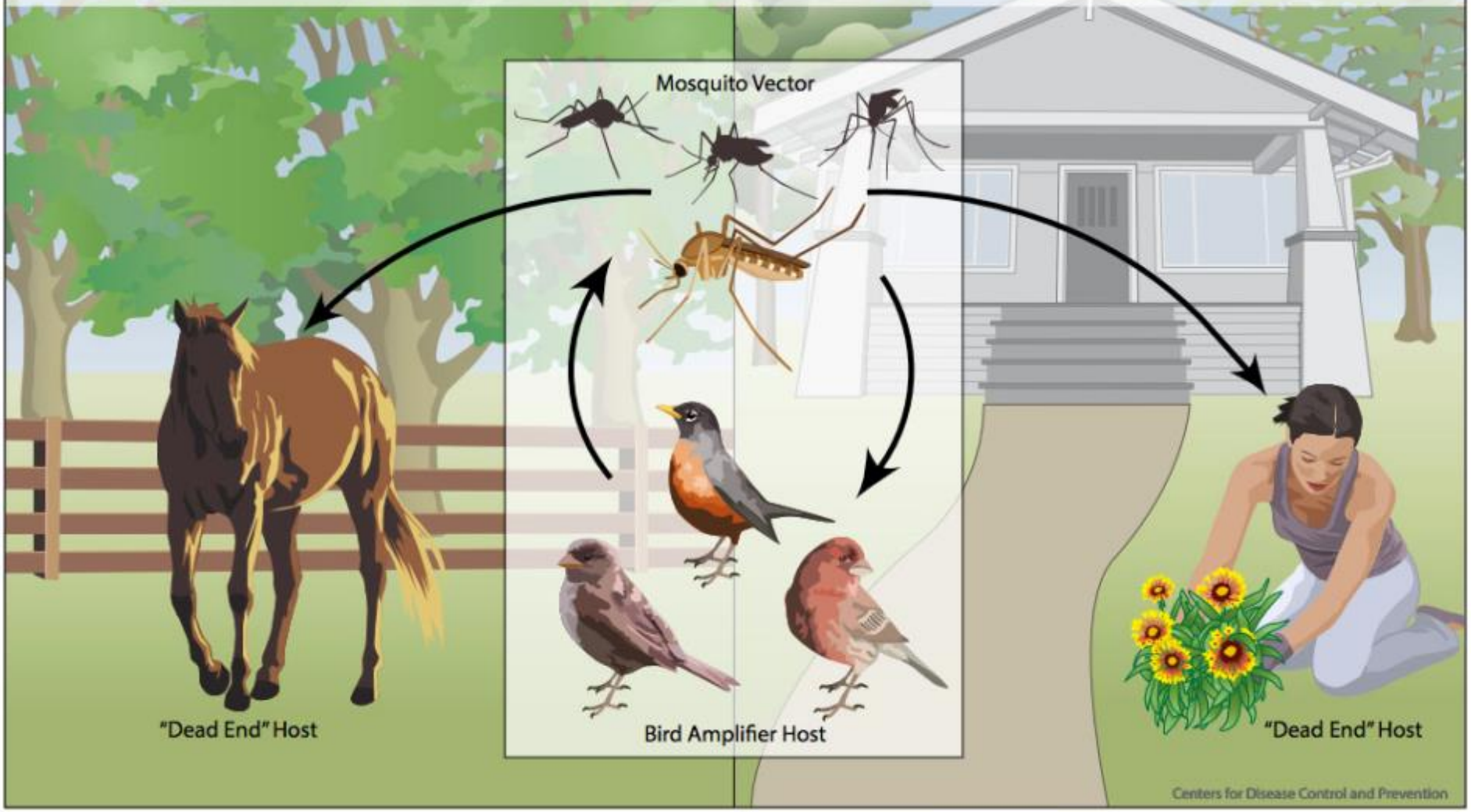
Ill household contacts

West Nile (WNV) &
St. Louis Encephalitis (SLEV) Viruses

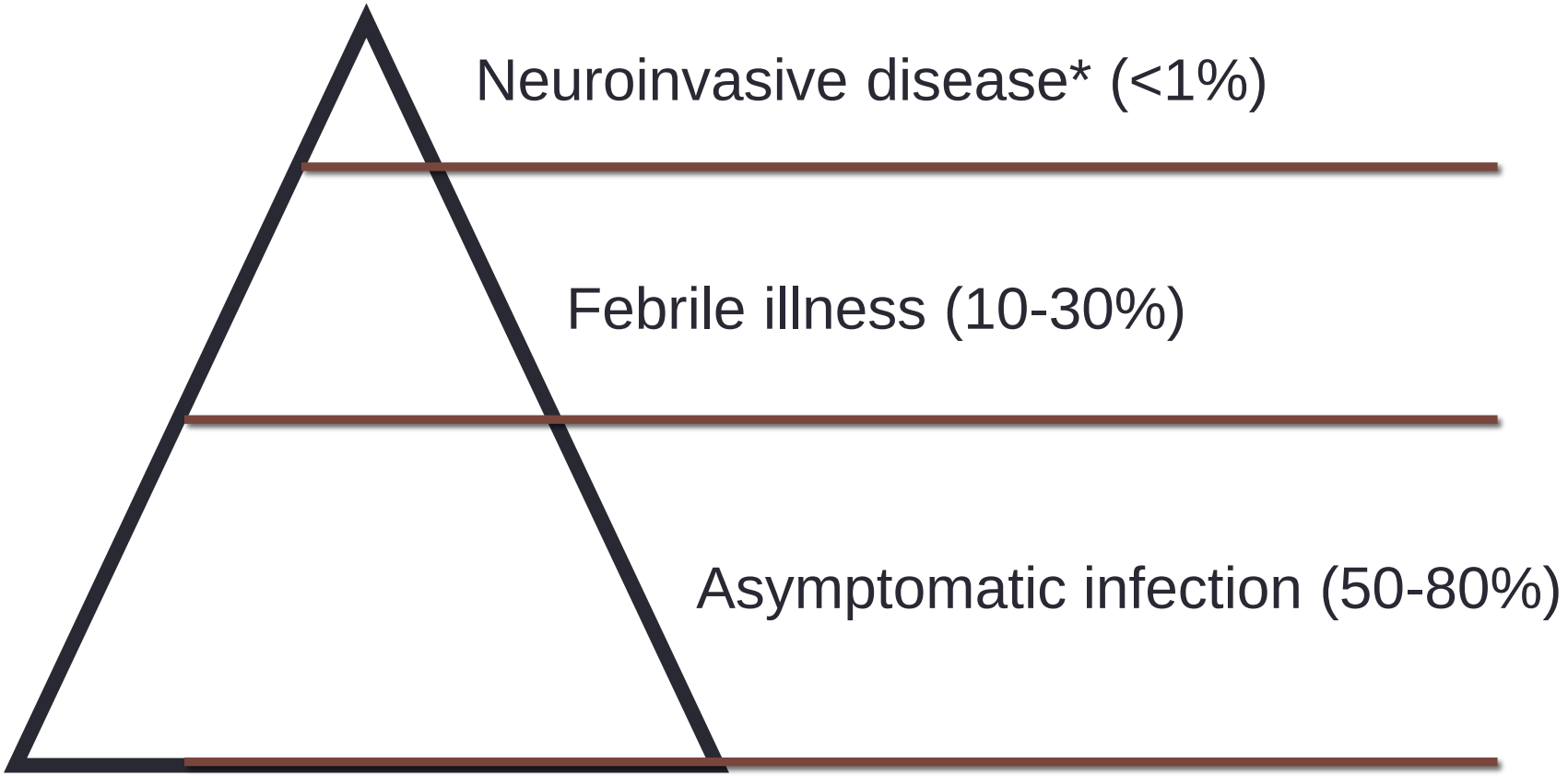
West Nile Virus Transmission Cycle

In nature, West Nile virus cycles between mosquitoes (especially *Culex* species) and birds. Some infected birds, can develop high levels of the virus in their bloodstream and mosquitoes can become infected by biting these infected birds. After about a week, infected mosquitoes can pass the virus to more birds when they bite.

Mosquitoes with West Nile virus also bite and infect people, horses and other mammals. However, humans, horses and other mammals are 'dead end' hosts. This means that they do not develop high levels of virus in their bloodstream, and cannot pass the virus on to other biting mosquitoes.

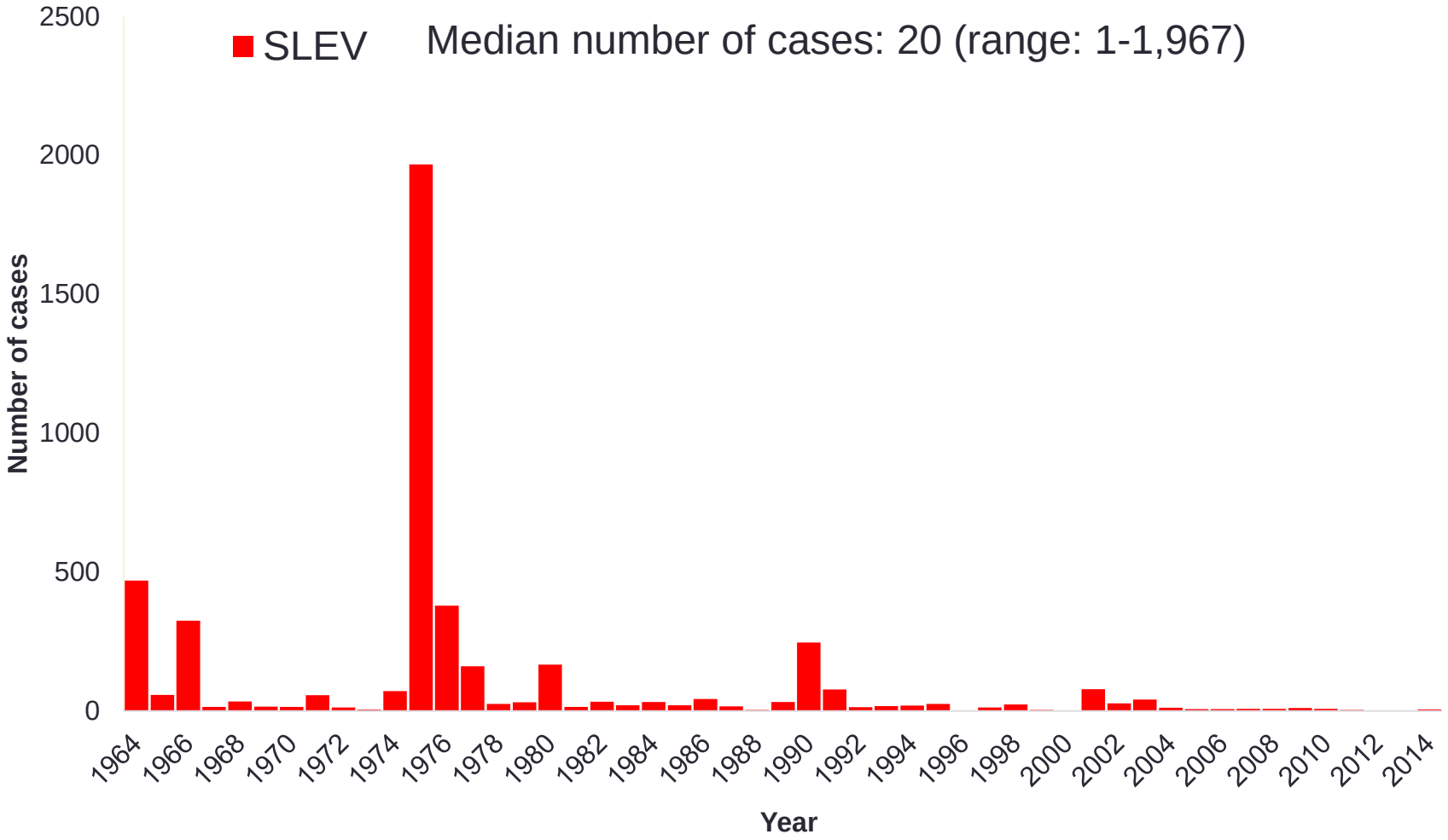


Clinical spectrum of human infections with neuroinvasive arboviruses

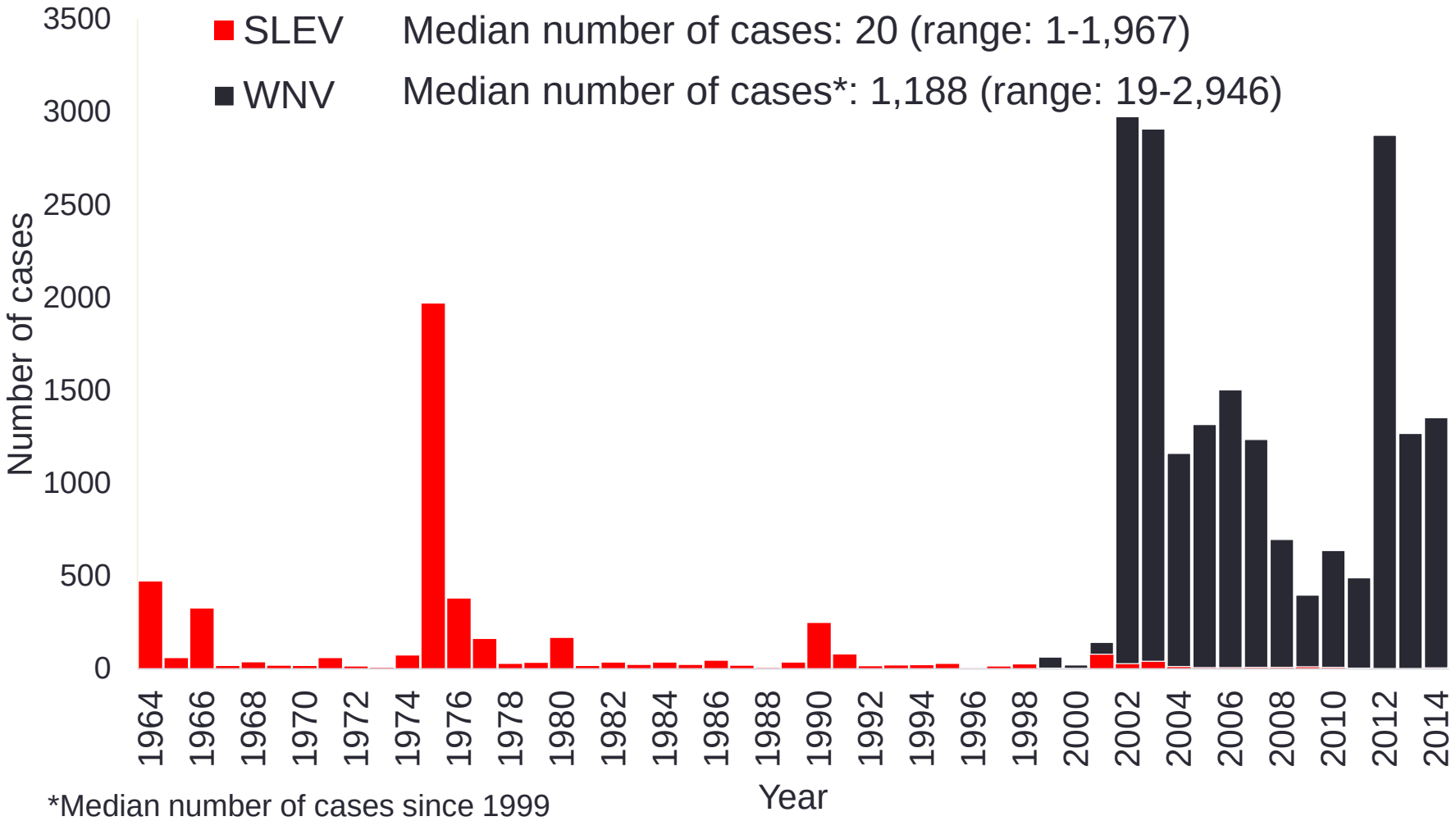


*Infections of central nervous system such as meningitis, encephalitis, or myelitis

Number of SLEV neuroinvasive disease cases – United States, 1964–2014



Number of SLEV and WNV neuroinvasive disease cases – United States, 1964–2014



*Median number of cases since 1999

2015 Mosquito Season

WNV

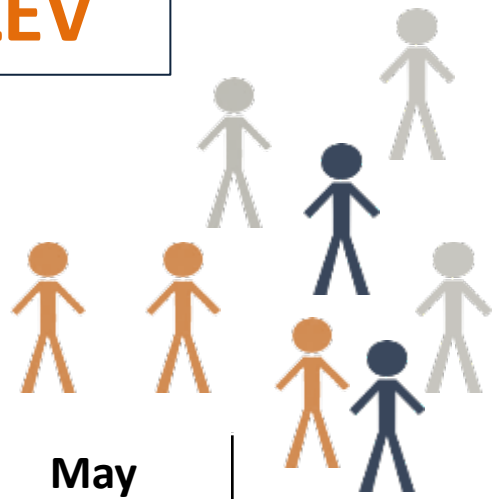
SLEV

May		July		September	
	June		August		October

2015 Mosquito Season

WNV

SLEV

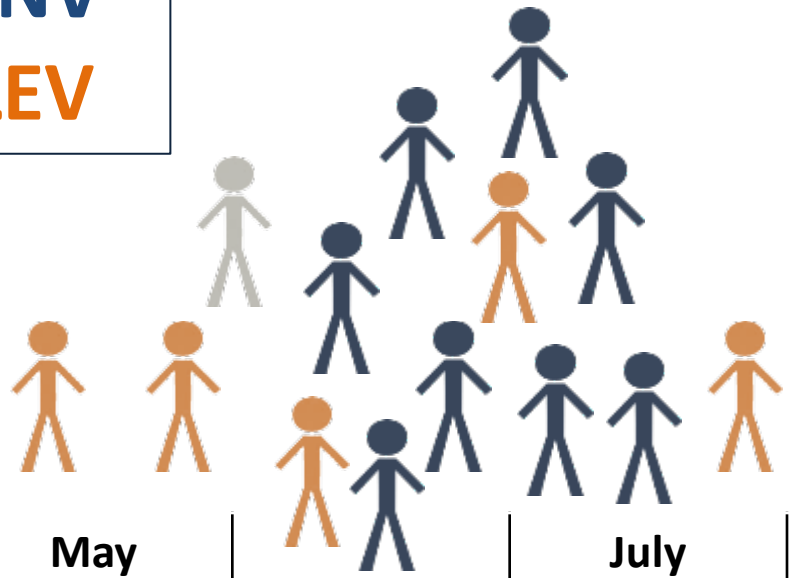


May		July		September	
	June		August		October

2015 Mosquito Season

WNV

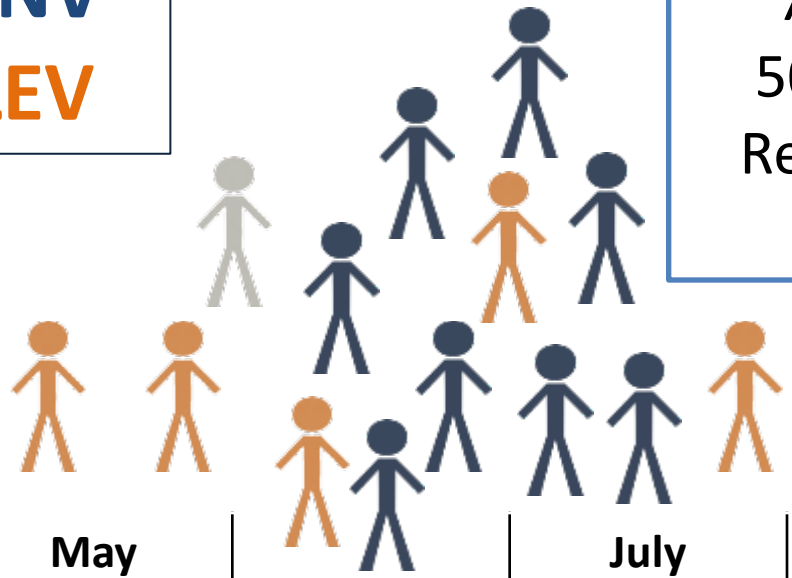
SLEV



May		July		September	
	June		August		October

2015 Mosquito Season

WNV
SLEV



7 SLEV cases
50 WNV cases
Requested CDC assistance

May | June | July | August | September | October

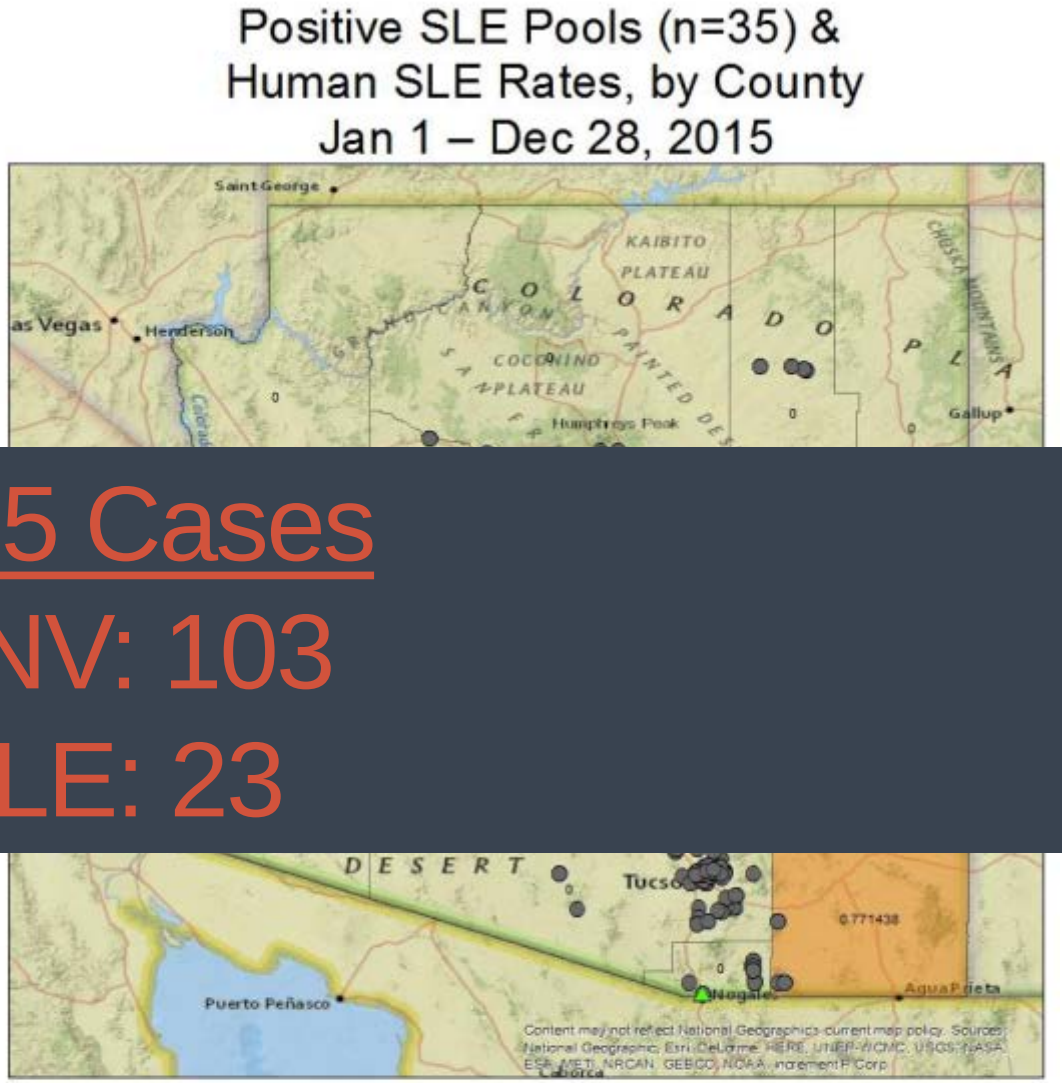
RARE VIRUS OUTBREAK MEANS MARICOPA COUNTY MOSQUITOES DOUBLY DANGEROUS

A A BY ELIZABETH STUART MONDAY, AUGUST 24, 2015 | 29 DAYS AGO

581 37 2

mycteria/Shutterstock

Enhanced Laboratory Surveillance & Case Finding



2015 Cases

WNV: 103

SLE: 23

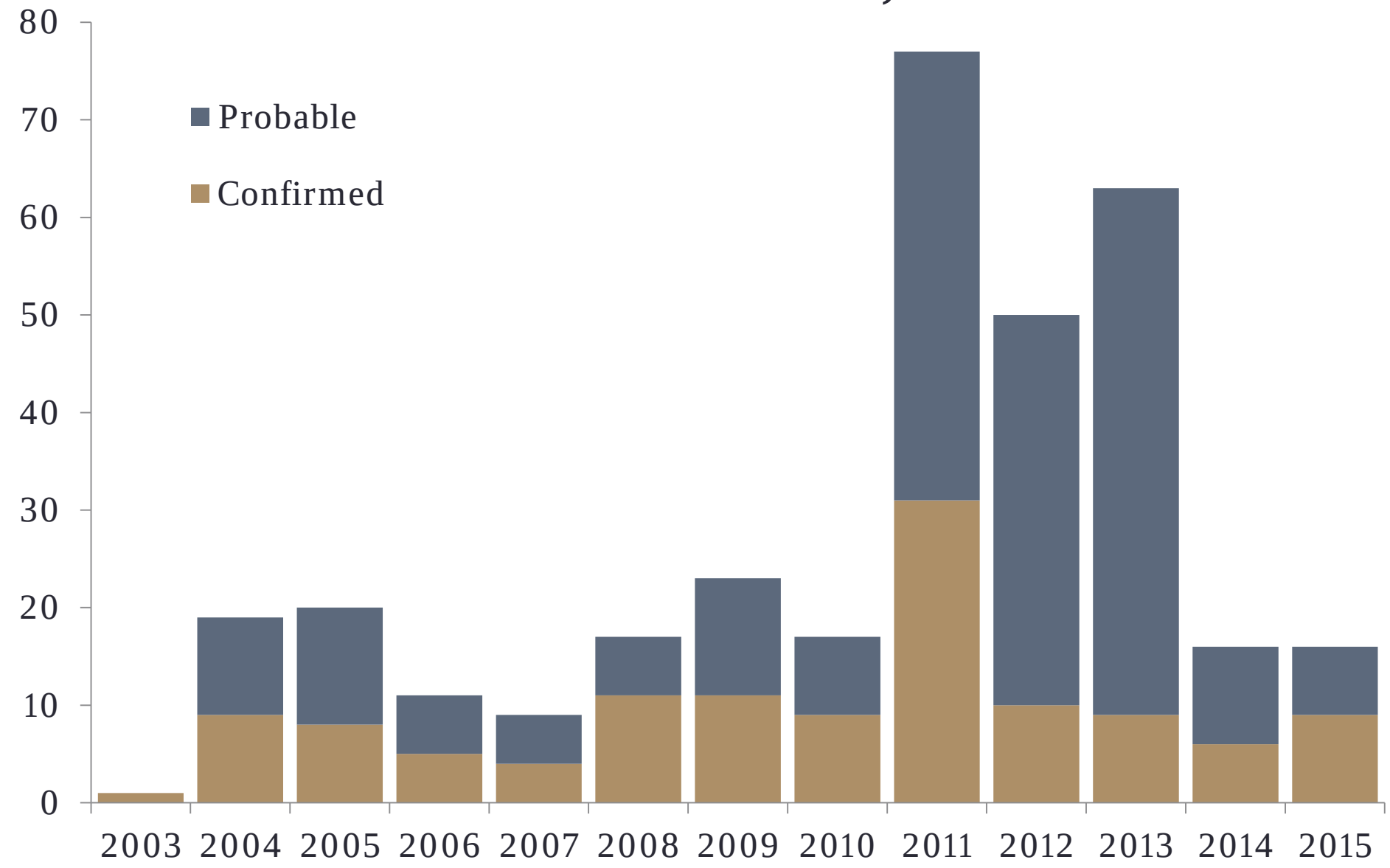
ROCKY MOUNTAIN SPOTTED FEVER

330+ cases 2003-2015

20 fatalities

6 tribal reservations

Confirmed and Probable Rocky Mountain spotted fever Cases in Arizona, 2003–2015




4 1/3 4 3 1/4 2 1/3 2
CM 1 2 3 4

Doxycycline saves lives!

Use it to treat suspected rickettsial infections in patients of all ages.

New research shows NO evidence of pediatric dental staining when used in short courses.

Click to learn more.

CDC

Rocky Mountain spotted fever in Arizona



What

1- hour lecture

Describe RMSF epidemiology & clinical picture

Discuss diagnostic recommendations & treatment

When & Where

TBD

Live-streamed webinar

Who

Physicians, nurses, pharmacists, infection preventionists, public health professionals

Presentation by

Arizona Department of Health Services

CDC Rickettsial Zoonoses Branch

For more information, contact

Hayley Yaglom

Hayley.Yaglom@azdhs.gov

Arizona Department of Health Services

Rickettsia parkeri

Fever

Body aches

Headache

Rash

Eschar

Plague

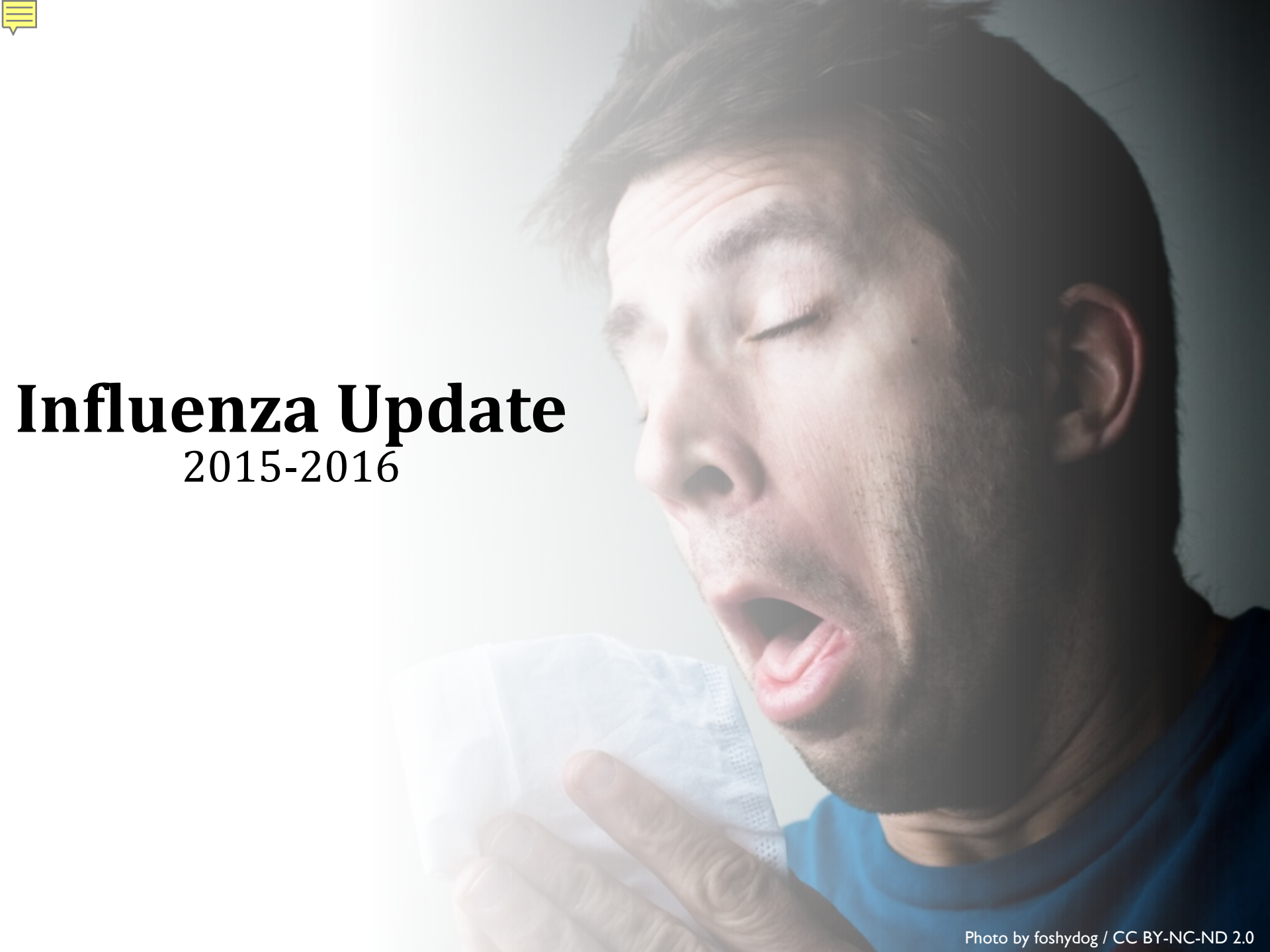
Tularemia

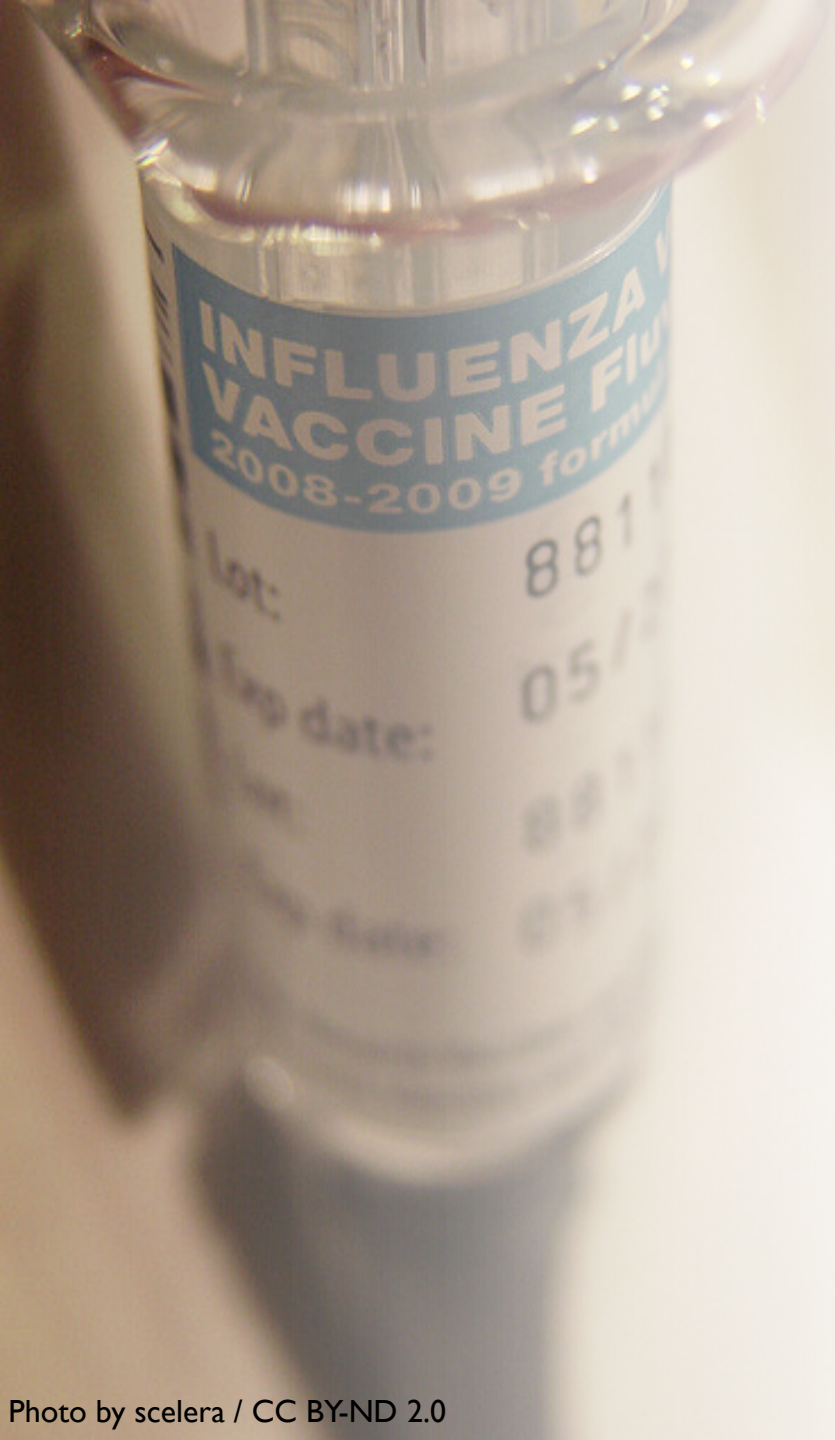
Questions?

Hayley.Yaglom@azdhs.gov

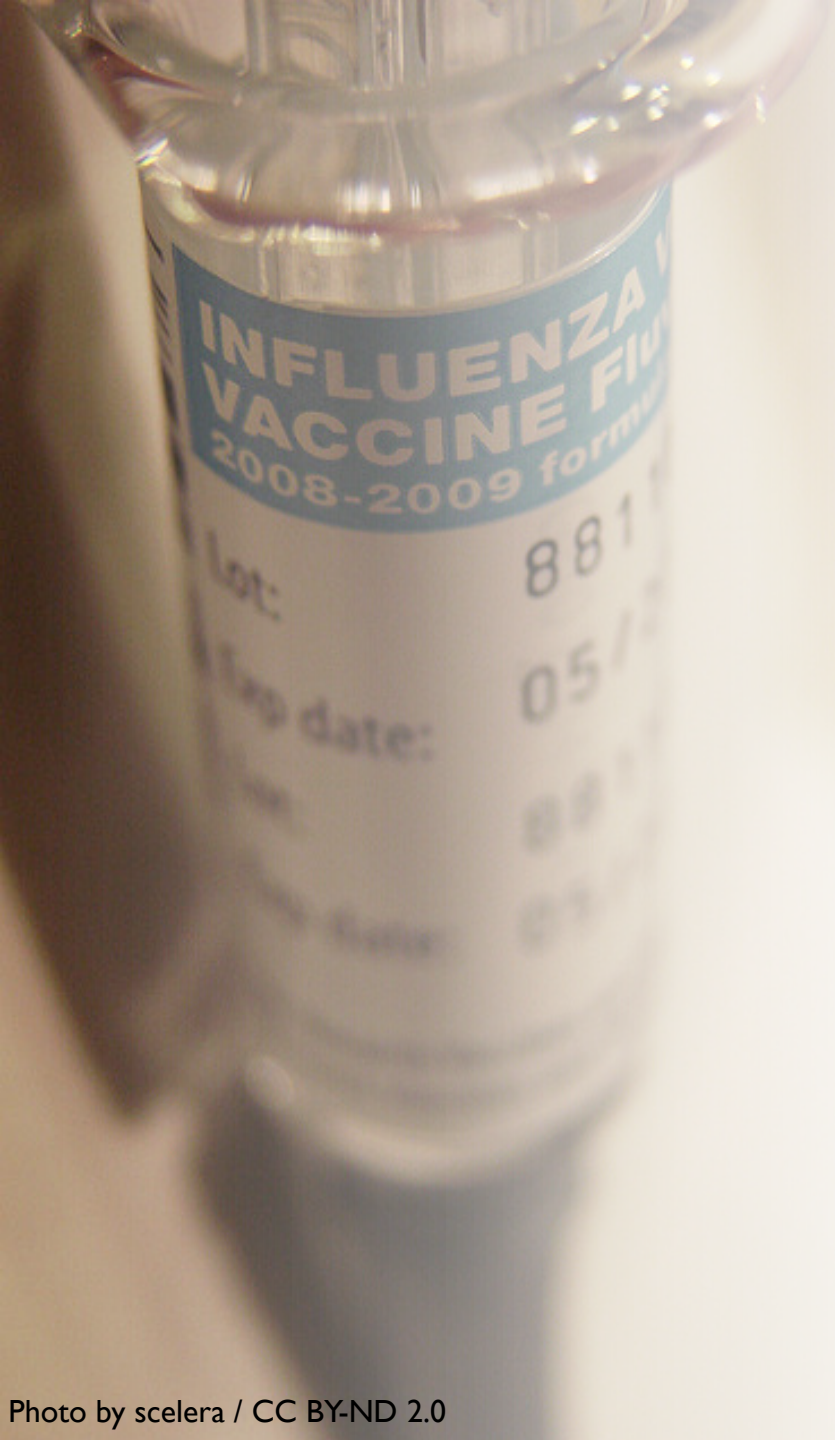
Influenza Update

2015-2016

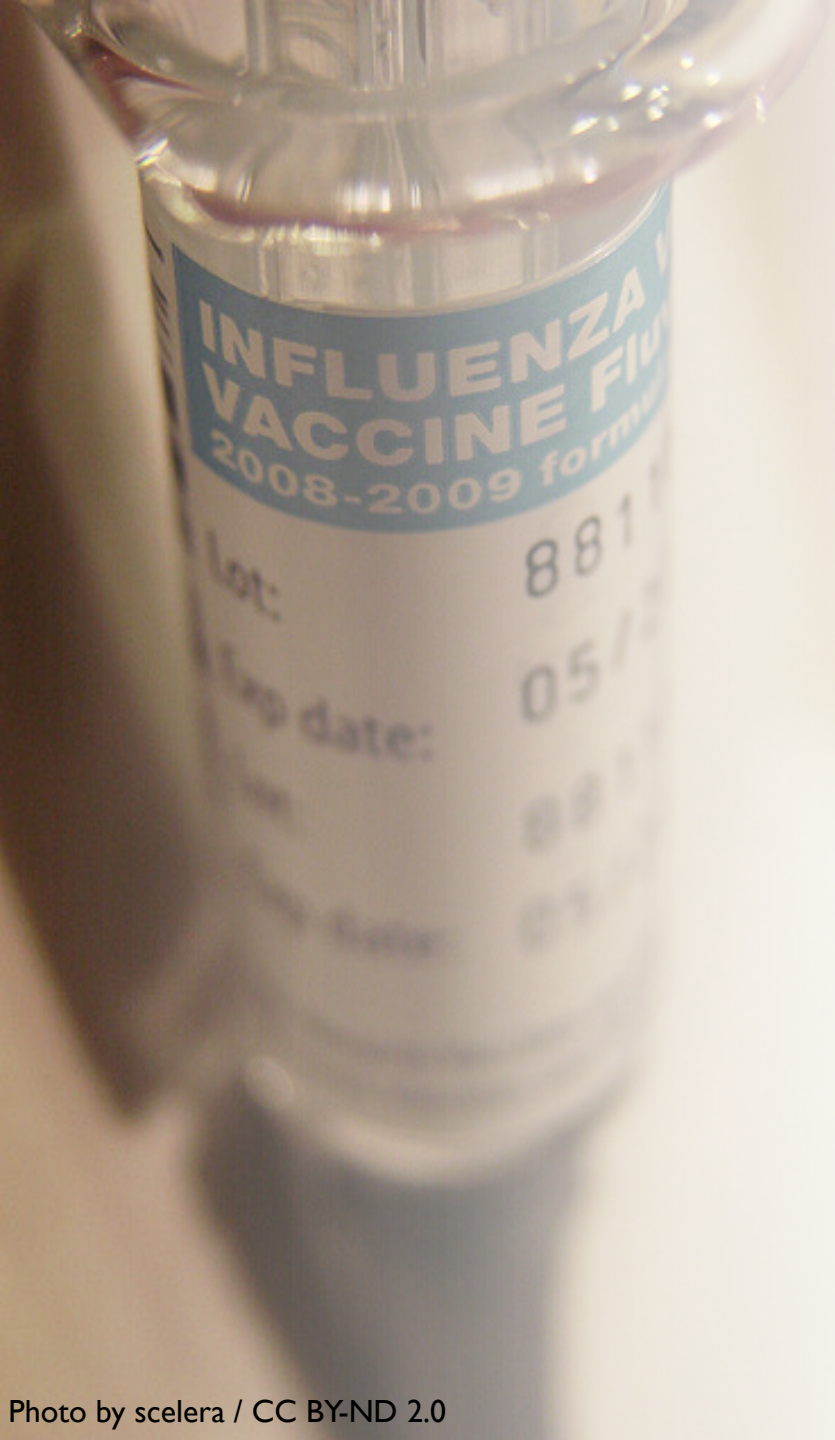




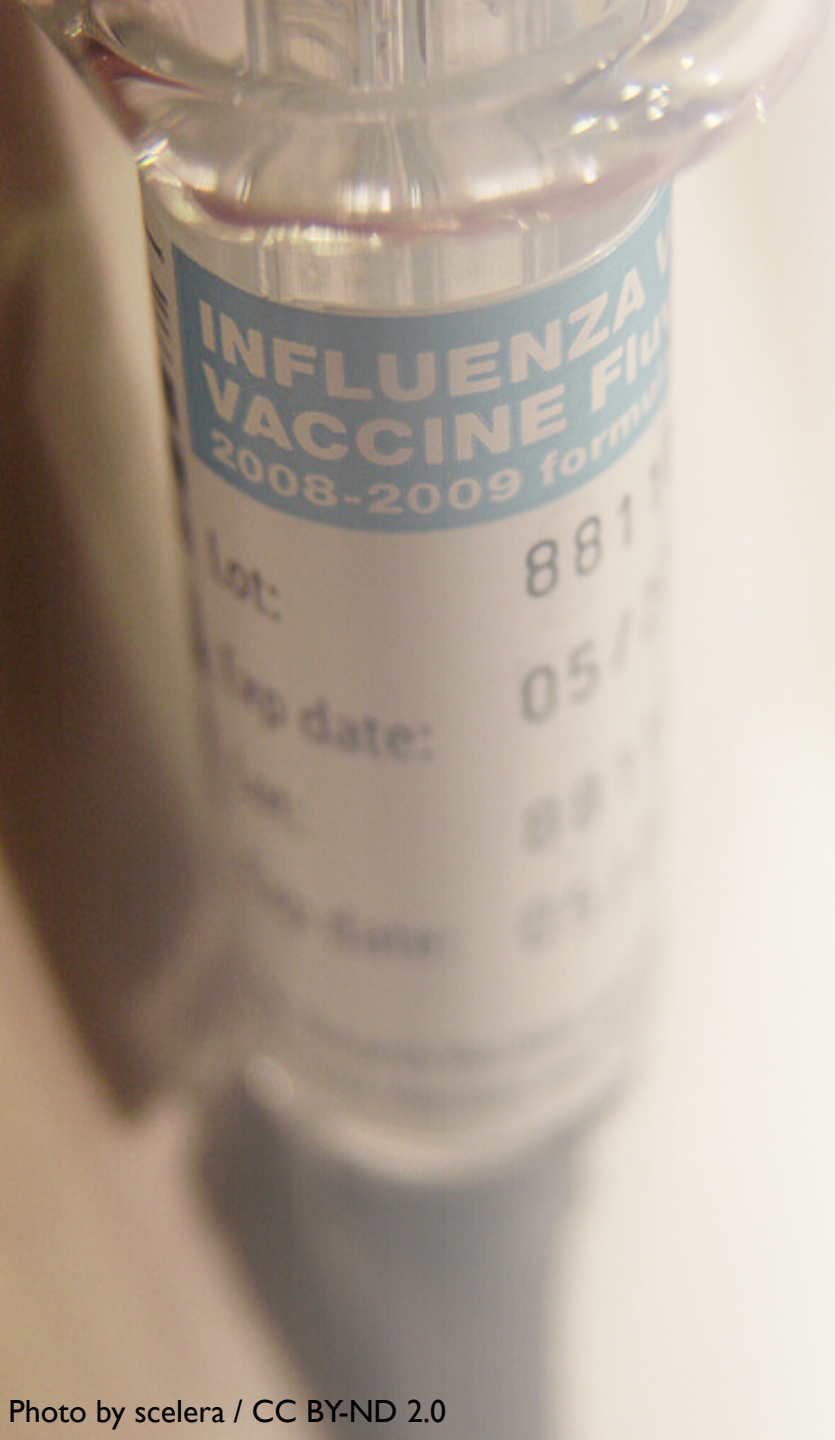
A/California/7/2009 (**H1N1**)pdm09-like virus



A/California/7/2009 (**H1N1**)pdm09-like virus
A/Switzerland/9715293/2013 (**H3N2**)-like virus

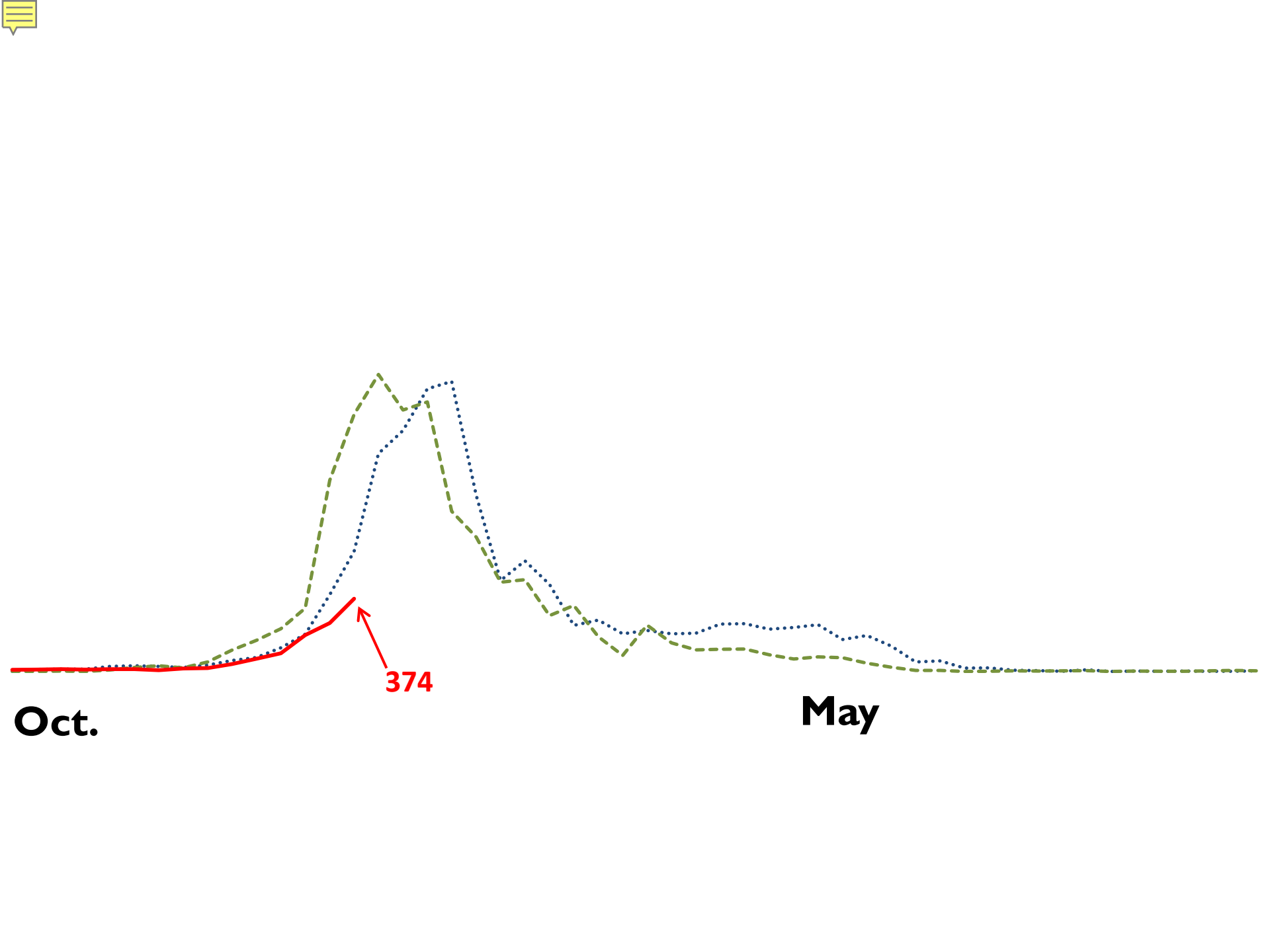


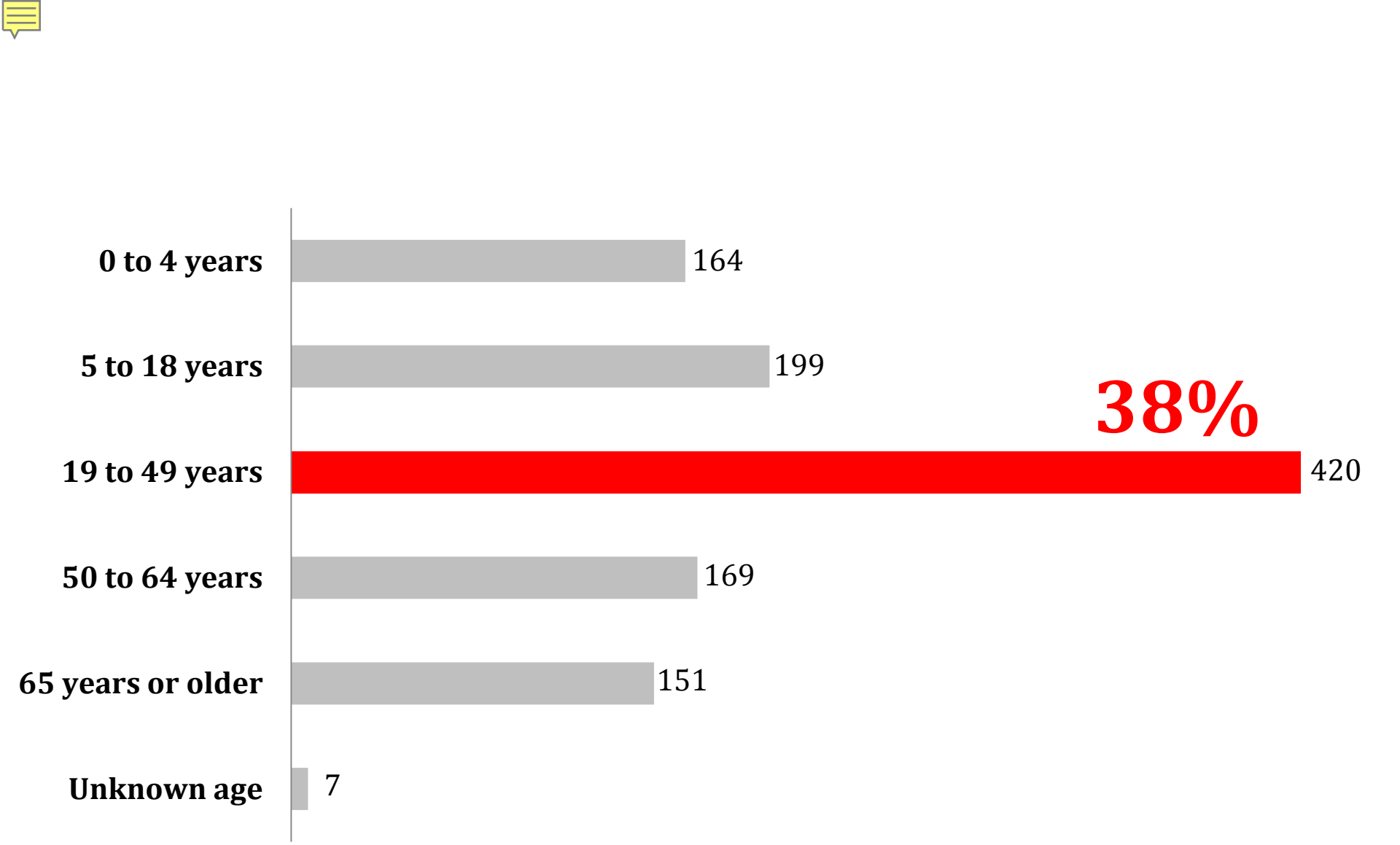
A/California/7/2009 (**H1N1**)pdm09-like virus
A/Switzerland/9715293/2013 (**H3N2**)-like virus
B/Phuket/3073/2013-like viruses (**B/Yamagata**)

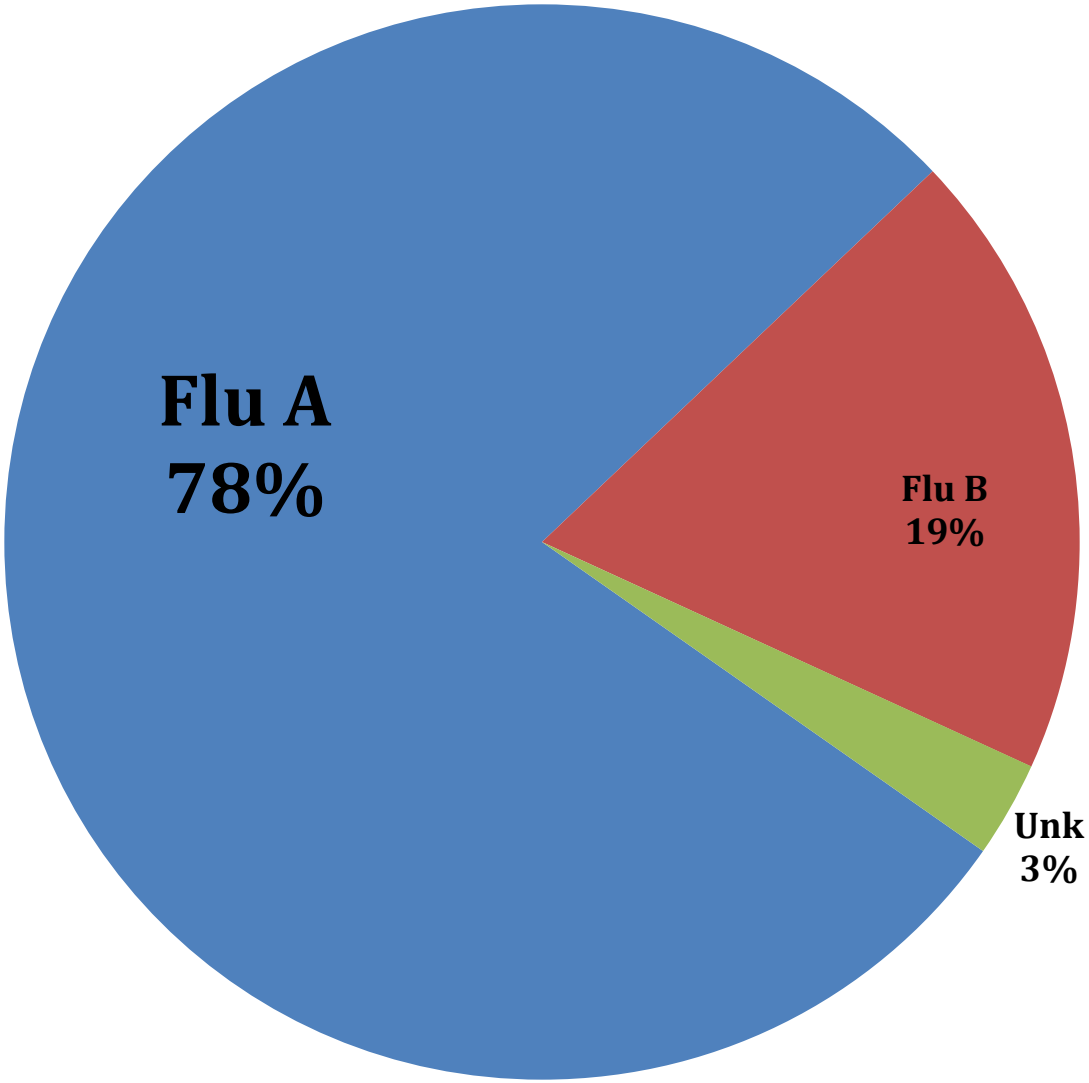


A/California/7/2009 (**H1N1**)pdm09-like virus
A/Switzerland/9715293/2013 (**H3N2**)-like virus
B/Phuket/3073/2013-like viruses (**B/Yamagata**)
*B/Brisbane/60/2008-like virus (**B/Victoria**)

**Quadrivalent only*


374
Oct.
May


0 to 4 years
164
5 to 18 years
199
38%
19 to 49 years
420
50 to 64 years
169
65 years or older
151
Unknown age
7


Flu A
78%
Flu B
19%
Unk
3%

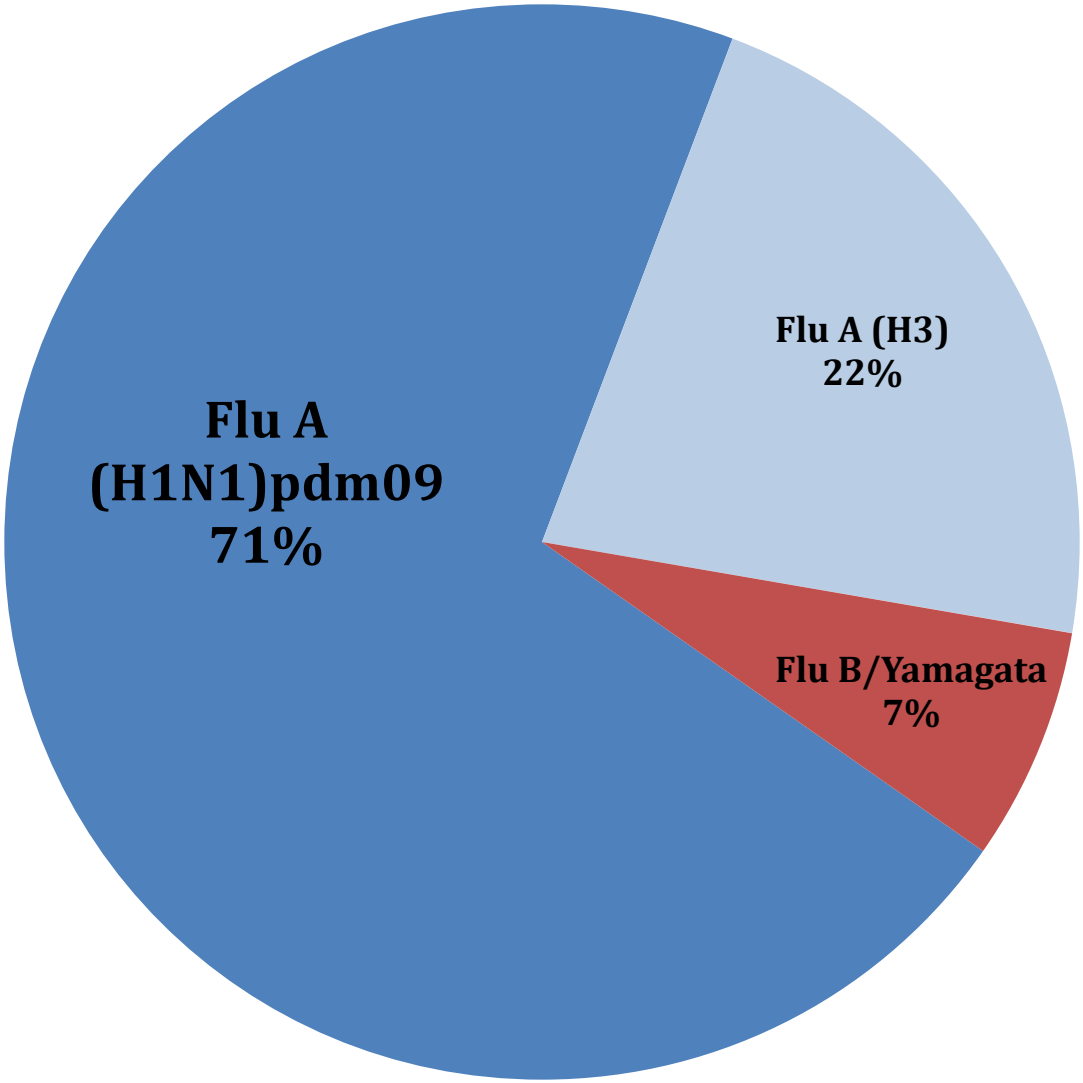

Flu A (H3)
22%
Flu A
(H1N1)pdm09
71%
Flu B/Yamagata
7%

Photo by gerlos / CC BY-SA 2.0

Photo by gerlos / CC BY-SA 2.0

- ✓ Pediatric flu-associated deaths

Photo by gerlos / CC BY-SA 2.0

- ✓ Pediatric flu-associated deaths
- ✓ Severely ill

Photo by gerlos / CC BY-SA 2.0

- ✓ Pediatric flu-associated deaths
- ✓ Severely ill
- ✓ Travel-associated cases (international)

Photo by gerlos / CC BY-SA 2.0

- ✓ Pediatric flu-associated deaths
- ✓ Severely ill
- ✓ Travel-associated cases (international)
- ✓ Cases with known animal exposure (swine, poultry)

the **benefits** of **flu vaccination** 2014-2015

The estimated number of influenza-associated **illnesses prevented** by flu vaccination during the 2014-2015 season:

1.9 million

greater than the population of the city of Philadelphia

The estimated number of flu-associated **medical visits prevented** by vaccination during the 2014-2015 season:

966,000

as many people as can fit in Manhattan's Times Square

The estimated number of flu **hospitalizations prevented** during the 2014-2015 season:

67,000

as many people as Seattle's Seahawks stadium can seat

get **vaccinated**

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

DATA: www.cdc.gov/flu/about/disease/2014-15.htm
Morbidity and Mortality Weekly Report (MMWR), October 4–November 28, 2015: Vol. 64, No. 48
NCIRDig-529 | 12.10.2015

www.cdc.gov/flu

Photo by [illegible]ryas/ CC BY 2.0

Resources

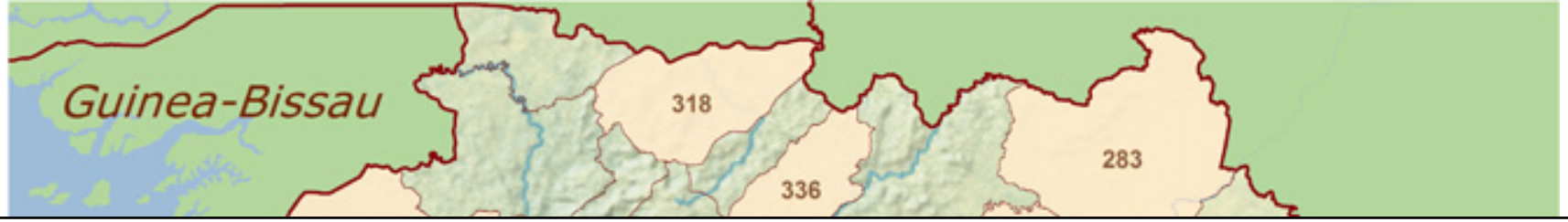
ADHS Weekly Flu Activity Reports:
azdhs.gov/flu

CDC Flu:
cdc.gov/flu

Questions?

Kristen Herrick
Kristen.Herrick@azdhs.gov
602-653-5528

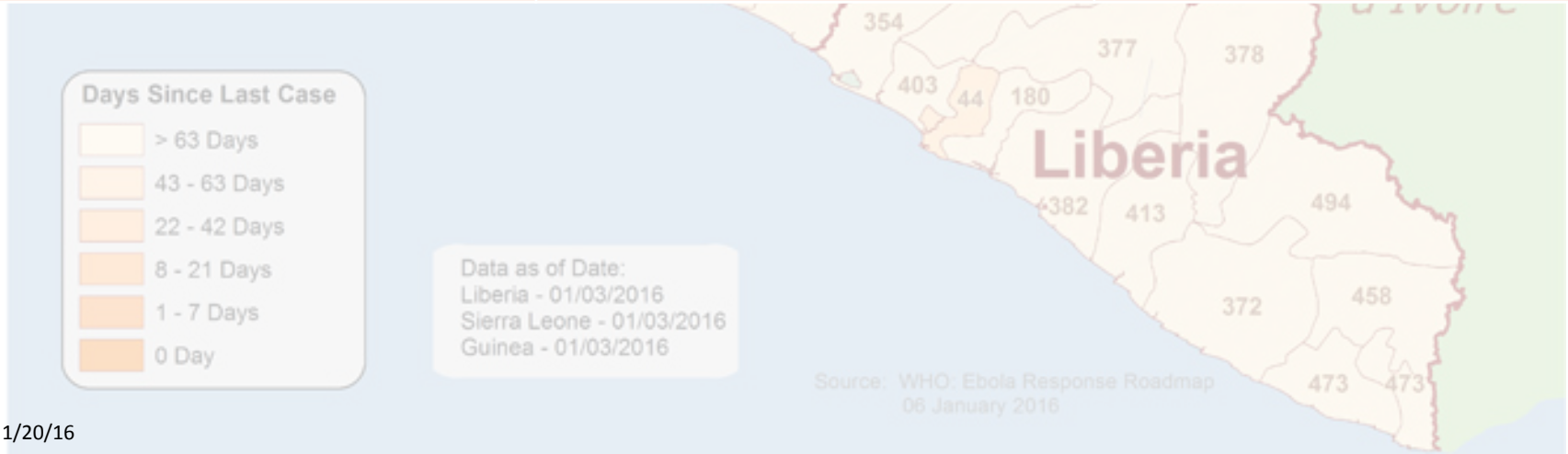
Arizona Department of Health Services



2014 West Africa Ebola Outbreak

Where are we now?

	Cases	Deaths
Liberia	10,675	4,809
Sierra Leone	14,122	3,955
Guinea	3,804	2,536
Total	**28,601**	**11,300**



Data as of 1/20/16

U.S. Entry Screening for Ebola

WHAT TO EXPECT when you arrive from Guinea.

After Passport Control, process may take 45 minutes or more.

1 Health Screening

Staff will

- Take your temperature.
- Ask questions about Ebola exposure and symptoms.

Some travelers will need more screening or medical evaluation. All others will go to step 2.

2 CARE Kit Discussion

- The CARE Ambassador will explain how to watch yourself for any symptoms of Ebola for 21 days.

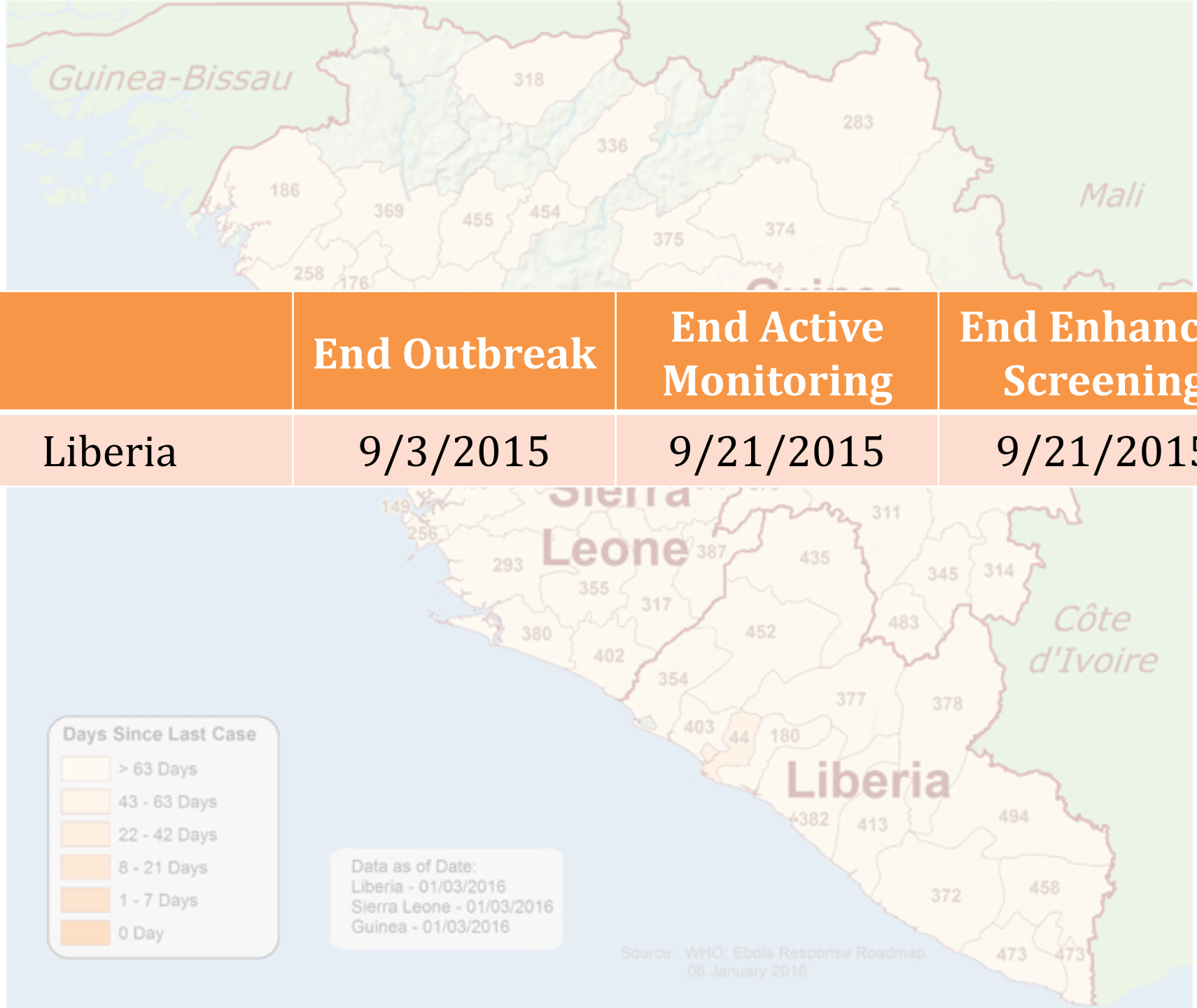
Please ask any questions that you have at this time.

3 Continue Travel

You can go to

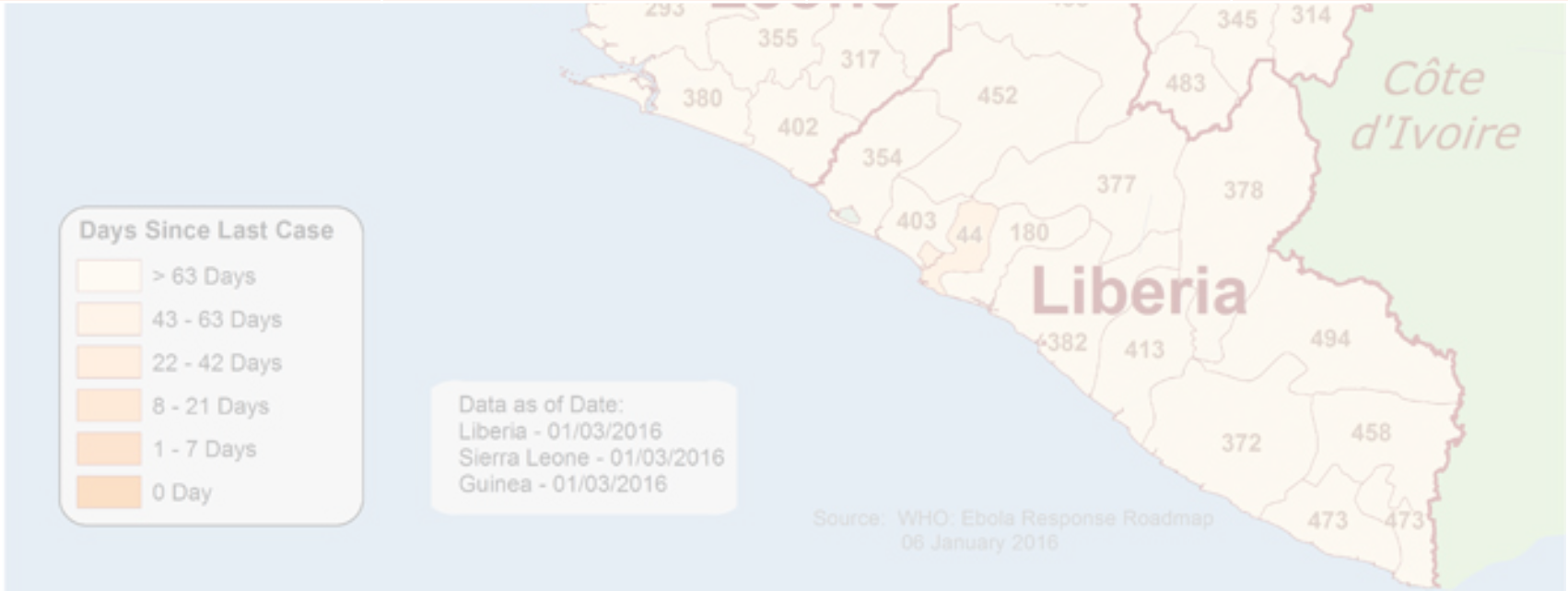
- Baggage claim, then
- Your destination or connecting flight gate.

CS295188F December 28, 2015 12:10PM

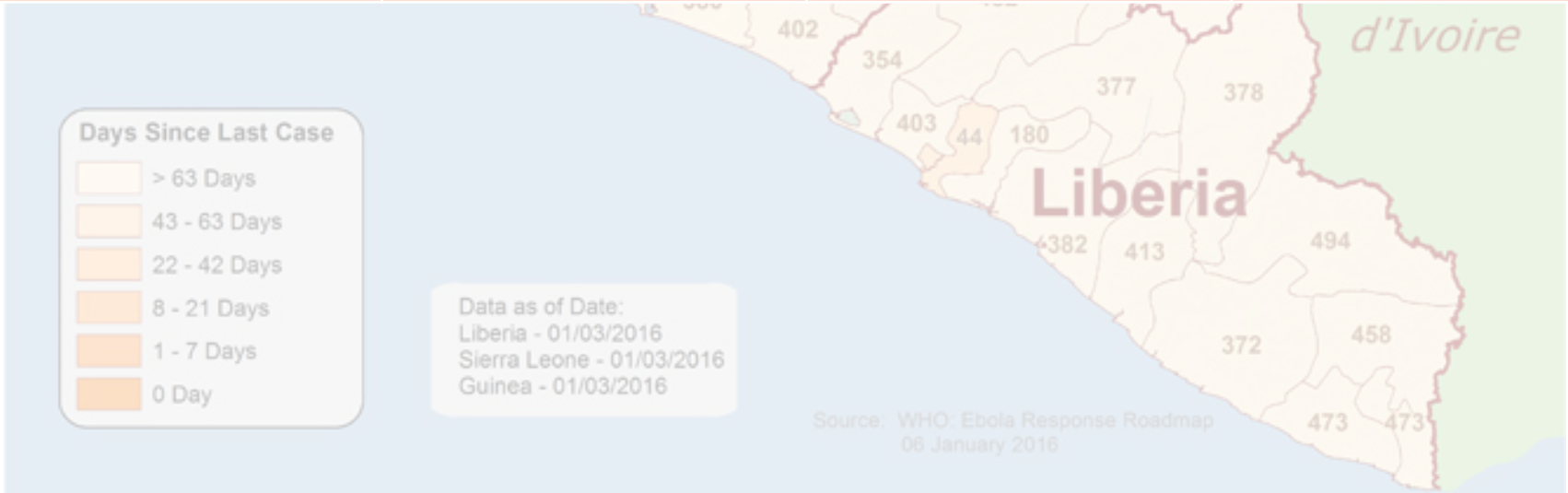


	End Outbreak	End Active Monitoring	End Enhanced Screening
Liberia	9/3/2015	9/21/2015	9/21/2015

	End Outbreak	End Active Monitoring	End Enhanced Screening
Liberia	9/3/2015	9/21/2015	9/21/2015
Sierra Leone	11/7/2015	11/10/2015	12/22/2015

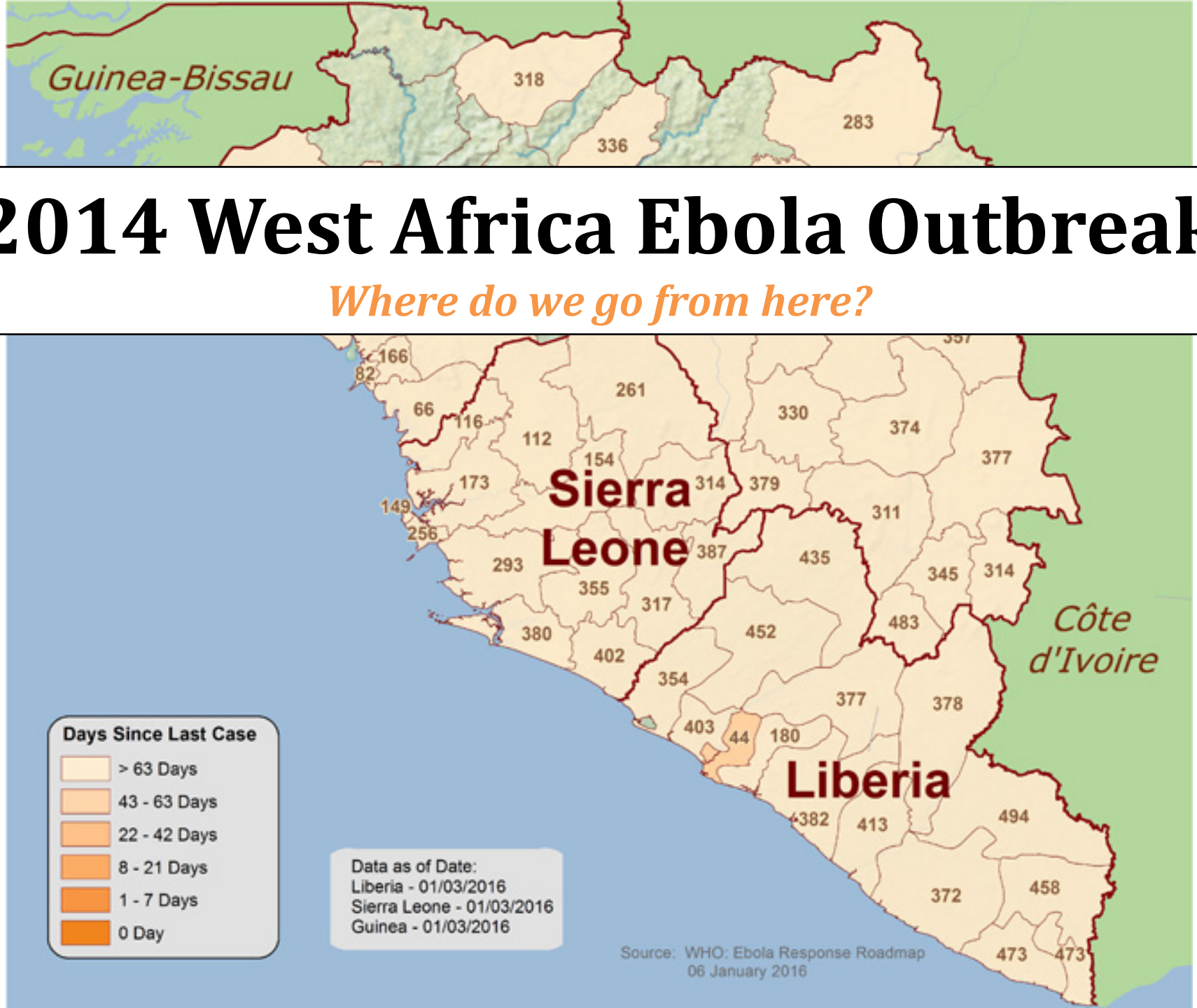


	End Outbreak	End Active Monitoring	End Enhanced Screening
Liberia	9/3/2015	9/21/2015	9/21/2015
Sierra Leone	11/7/2015	11/10/2015	12/22/2015
Guinea	12/29/2015	12/29/2015	***Ongoing***



2014 West Africa Ebola Outbreak

Where do we go from here?



CHAGAS

MEASLES

ZIKA

EBOLA

AVIAN INFLUENZA

CHIKUNGUNYA

MALARIA

MERS

DENGUE

SCHISTOSOMIASIS

YELLOW FEVER

Resources

ADHS Ebola:
azdhs.gov/Ebola

CDC Ebola:
cdc.gov/Ebola

Questions?

Kristen Herrick
Kristen.Herrick@azdhs.gov
602-653-5528

Arizona Department of Health Services

Frontline Healthcare Facilities

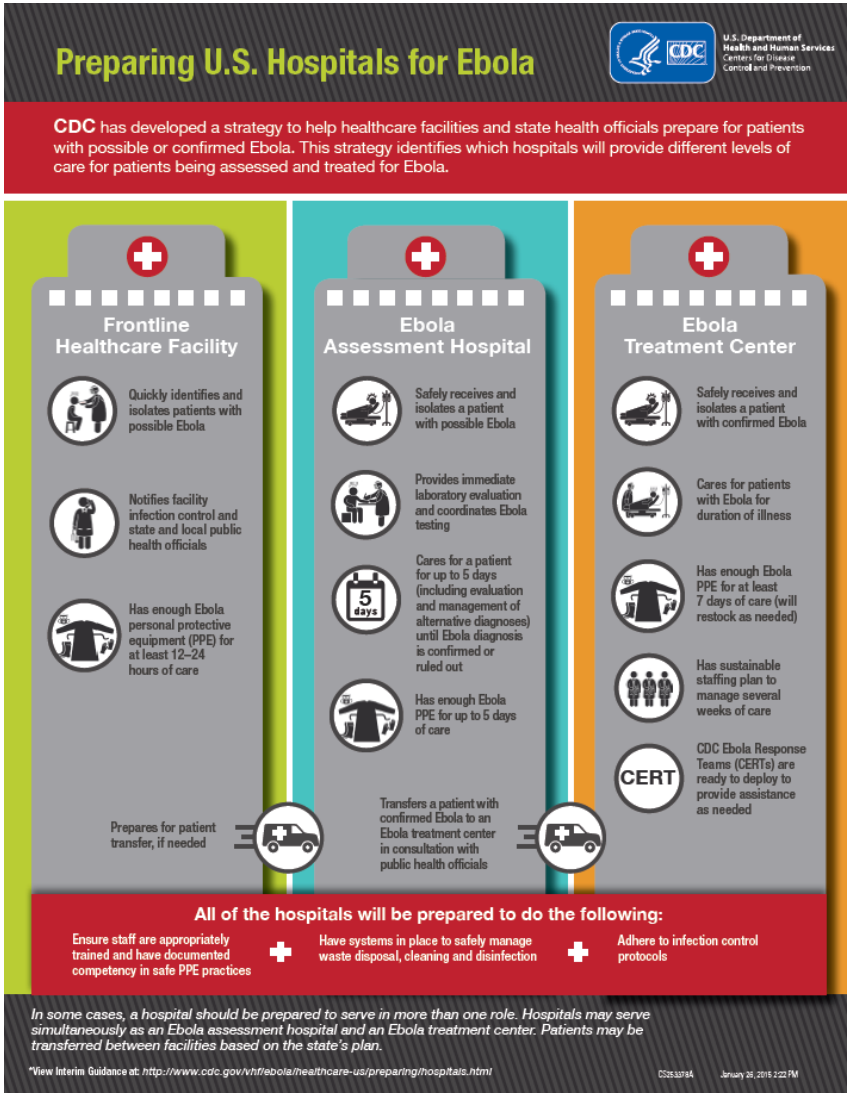
- Most U.S. acute care facilities that are equipped for emergency care are in this tier
  - E.g. hospital-based emergency departments and other emergency care settings including urgent care clinics and critical access hospitals

Ebola Assessment Hospitals

- Facilities prepared to receive and isolate PUIs and care for the patient until a diagnosis of EVD can be confirmed or ruled out and until discharge or transfer is completed

Ebola Treatment Centers

- Facilities that plan to care for and manage a patient with confirmed EVD for the duration of the patient's illness



http://www.cdc.gov/vhf/ebola/healthcare-us/preparing/hospitals.html

Arizona's Ebola Treatment Centers

- Maricopa Integrated Health Systems
  - Phoenix, Arizona
- University of Arizona Health Network
  - Tucson, Arizona

http://www.cdc.gov/vhf/ebola/healthcare-us/preparing/current-treatment-centers.html

Regional Ebola and Other Special Pathogen Treatment Center: Region IX

- CDC is working to identify a regional Ebola and other special pathogen treatment centers in each U.S. Region
- The Region IX center should be announced within the next few weeks
- This center would provide back-up support for Arizona in the event of an Ebola or other significant infectious disease incident

Infectious Disease Certification Program

- Certification for Healthcare Facilities
- Focus on Infectious Disease Services
  - Prevention
  - Screening
  - Care and Treatment

Program Description

- Established Guidelines for voluntary certification

- Intended to be adapted to the many various infectious disease illnesses or situations.
  - Based on the needs and resources particular to the community and level of certification
  - Variations that improve the quality of infectious disease prevention and treatment are encouraged
    - Provided that they are in accordance with local/national regulations and statutes and professional standards

- Guidelines are based on rules, regulations, and best practices that have been identified to achieve the best outcomes
  - Prevention
  - Screening
  - Treatment

- The certification will address areas of responsibility in a comprehensive and progressive approach to systems of care
  - Patient care
  - Continuing education
  - Professional requirements
  - Community involvement
  - Evaluation of care and services

Structure

- The Arizona Department of Health Services (ADHS) will be the responsible agency for development and maintenance of the certification program

- The Governor's Council for Infectious Disease will approve the program and will be the authority to provide ADHS with guidance and direction as the program evolves

- The initial certification program will focus on the highest level of care available to an individual with an infectious disease

Value of Certification:

- **For the community:**
  - Demonstrates to the community of Arizona the State recognizes and supports a system approach to infectious disease management.
  - Demonstrates Arizona is prepared and has systems in place to address outbreaks and the day-to-day infections.
  - Once a full certification system is established there would be a coordinated link with other certified facilities based on the level of care each facility can provide.

- **For the healthcare provider:**
  - Provides the healthcare facility with one more additional method to demonstrate the facility processes and systems meet all requirements and best practices related to infectious disease.
  - Communicates the healthcare facility is committed to providing high quality patient care.
  - Provides the opportunity for multi-disciplinary, comprehensive review of the infectious disease systems and processes.

More information to come in the near future!

Healthcare-Associated Infections Program: A Review of 2015

Office of Infectious Disease Services
Arizona Department of Health Services

New Healthcare-Associated Infections (HAI) Staff

- Rachana Bhattarai, BVSc & AH, MS
  - HAI Epidemiologist

- Kasia Golenko, MPH
  - HAI Epidemiologist

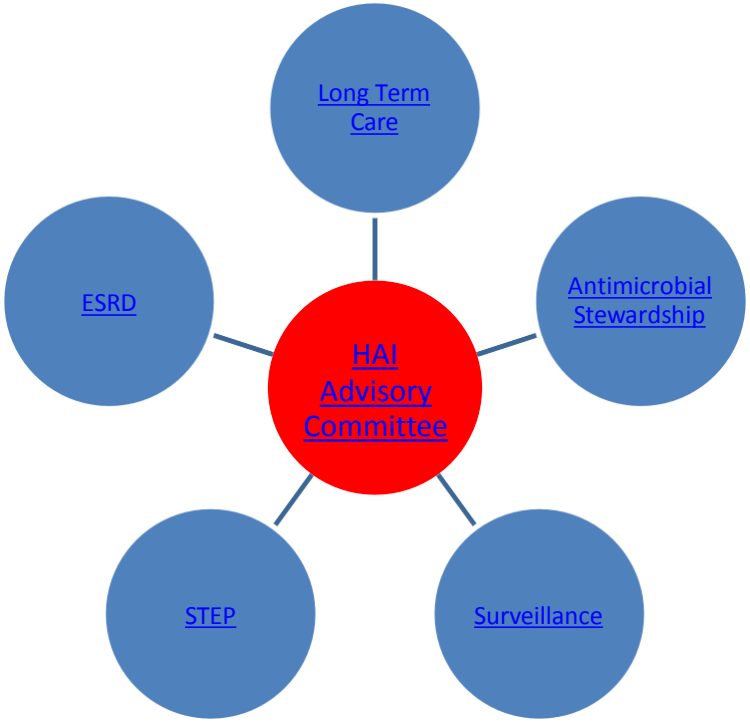
- Geoff Granseth, MPH
  - CDC/CSTE Applied Epidemiology HAI Fellow

- Felicia McLean, BA
  - CDC Public Health Associate

HAI Program

- Facilitate the HAI Advisory Committee and its corresponding subcommittees as they identify and support HAI prevention priorities for the state
- Coordinate intra-agency HAI prevention activities
- Monitor and expand current HAI surveillance activities
- Build and participate in partnerships and collaborations to assist HAI efforts throughout the state

HAI Advisory Committee and Subcommittees



Click on one to view the website!

HAI Program Priorities for 2015-2016

- Infection prevention
- Injection safety
- Drug diversion
- Pharmacy and compounding
- Antimicrobial stewardship, use, and resistance
- Healthcare worker vaccination

National Healthcare Safety Network (NHSN) Evaluation

- Using the CDC's *Updated Guidelines for Evaluating Public Health Surveillance Systems* evaluated on:
  - **Data Quality (Completeness)**
  - **Representativeness**
  - **Sensitivity**
  - Stability
  - Simplicity
  - Timeliness
  - Predicted Value Positive
  - Acceptability
  - Flexibility

Hospital Reporting Plans, January 2015

Reporting Plan	Total # of Hospitals in ADHS Super Group	# of Hospitals Reporting, per facility's reporting plan	% Reporting
CLABSI	54	54	100%
CAUTI	54	54	100%
VAE	54	26	48%
SSI COLO	54	53	98%
SSI HYST	54	53	98%
MRSA LabID (Blood)	54	40	74%
MRSA LabID	54	15**	28%
MRSA (Any)	54	54**	100%
CDI LabID	54	54	100%

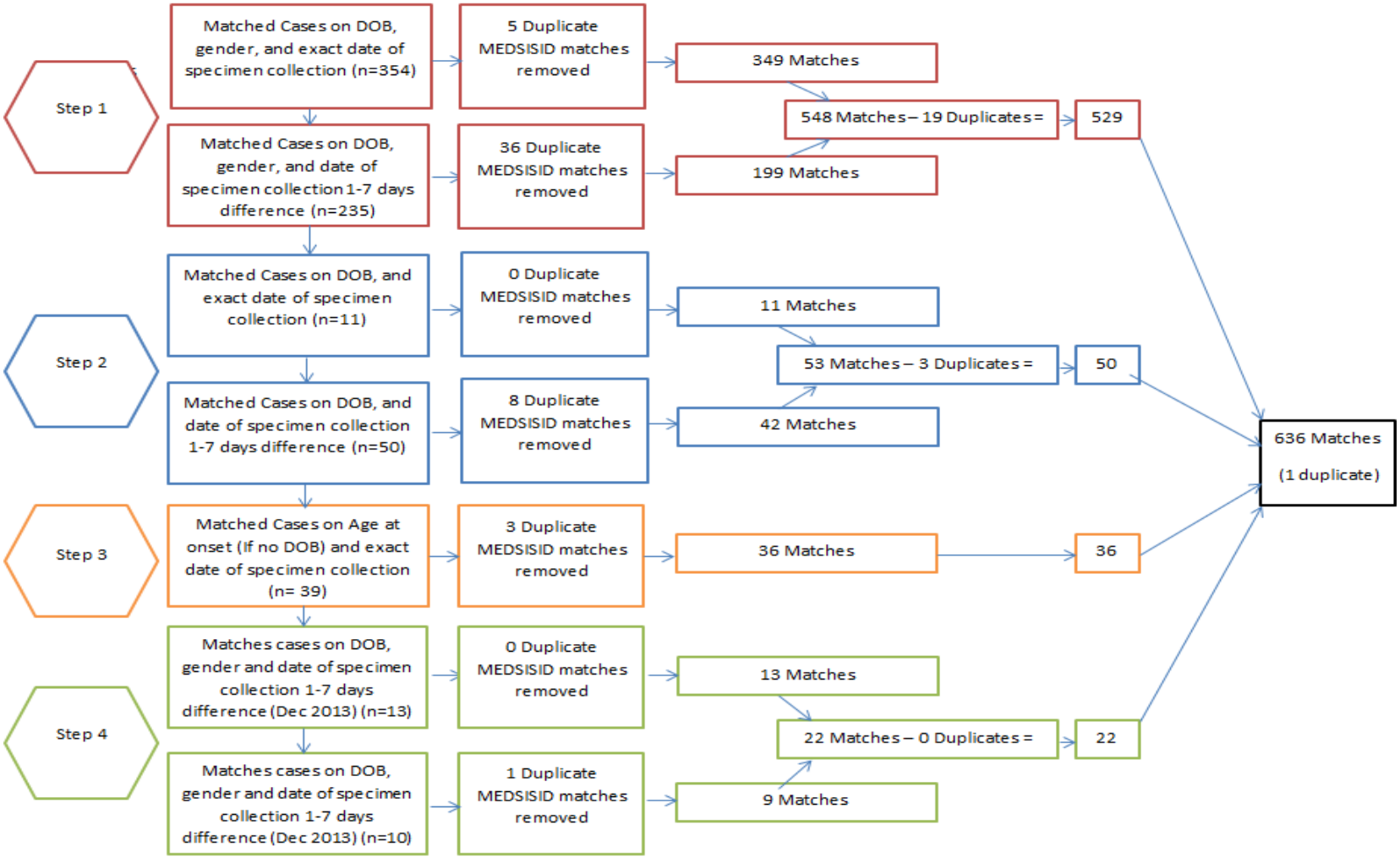
*Not all hospitals are required to report all infections; for example some hospitals do not have ventilated patients or do not perform surgeries

**One Hospital reported MRSA as both LabID Blood and LabID

Arizona Hospitals Reporting Data to NHSN

Module	# Hospitals Reporting to NHSN, per CDC report	# Hospitals with data available to ADHS Super Group	% Reporting Hospitals in ADHS Super Group
CLABSI	60	54	90%
CAUTI	60	54	90%
SSI HYST	53	53	100%
SSI COLO	56	53	95%
MRSA LabID	68	54	79%
CDI LabID	68	54	79%

Sensitivity Matching Process



MRSA Sensitivity Analysis

- Calculated the sensitivity of NHSN for capturing invasive MRSA events reported to MEDSIS
  - Low sensitivity (54%)
  - Large number of “unspecified” NHSN samples
  - Not all hospitals had “events”
  - Not all hospitals with “events” matched cases
  - Next Step ----------> Validation

2015 HAI Outbreaks

47 outbreak in HCFs

- 64% GI Illness
- 21% Respiratory
- 11% Lice and Mites
- 4% Other*

*Includes strep, strongyloides

Outbreak Setting	Frequency	Percentage
Long Term Care Facility	19	40
Assisted Living	18	38
Hospital	6	12
Rehab Facility	2	4
Outpatient Clinic	1	2
Hospice	1	2

Legionella

- ADHS and Maricopa County Department of Public Health (MCDPH) notified of a HAI Legionellosis case seen at 2 HCFs during 2-10 days prior to illness onset date
  - Acute Care Hospital (ACH)
  - Long Term Care Facility (LTC)
- Admitted at both facilities 2-9 days before the onset of *Legionella* infection

Legionella

Recommendations for ACH

- Retrospective Surveillance
- Prospective Surveillance

Recommendations for LTC

- Keep a high index of suspicion of legionella infection on all patients with HAI pneumonia
- Keep a low threshold for transfer to acute care hospital for all patients with HAI pneumonia for further evaluation of pneumonia

Legionella

- Potential HAI *Legionella* case identified at the ACH through enhanced prospective surveillance
  - Admitted at the facility 12 days prior to the onset of infection
  - Confirmed diagnosis of HAI *Legionella*

Recommendations after second confirmed case

- Continue to identify potential risk factors for *Legionella* infection
- Continue prospective surveillance to identify future cases of legionellosis
- Ensure placement of point-of-use filter on the sink and shower of each patient in identified areas
- Restrict showering with tap water until all fixtures tested in identified areas
- Monthly *Legionella* testing of at least 10% of all fixtures in these units with representatives from patient sinks, staff sinks located in rooms, patient showers and ice machines
- Report all culture results to public health for 6 months
  - Once cultures have been negative for 6 consecutive months, move to quarterly testing for 2 years and biannual thereafter

HAI State Plan

- Enhance HAI Program Infrastructure
- Surveillance, Detection, Reporting, and Response
- Prevention
- Evaluation, Oversight, and Communication
- **Infection Control Assessment and Response**

Infection Control Assessment and Response

- Create an inventory of all healthcare settings in state
- Identify current regulatory/licensing oversight for each HCF
- Assess readiness of Ebola-designated facilities within the state
- Assess outbreak reporting and response in HCFs

Arizona's Infection Prevention Assessment Survey
Acute Care Hospitals

Section 1: Facility Demographics

Section 2: Facility monitoring, surveillance and reporting

Section 3: Laboratory monitoring, reporting, and surveillance

Section 4: Current Infection Control Resources

Section 5: Infection Control Program and Infrastructure

Section 6: Infection Control Training, Competency, and Implementation of Policies and Procedures

Survey will be confidential and an aggregate summary will be completed.

No individual facility data will be distributed or posted.

Who, What, When, Where, Who Else?

- *Who will receive the survey?*
  - Arizona ACH Infection Preventionists
- *What will be received?*
  - An email with an ADHS letter of request, explanation of the survey, and PDF of the survey
- *When will it be distributed?*
  - Monday, January 25, 2016
- *Where can the survey be taken?*
  - A PDF of the survey (i.e. worksheet) will be sent to each IP
  - Once complete, a Qualtrics link will be used to submit the survey
- *Who else assessed?*
  - Next: Long-Term Care, ESRD, Outpatient, etc.

Questions or Concerns?

- Please feel free to contact the HAI Program
  - Eugene Livar
    - Eugene.Livar@azdhs.gov
  - Rachana Bhattarai
    - Rachana.Bhattarai@azdhs.gov
  - Catherine “Kasia” Golenko
    - Catherine.Golenko@azdhs.gov
  - Geoff Granseth
    - Geoffrey.Granseth@azdhs.gov
  - Felicia McLean
    - Felicia.McLean@azdhs.gov

Arizona Department of Health Services STD Control Update

Ryan Kreisberg, MPH

APIC Meeting

January 22, 2016

Health Services Advisory Group

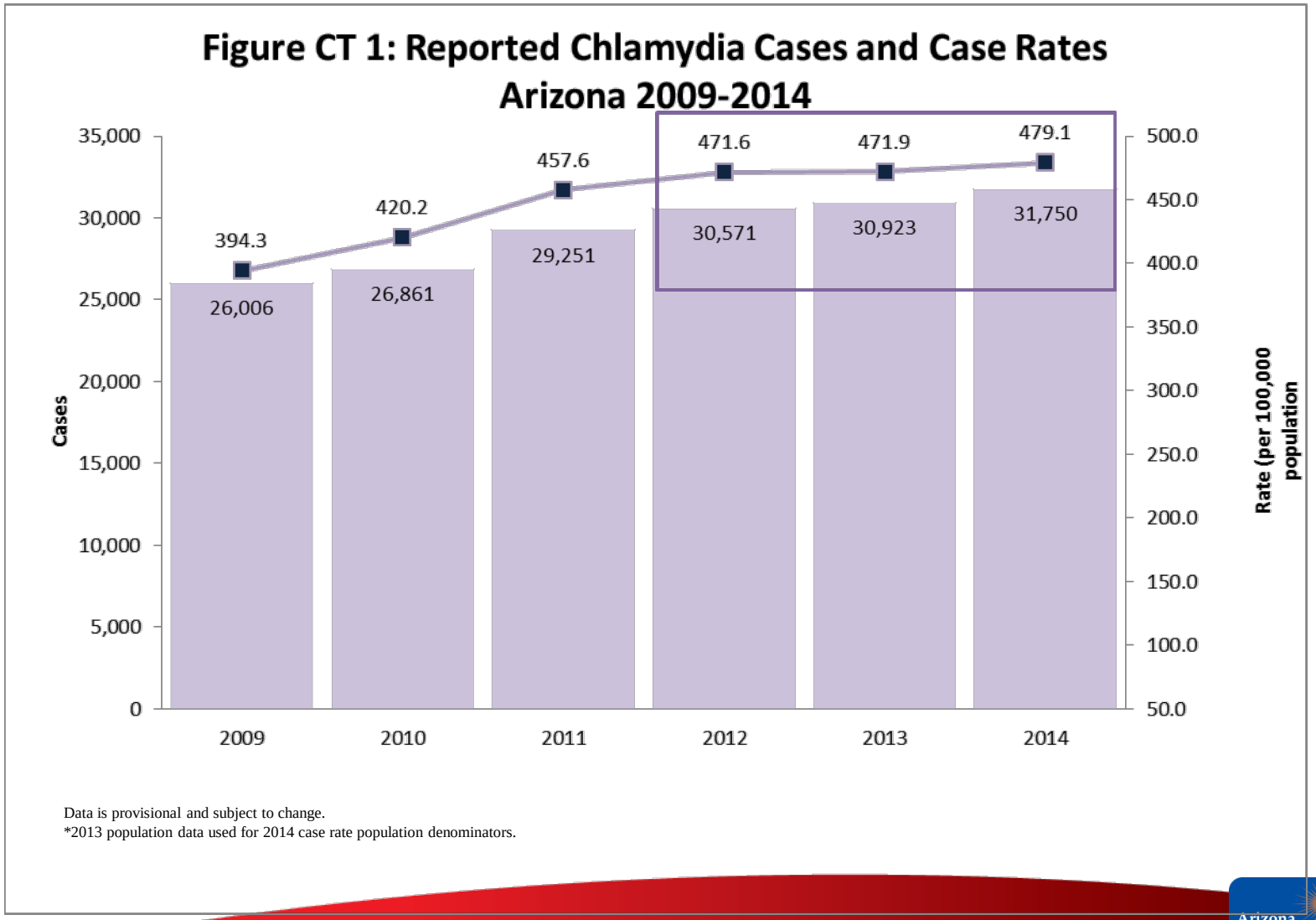
Objectives

- Review the epidemiology of reportable sexually transmitted diseases in the state of Arizona
- Review the importance of STD treatment and prevention at the clinical level
- Review reporting opportunities for clinicians

Today's Items

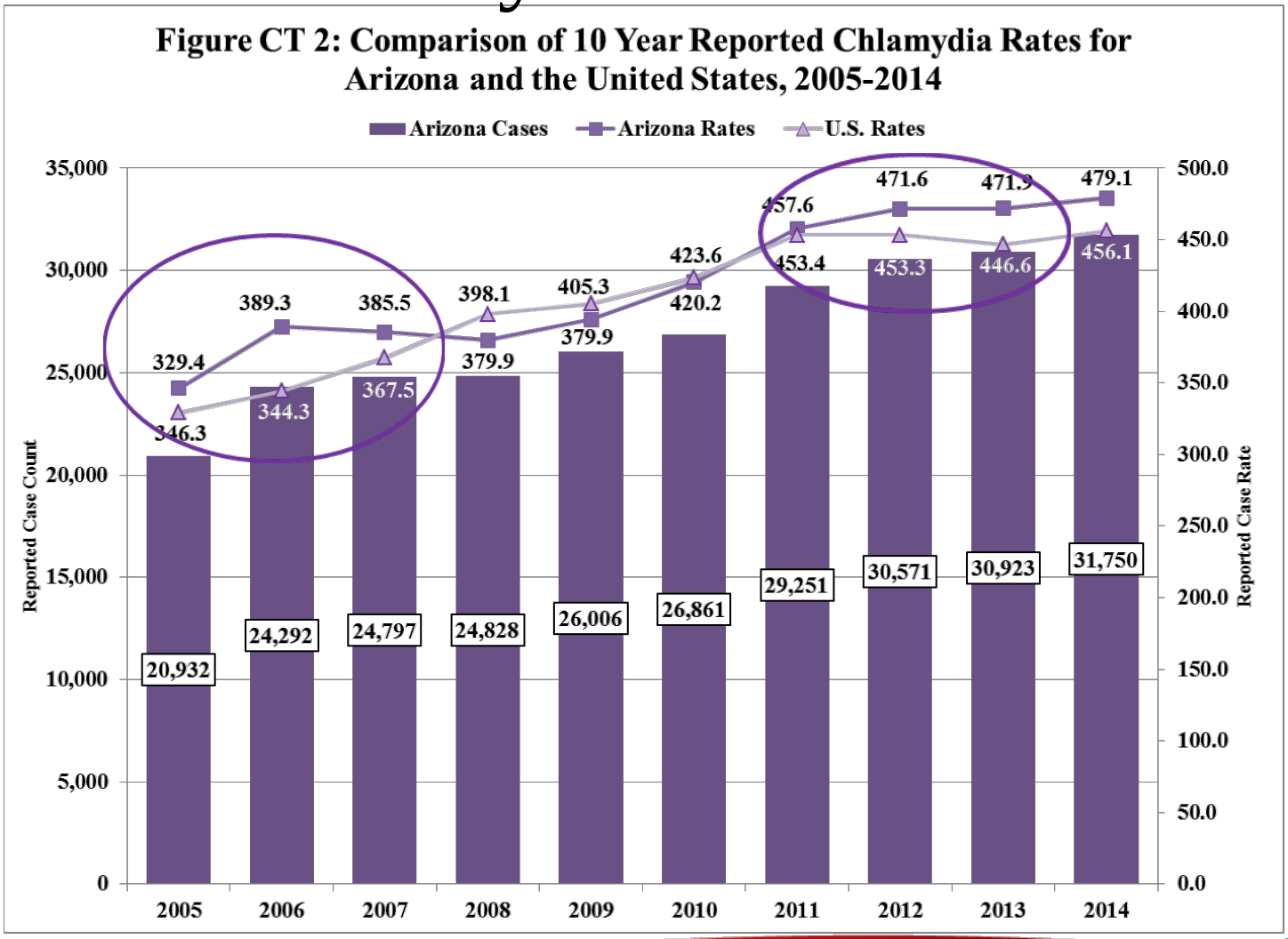
- Trends in chlamydia, gonorrhea and syphilis infections in Arizona, 2010-2014
- Preliminary numbers for 2015
- Treatment of STDs

Chlamydia in Arizona



Data is provisional and subject to change.
*2013 population data used for 2014 case rate population denominators.

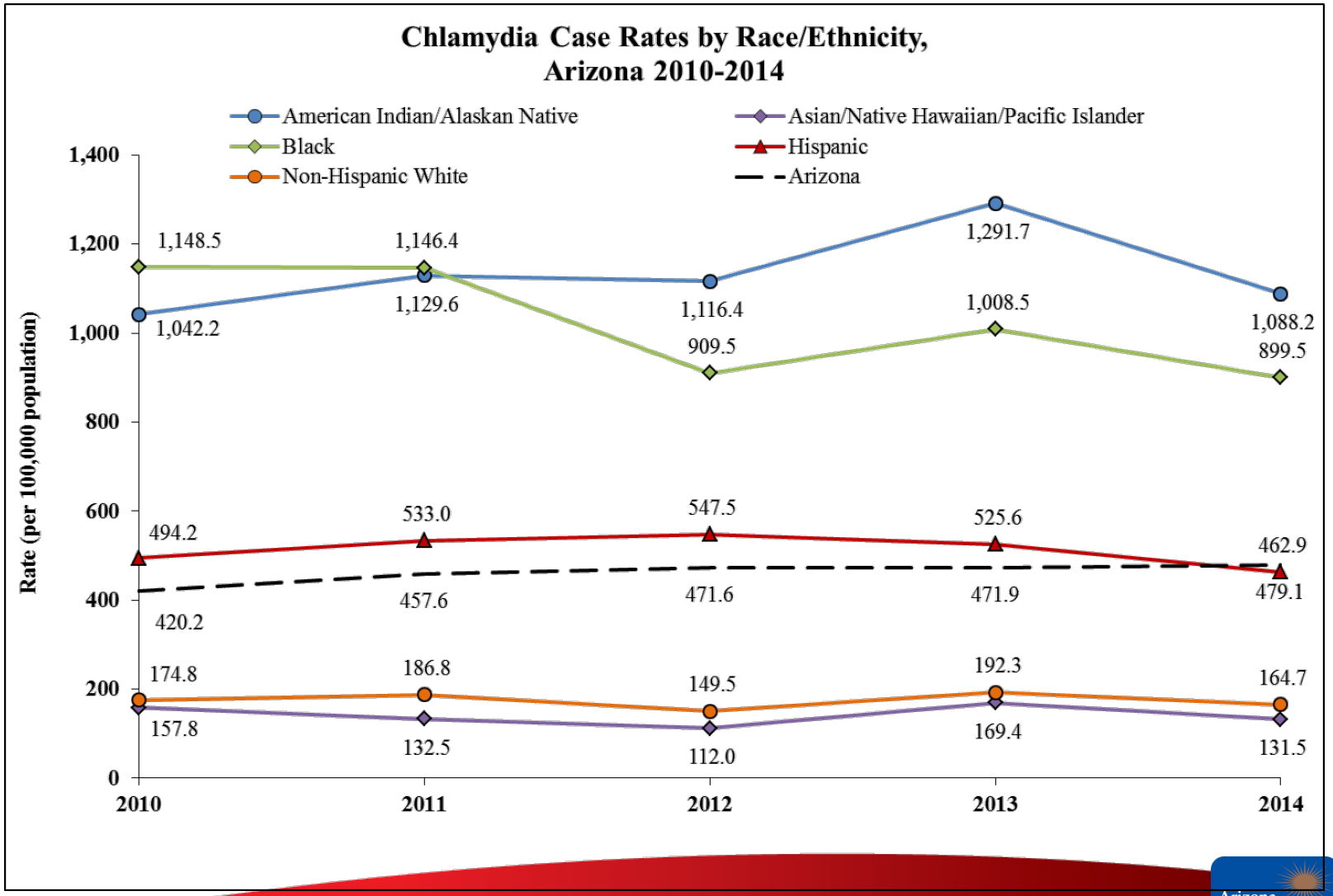
Chlamydia in the US



Arizona Department of Health Services

Health and Wellness for all Arizonans

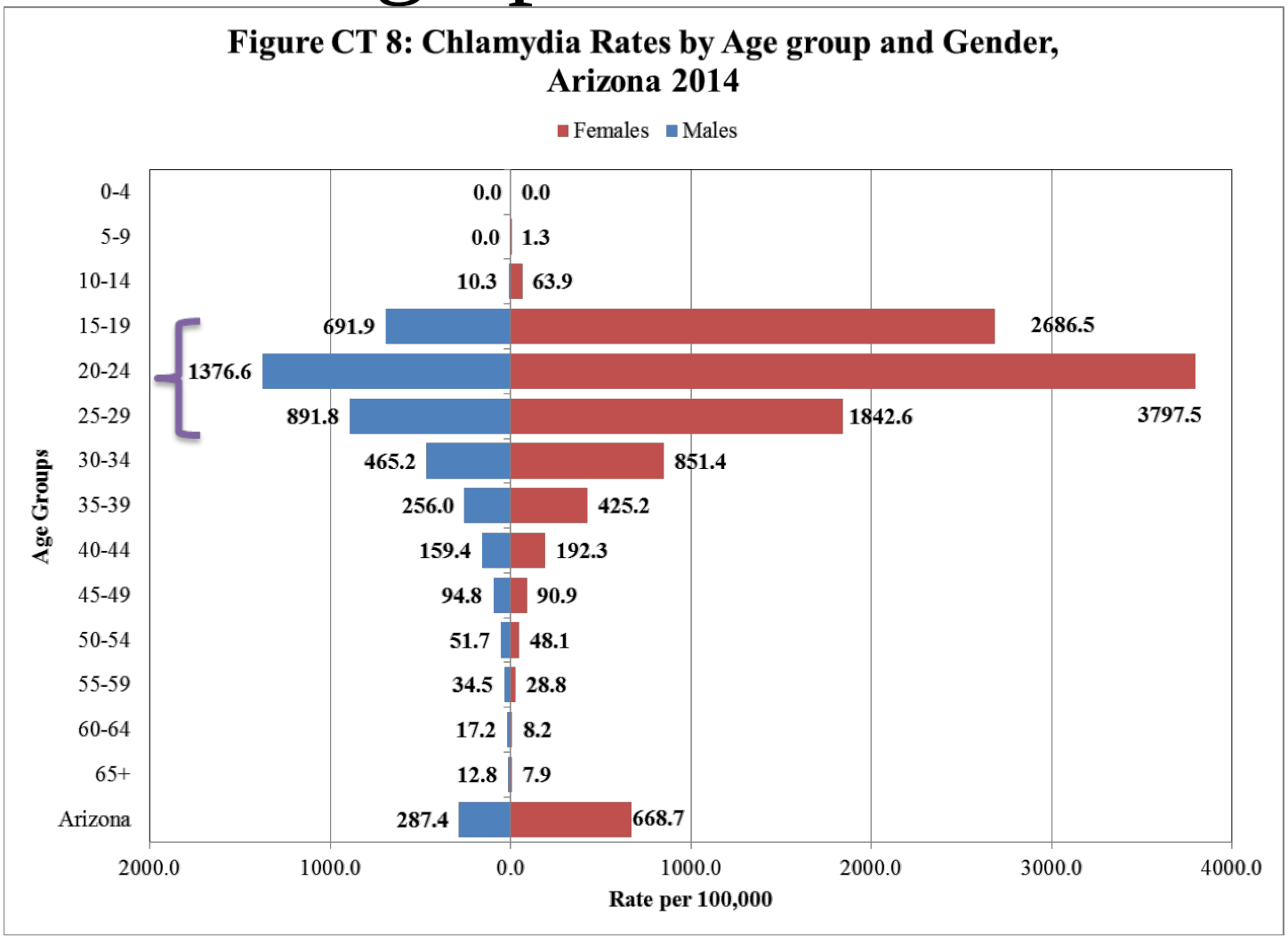
Demographic Differences



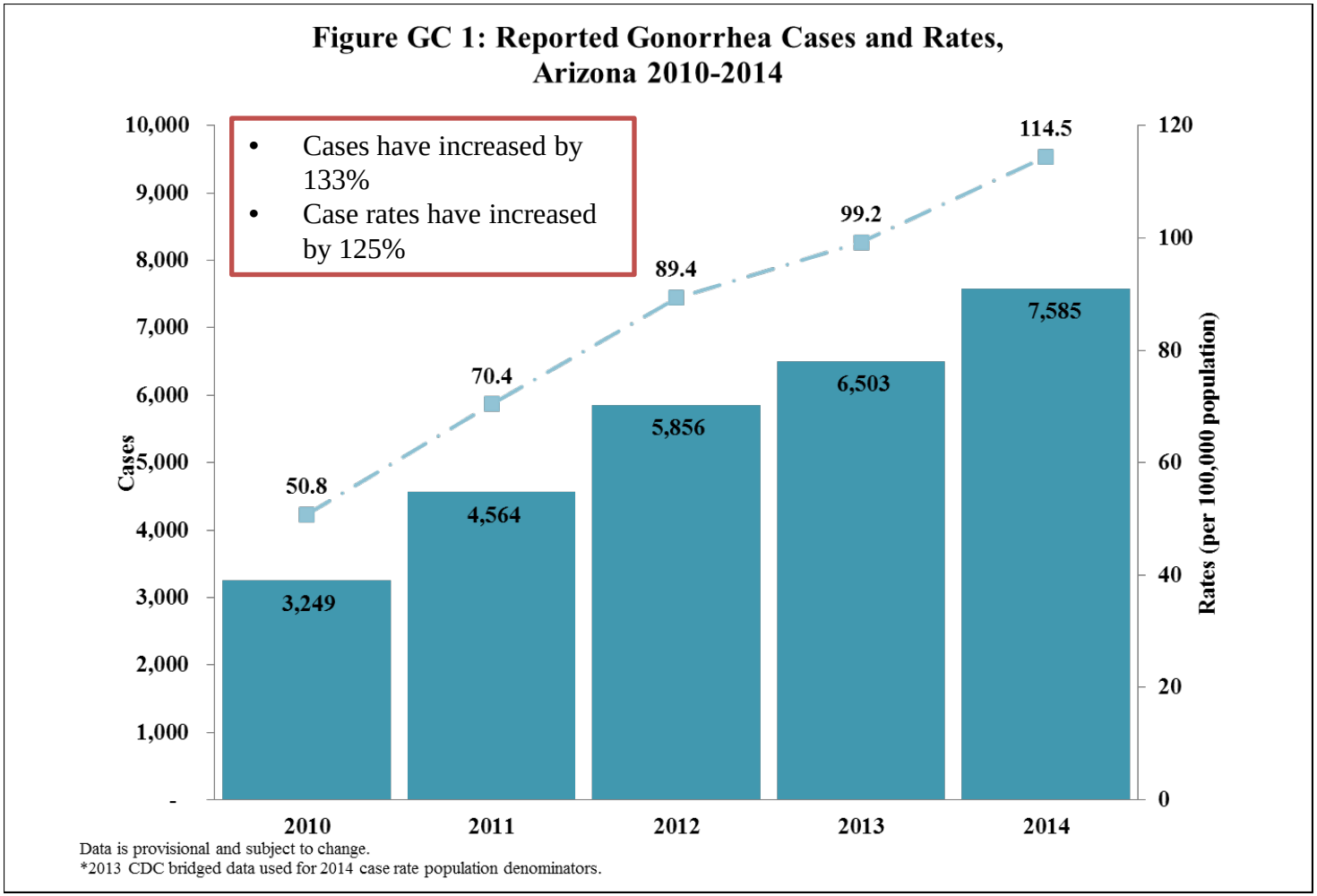
Arizona Department of Health Services

Health and Wellness for all Arizonans

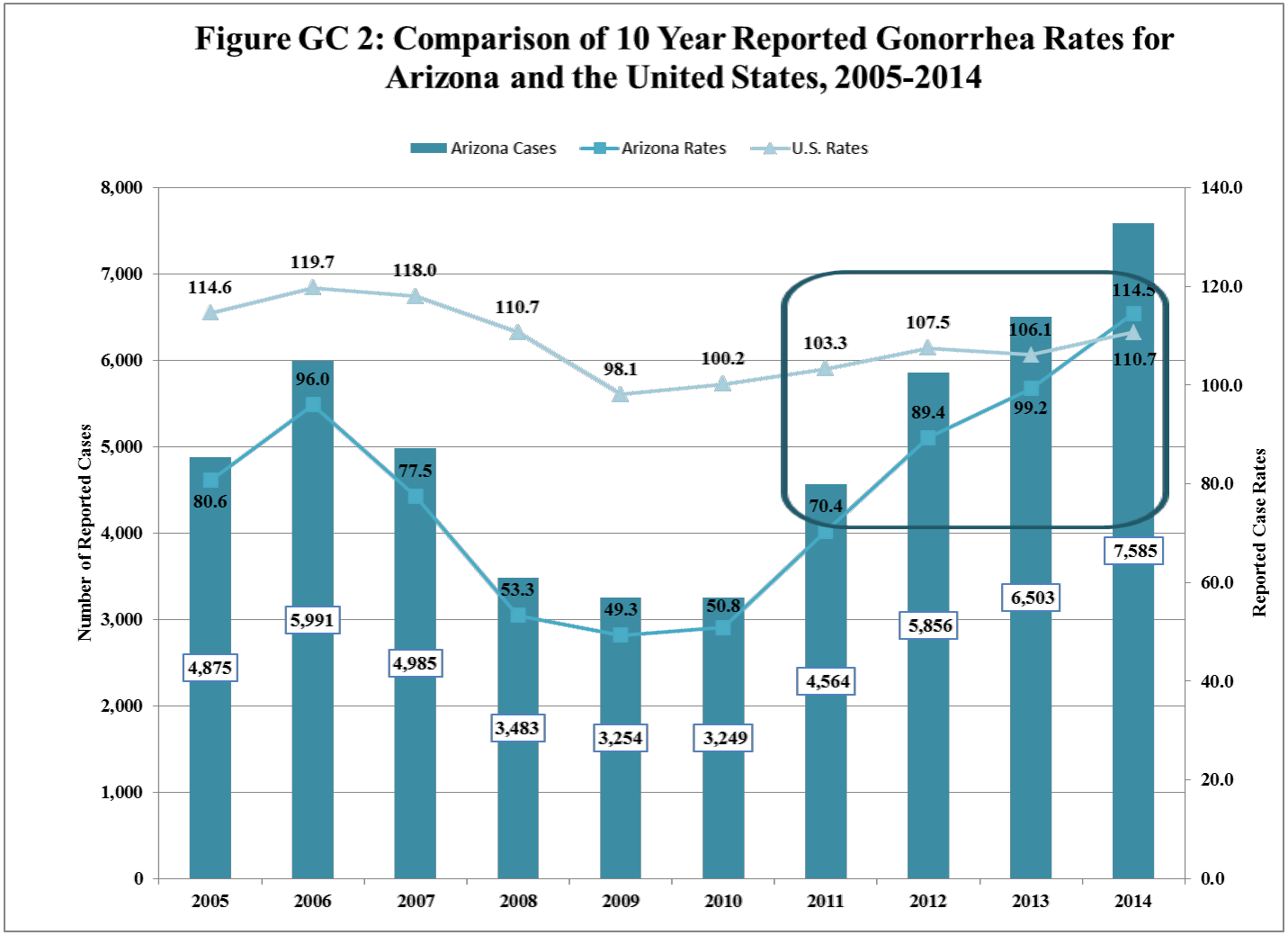
Demographic Differences



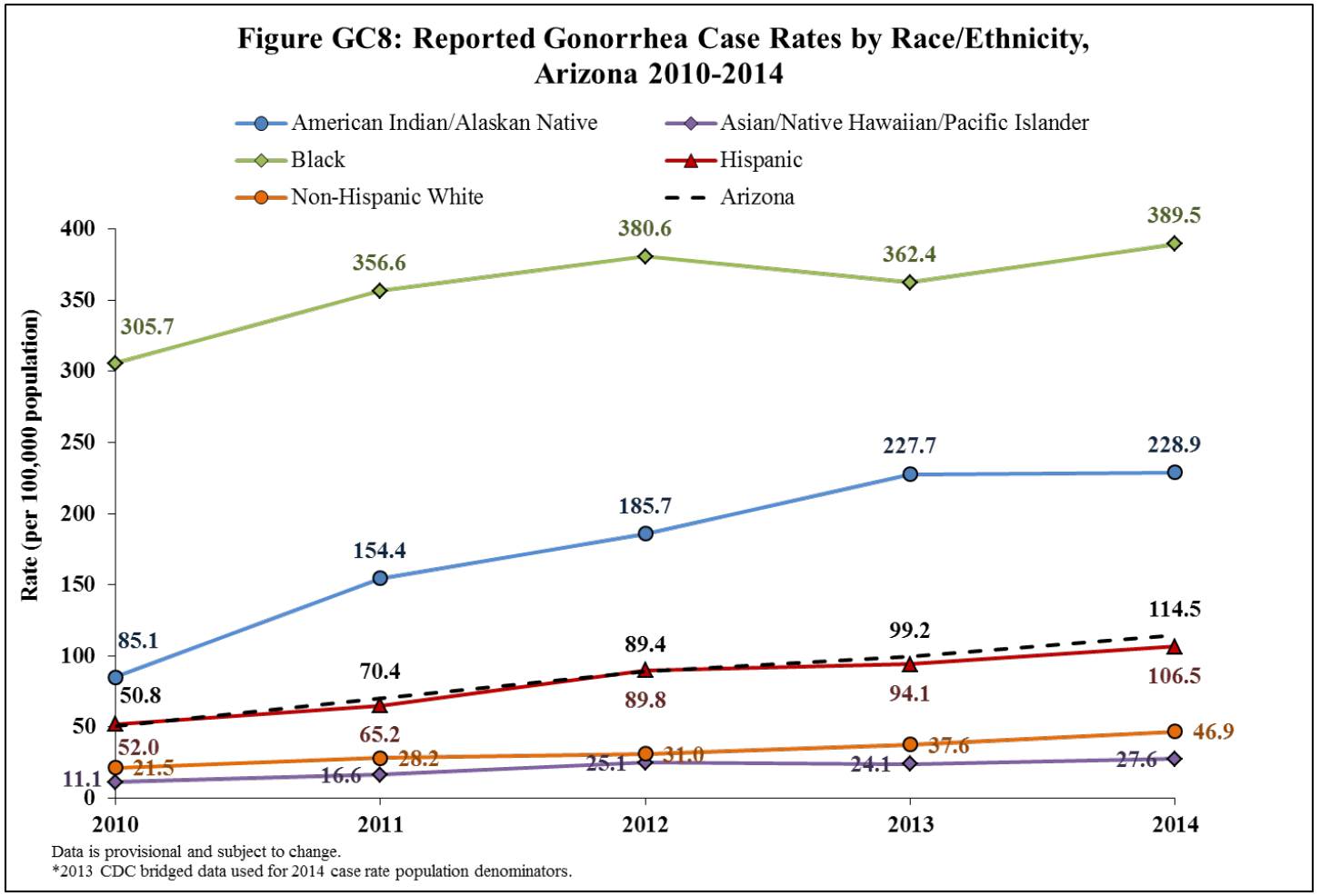
Gonorrhea in Arizona



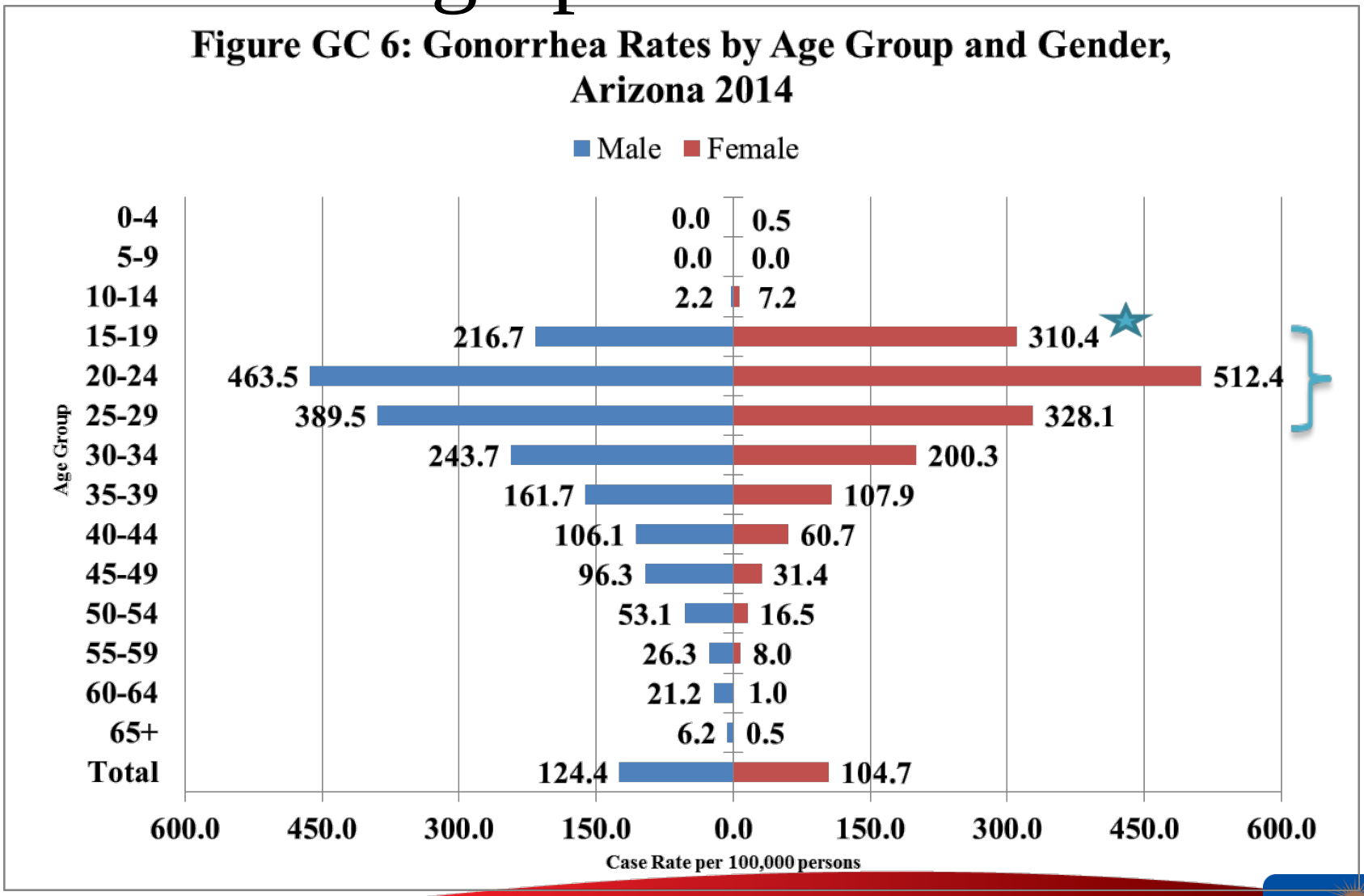
Gonorrhea in the US



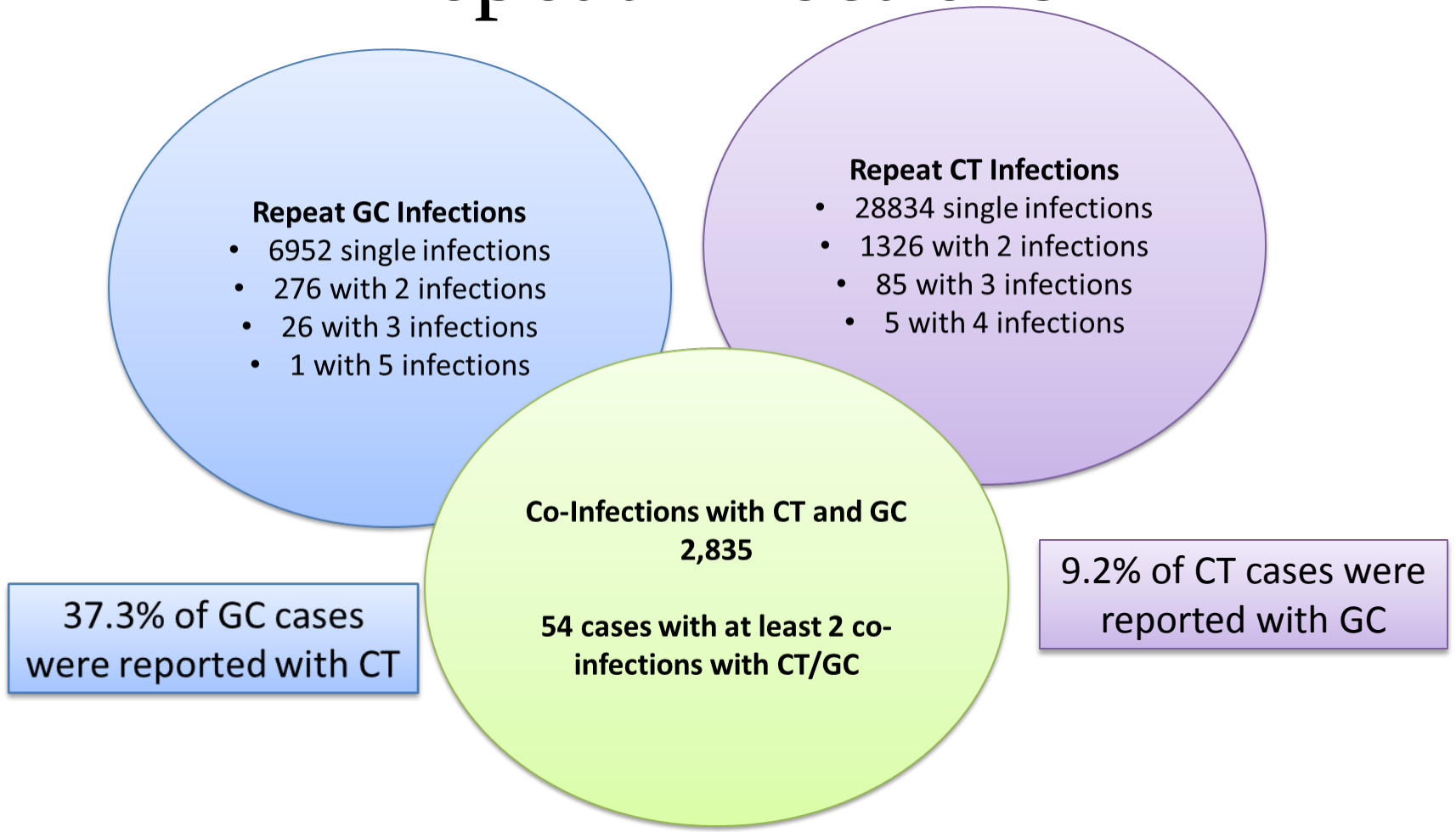
Demographic Differences



Demographic Differences

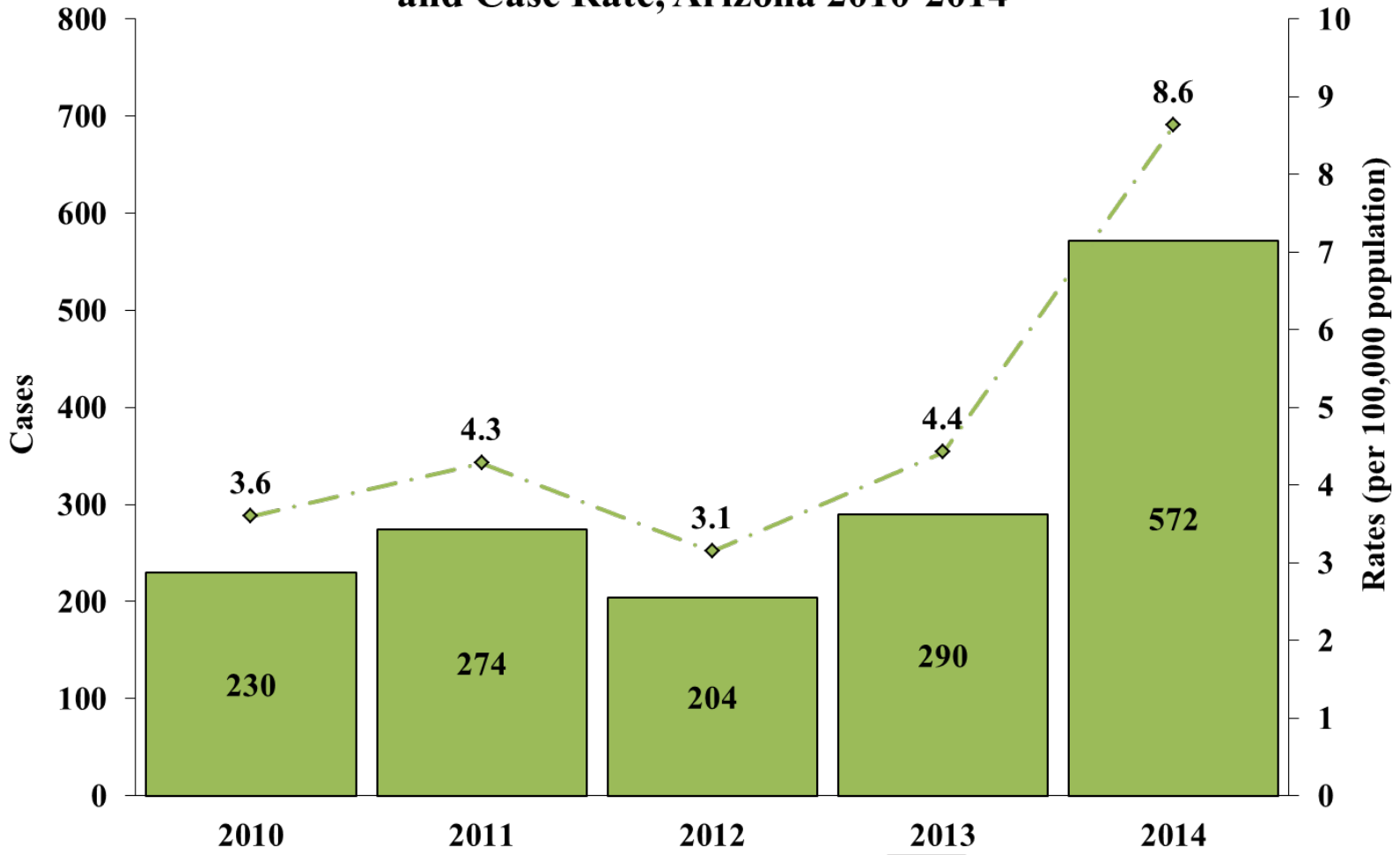


Repeat Infections



Syphilis in Arizona

Figure S1. Reported Primary and Secondary Syphilis Cases and Case Rate, Arizona 2010-2014



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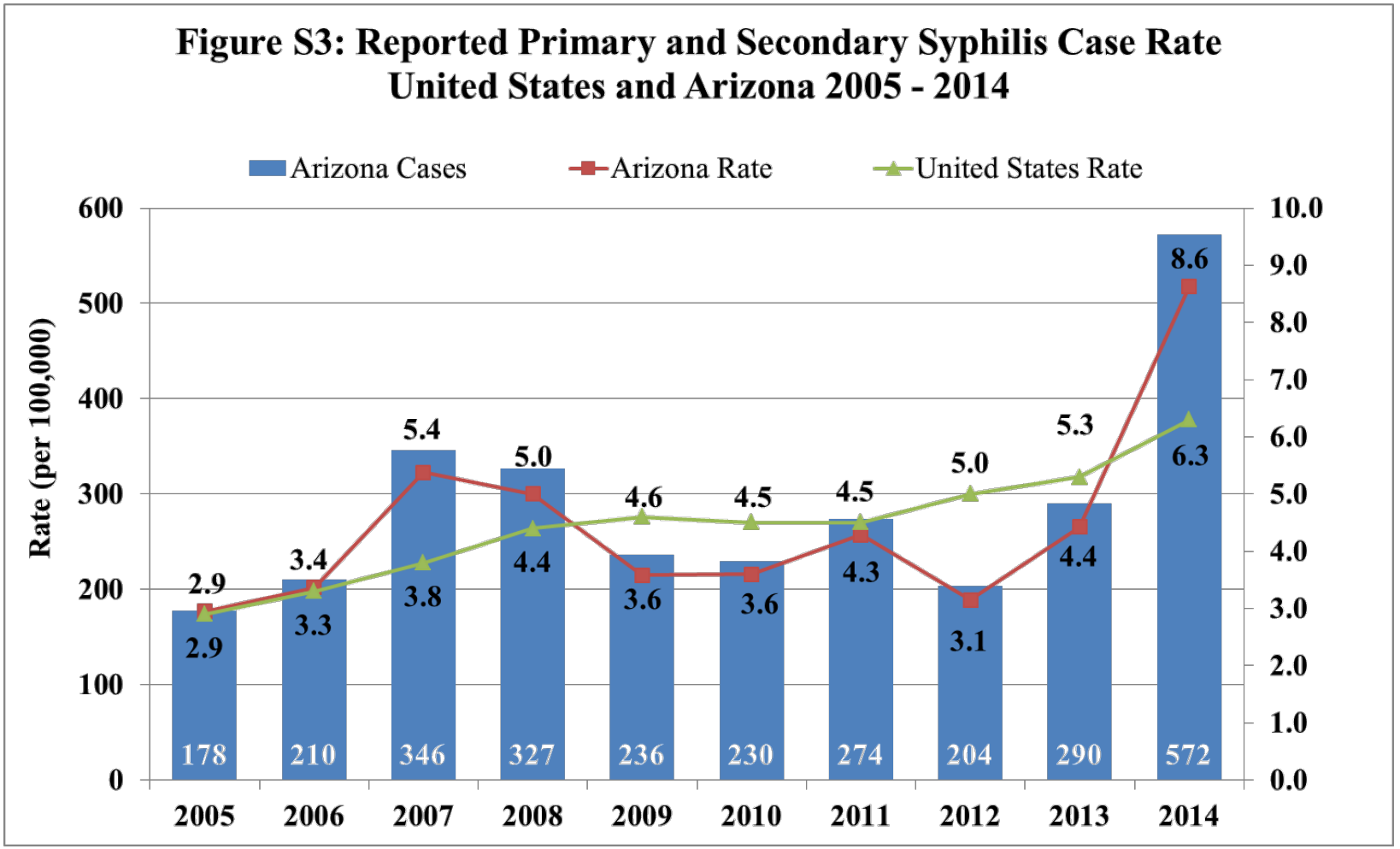
Syphilis in the US

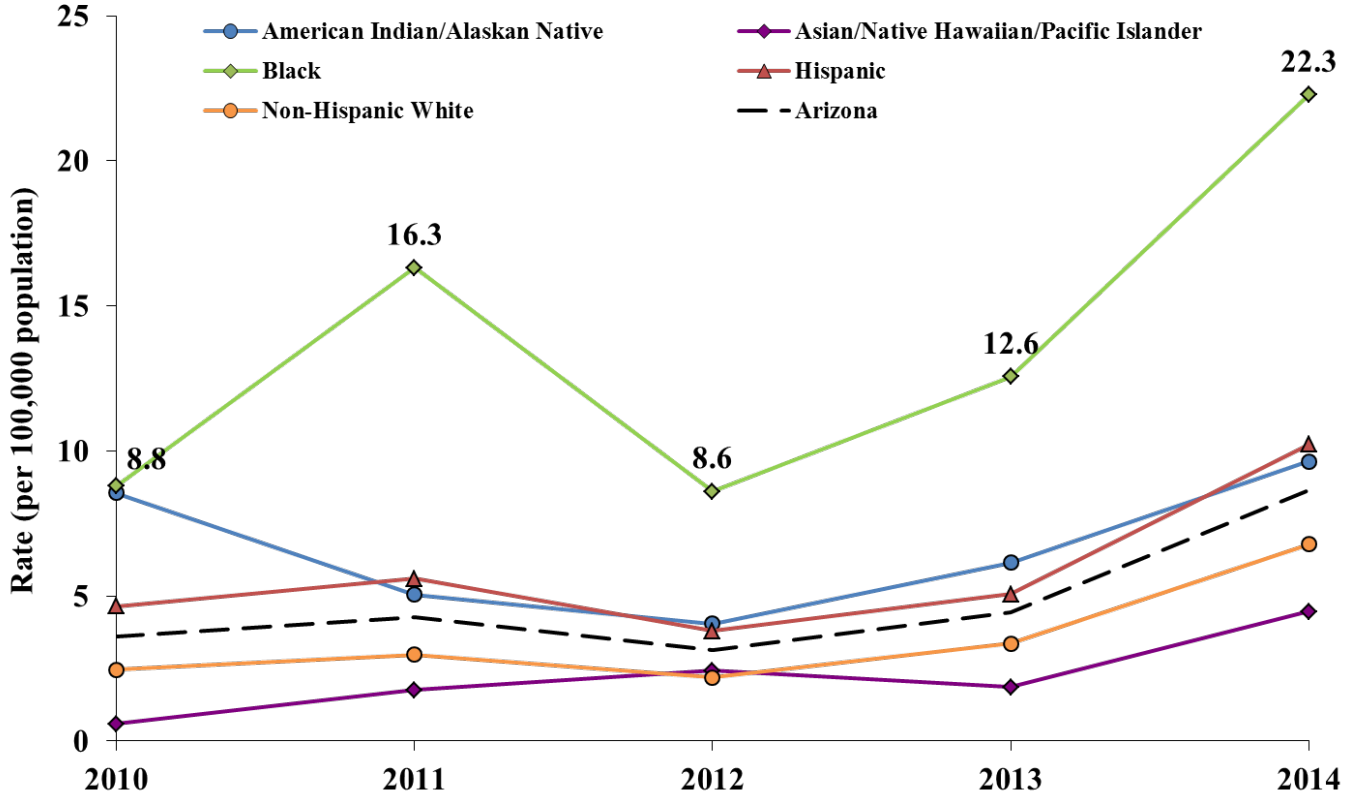


Arizona Department of Health Services

Health and Wellness for all Arizonans

Demographic Differences

Figure S6: Reported Primary and Secondary Syphilis Case Rates by Race/ Ethnicity, Arizona 2010 - 2014

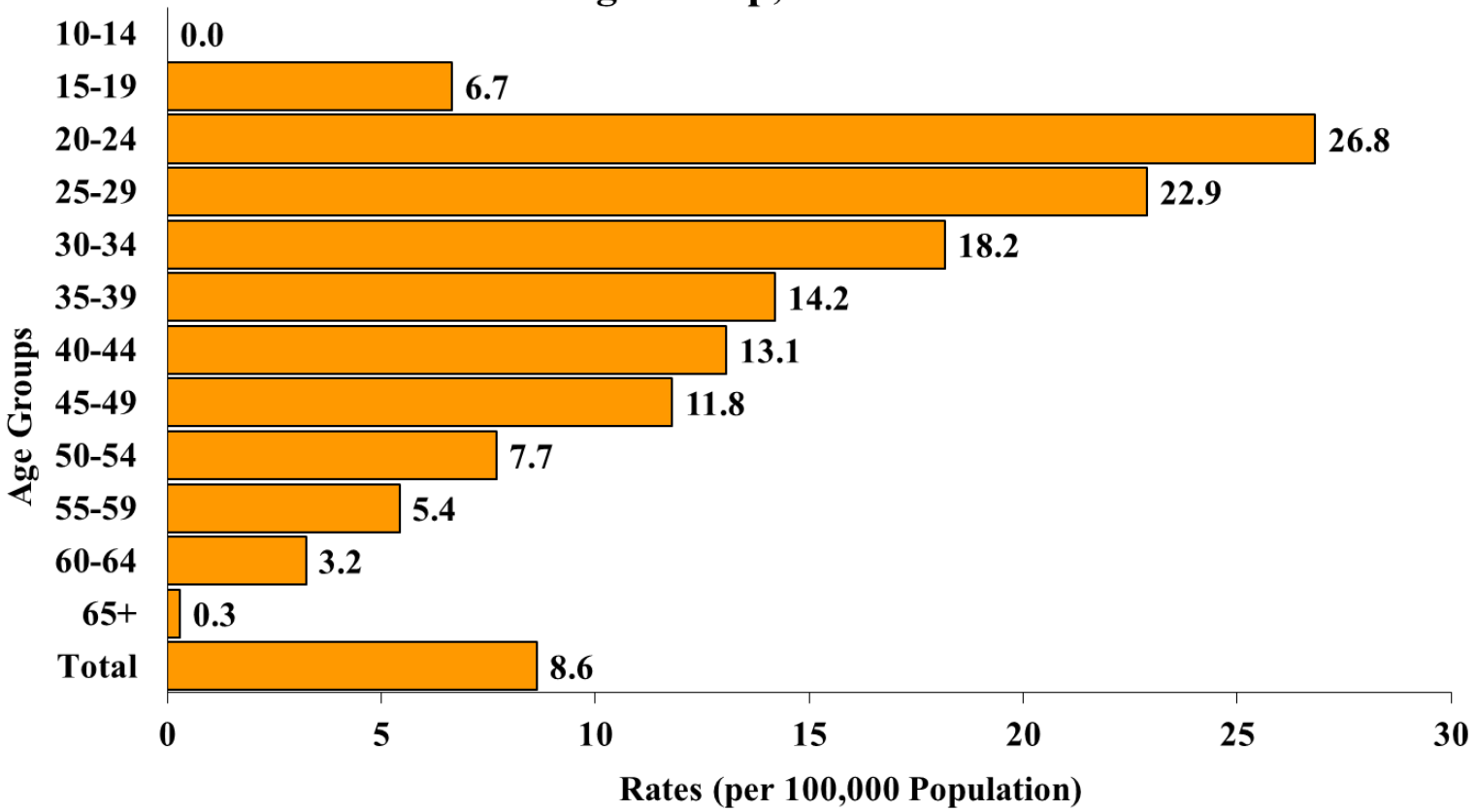


Arizona Department of Health Services

Health and Wellness for all Arizonans

Demographic Differences

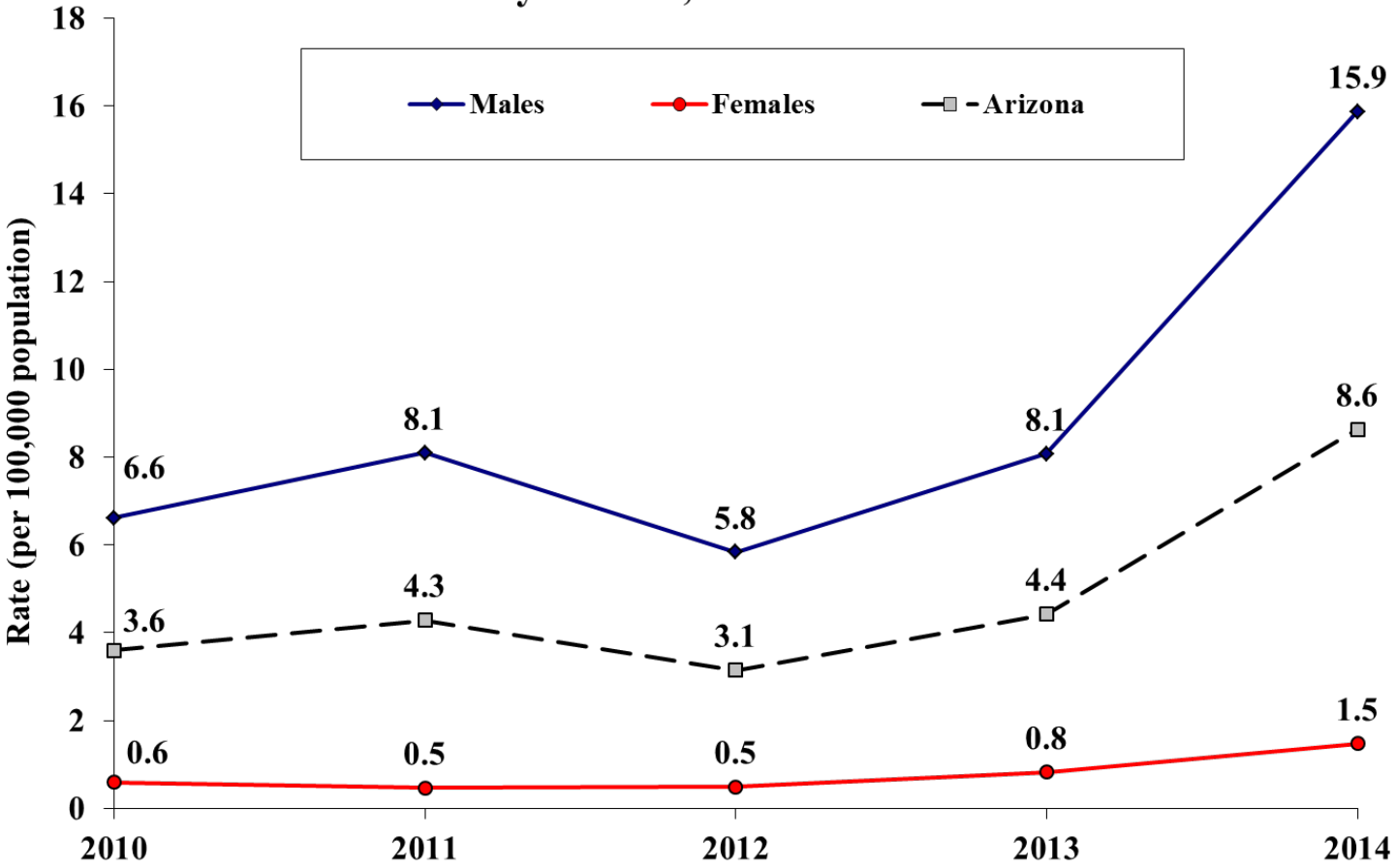
Figure S5. Reported Primary and Secondary Syphilis Rates by Age Group, Arizona 2014*



*Ages 0-9 not shown, Arizona rate reflects all ages.

Demographic Differences

Figure S5: Reported Primary and Secondary Syphilis Case Rates by Gender, Arizona 2010-2014

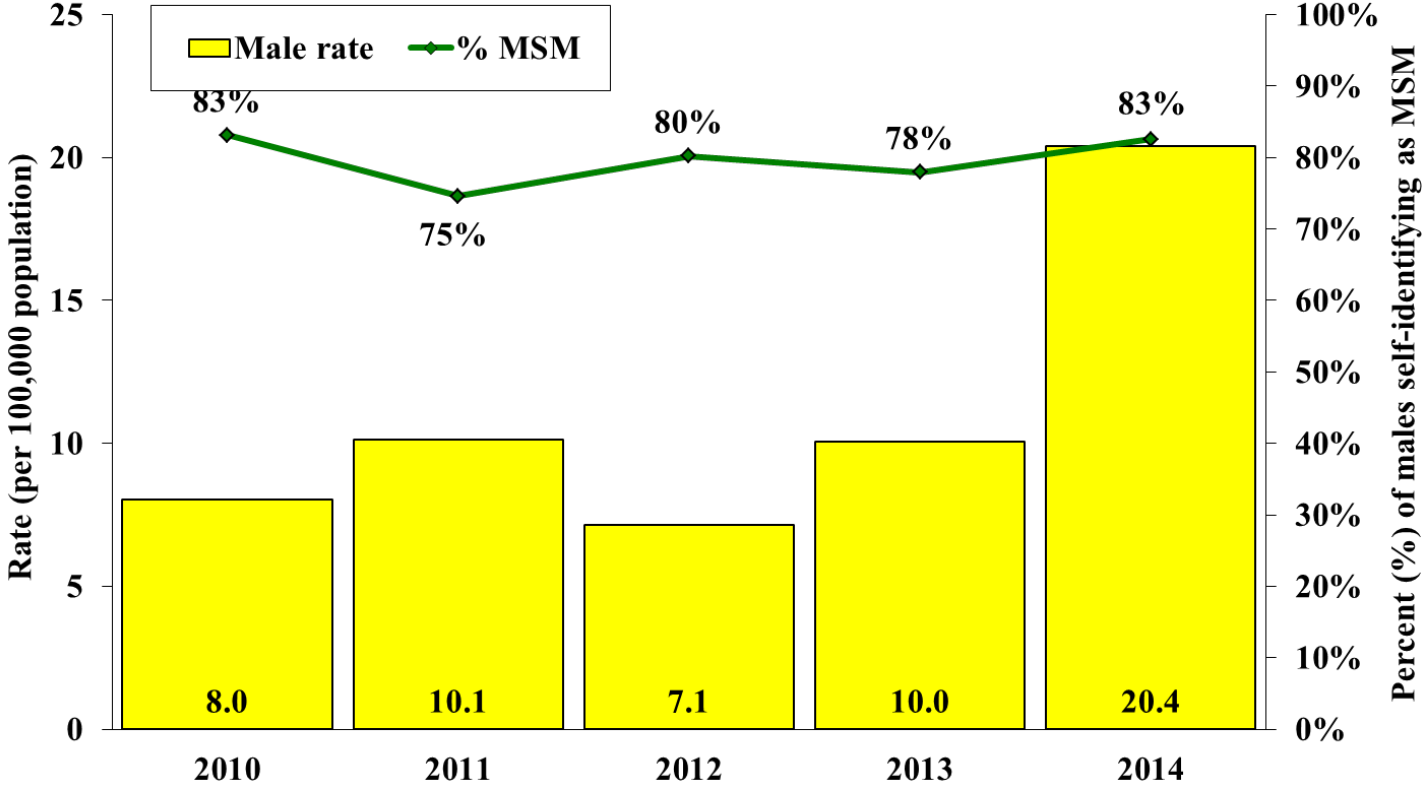


Arizona Department of Health Services

Health and Wellness for all Arizonans

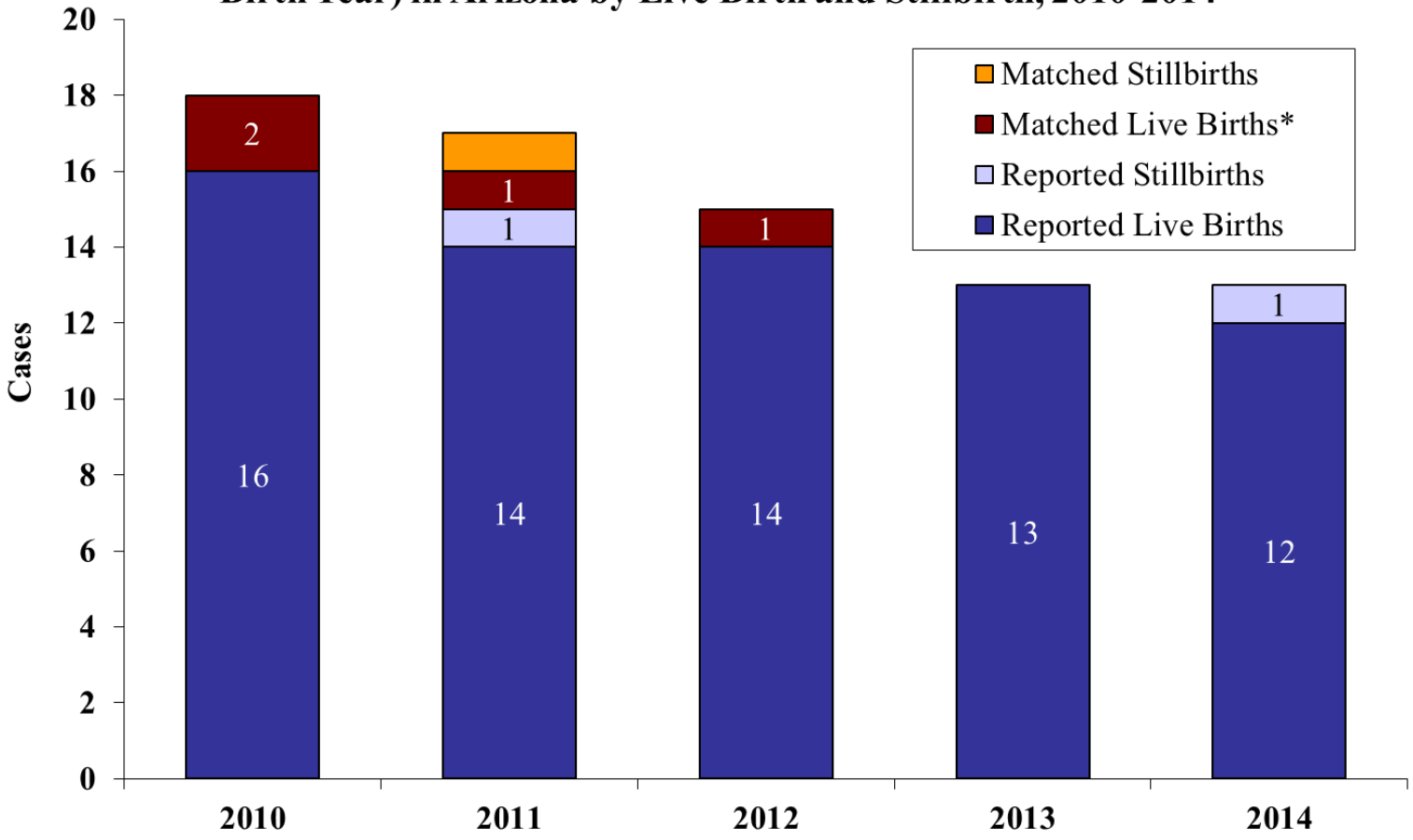
Demographic Differences

Figure S7. Reported Rate of Primary and Secondary Syphilis Cases among Males and the Percentage of Male Cases that Self-Identify as Men who Have Sex with Men (MSM), Maricopa and Pima Counties, 2010-2014



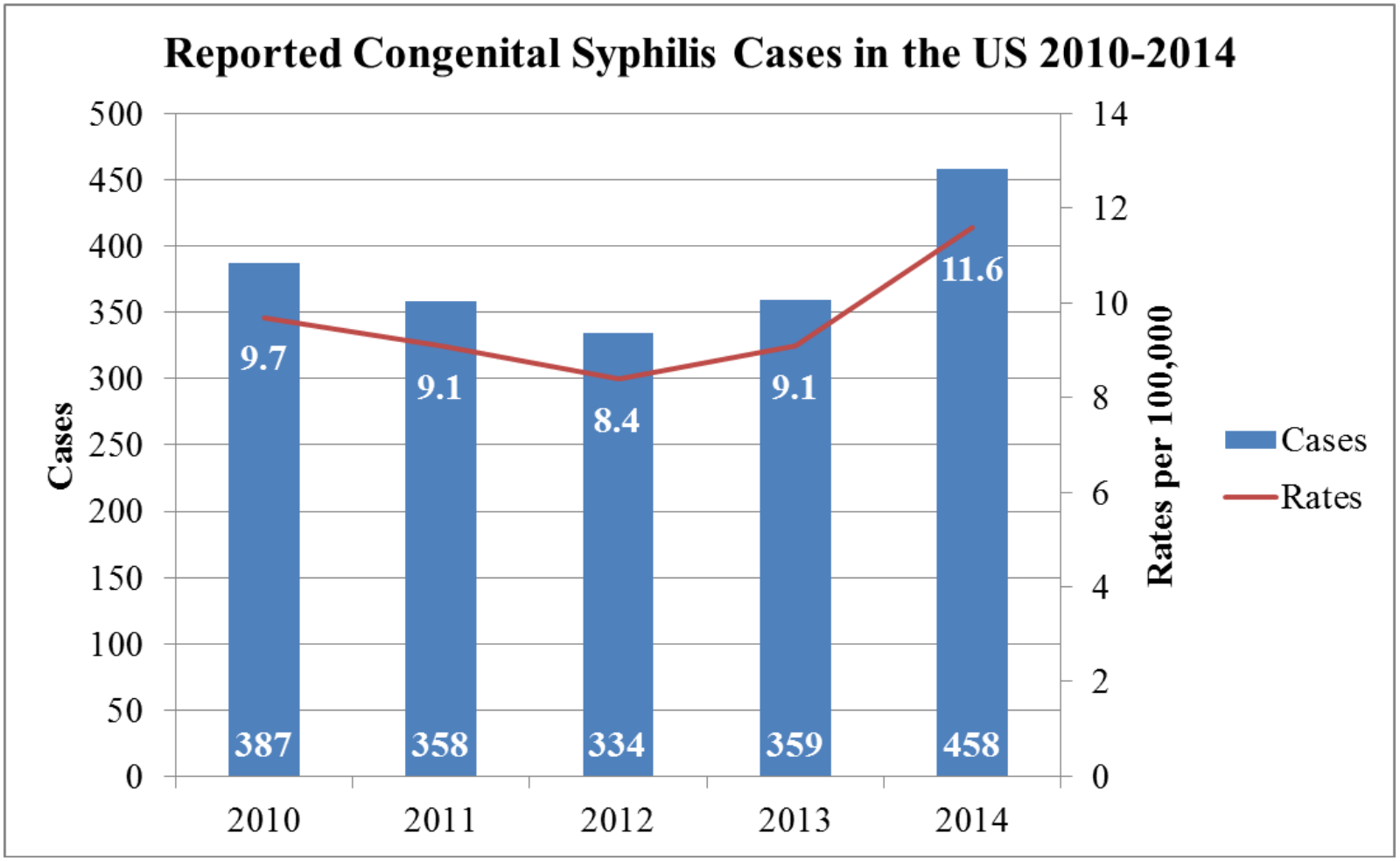
Congenital Syphilis in Arizona

Figure S10: Reported and Matched Congenital Syphilis Cases (by Birth Year) in Arizona by Live Birth and Stillbirth, 2010-2014

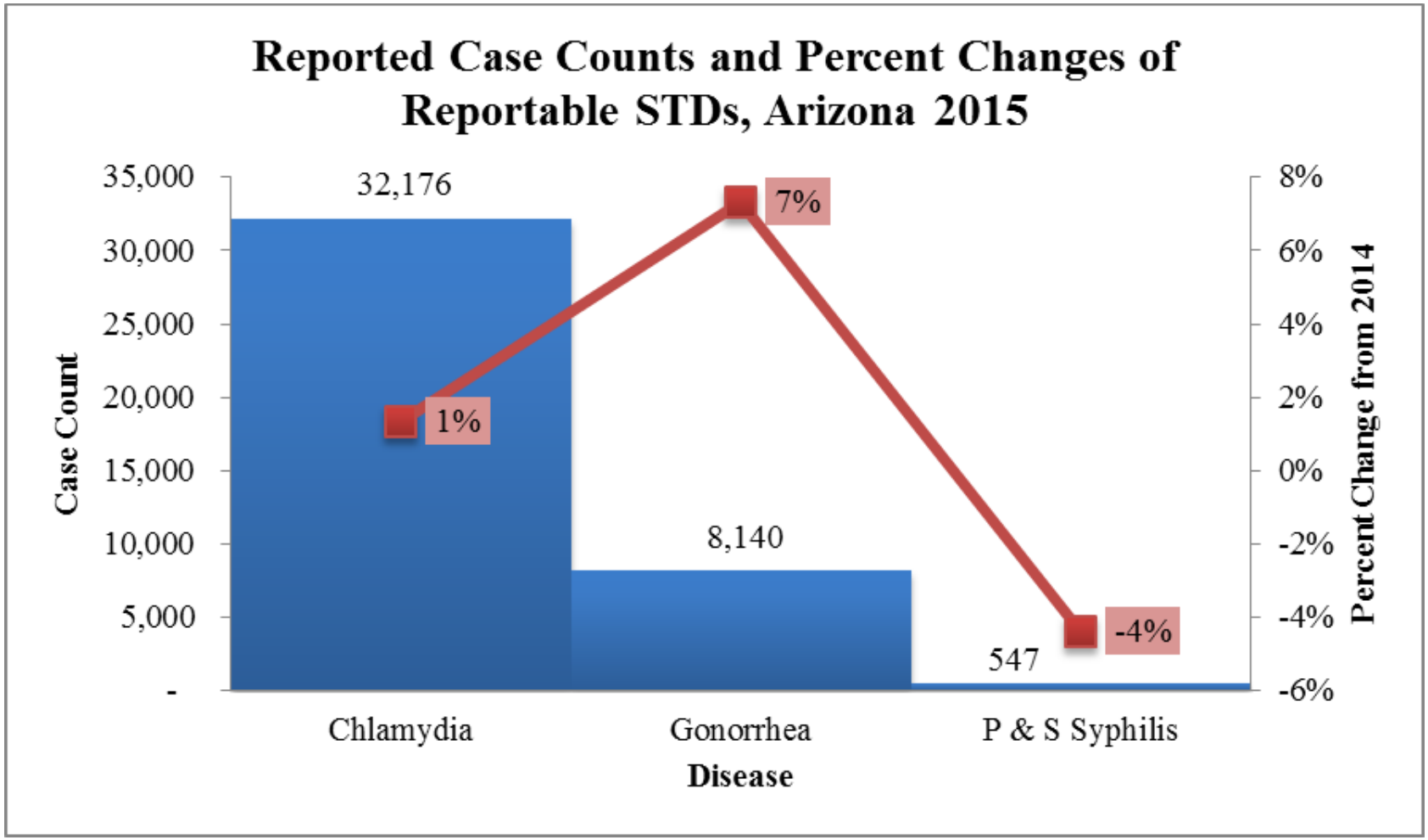


*The congenital syphilis crossmatch procedure uncovered one child that met the surveillance definition for congenital syphilis.

Congenital Syphilis in the US



Preliminary Counts for 2015



Treating Chlamydia in AZ

CDC Recommended Regimens

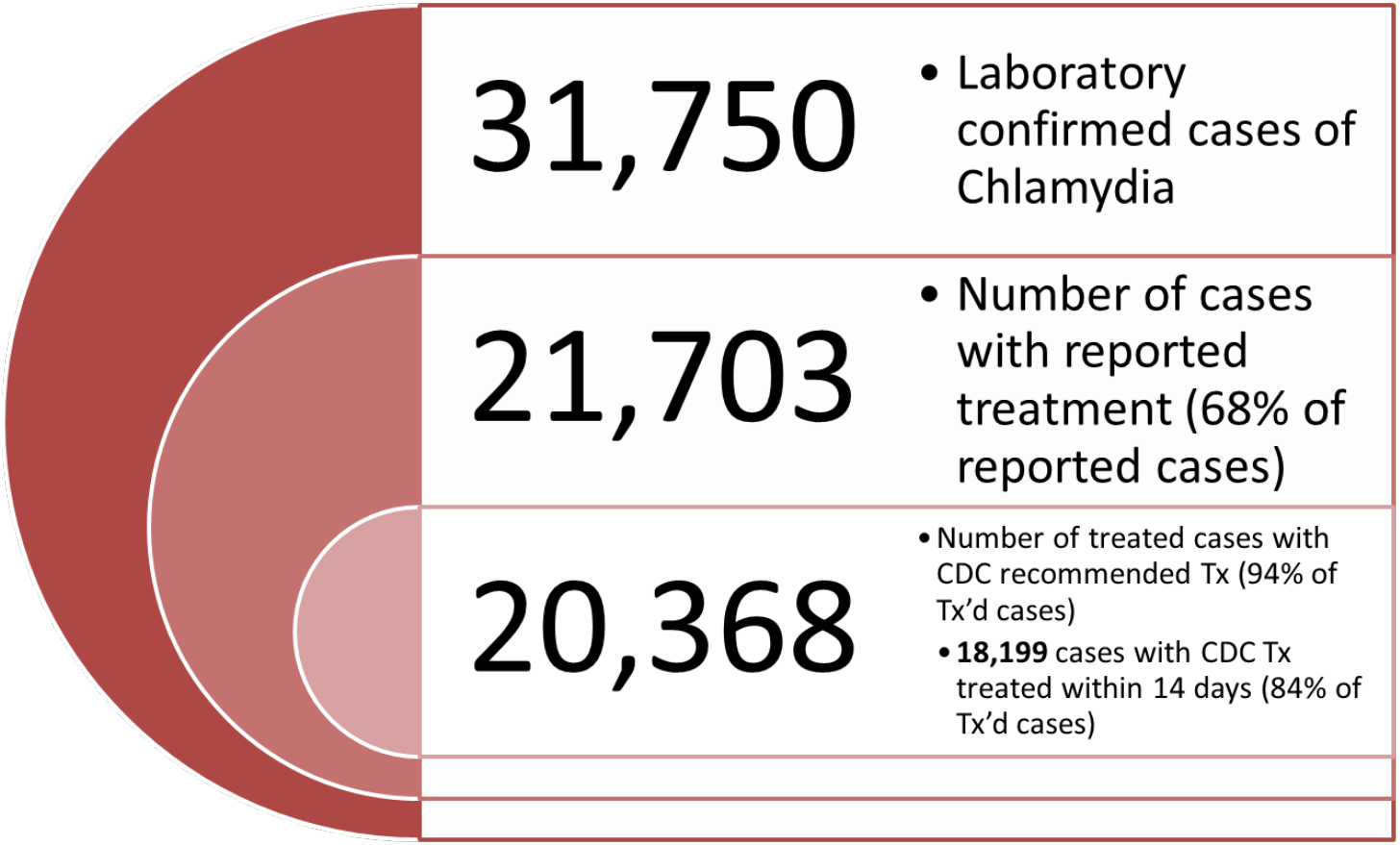
- **Azithromycin** 1g

OR

- **Doxycycline** 100mg bid/7 days

Full CDC guidelines can be found at: http://www.cdc.gov/std/tg2015/

Treatment of Reported Chlamydia Cases, Arizona 2014



Treating Gonorrhea in AZ

CDC Recommended Regimen

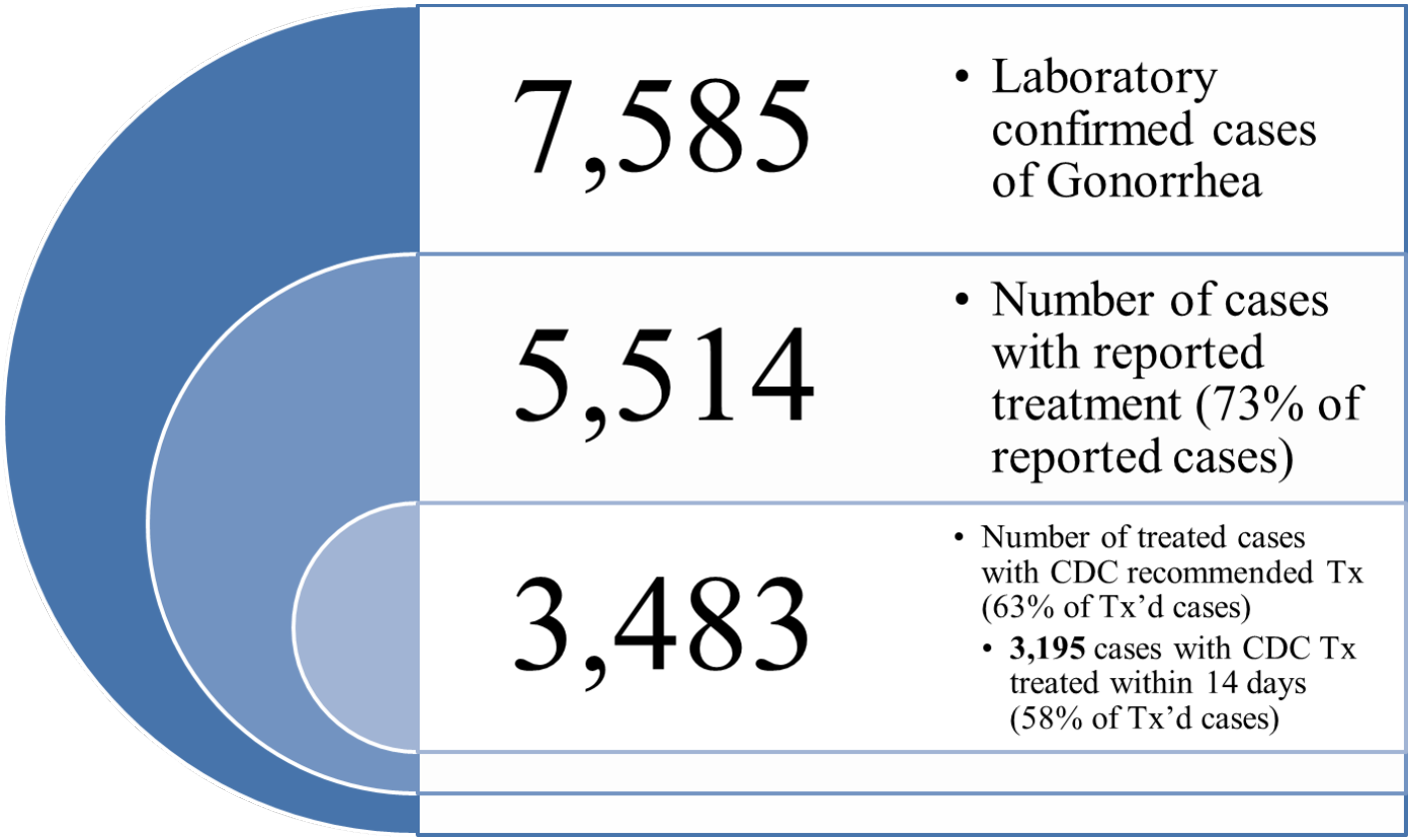
Ceftriaxone (Rocephin) 250mg IM

PLUS

Azithromycin 1g

Full CDC guidelines can be found at: http://www.cdc.gov/std/tg2015/

Treatment of Reported Gonorrhea Cases, Arizona 2014



Questions? Concerns?

Please feel free to contact us (ADHS STD Control Program) with any questions you have regarding:

- STD Reporting
- STD Treatment
- Partner Services Referrals

HIV EPIDEMIOLOGY IN ARIZONA

Dolly Tchio, MPH

HIV Epidemiologist & Data Manager

Arizona Department of Health Services

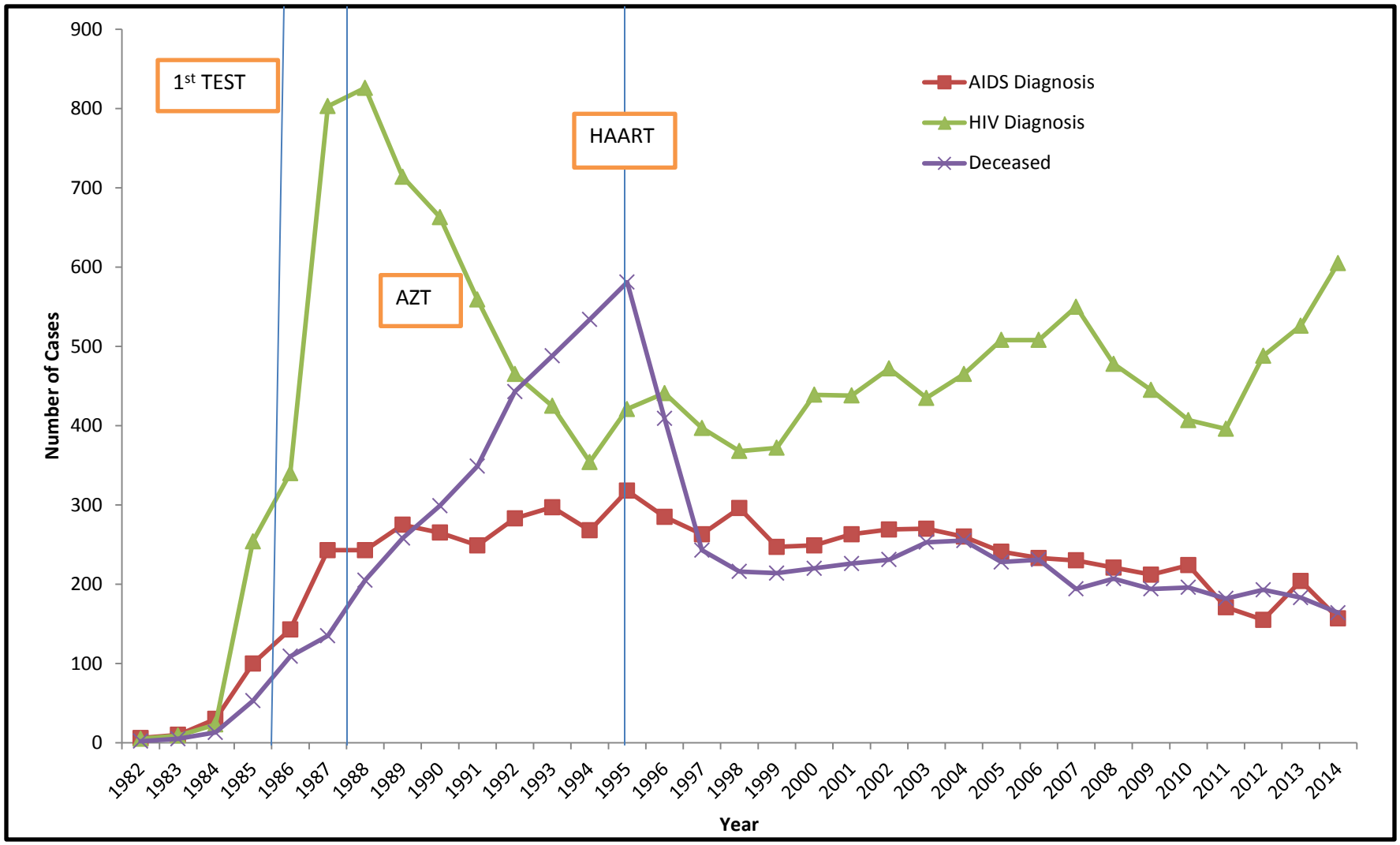
Arizona Department of Health Services

Health and Wellness for all Arizonans

Overview

- HIV Surveillance and Epidemiology data
- Spectrum of Care Cascades
- HIV Prevention Program
- ADAP-AIDS Drug Assistance Program

Arizona HIV/AIDS Events Per Year, 1982-2014



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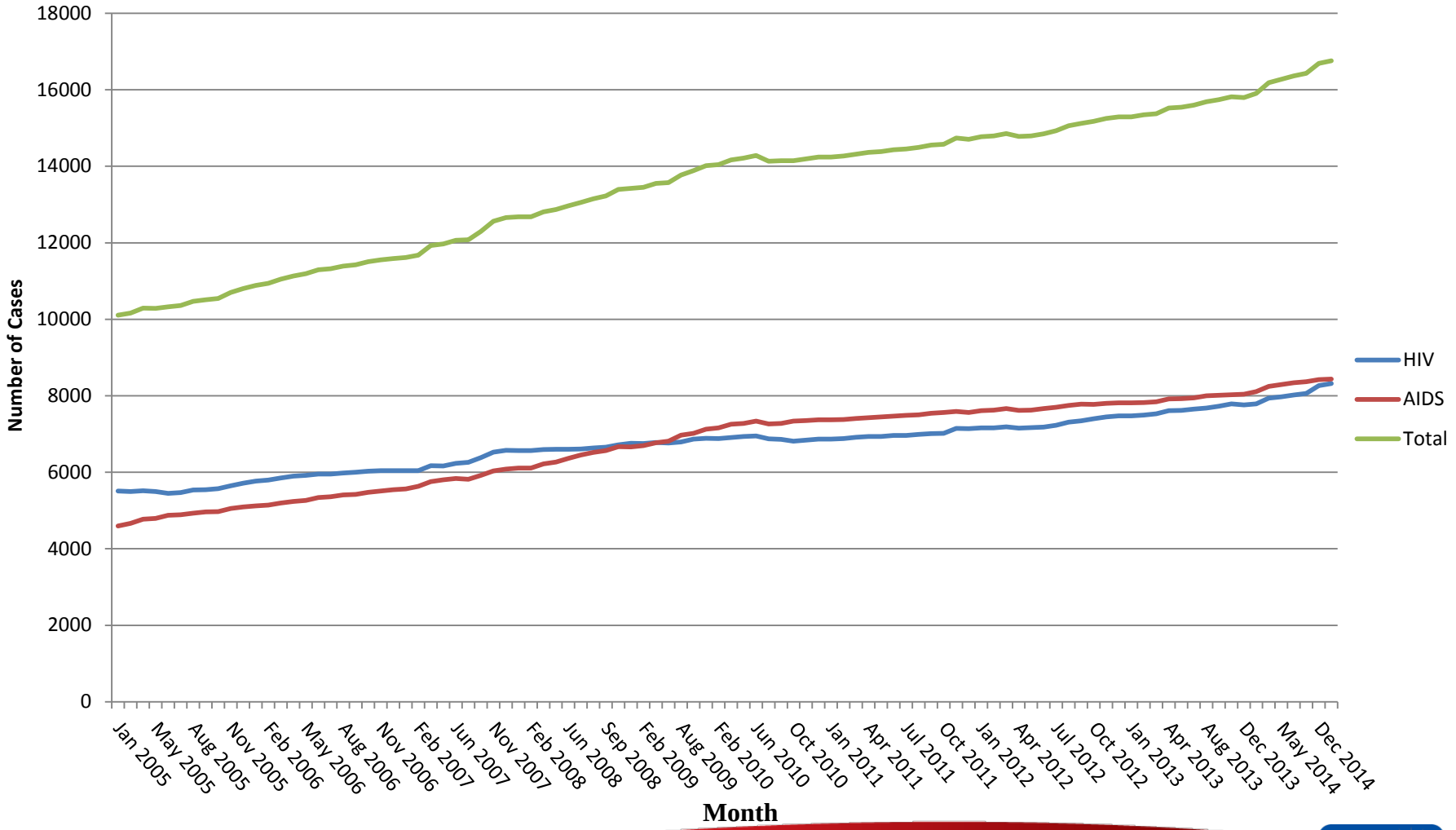
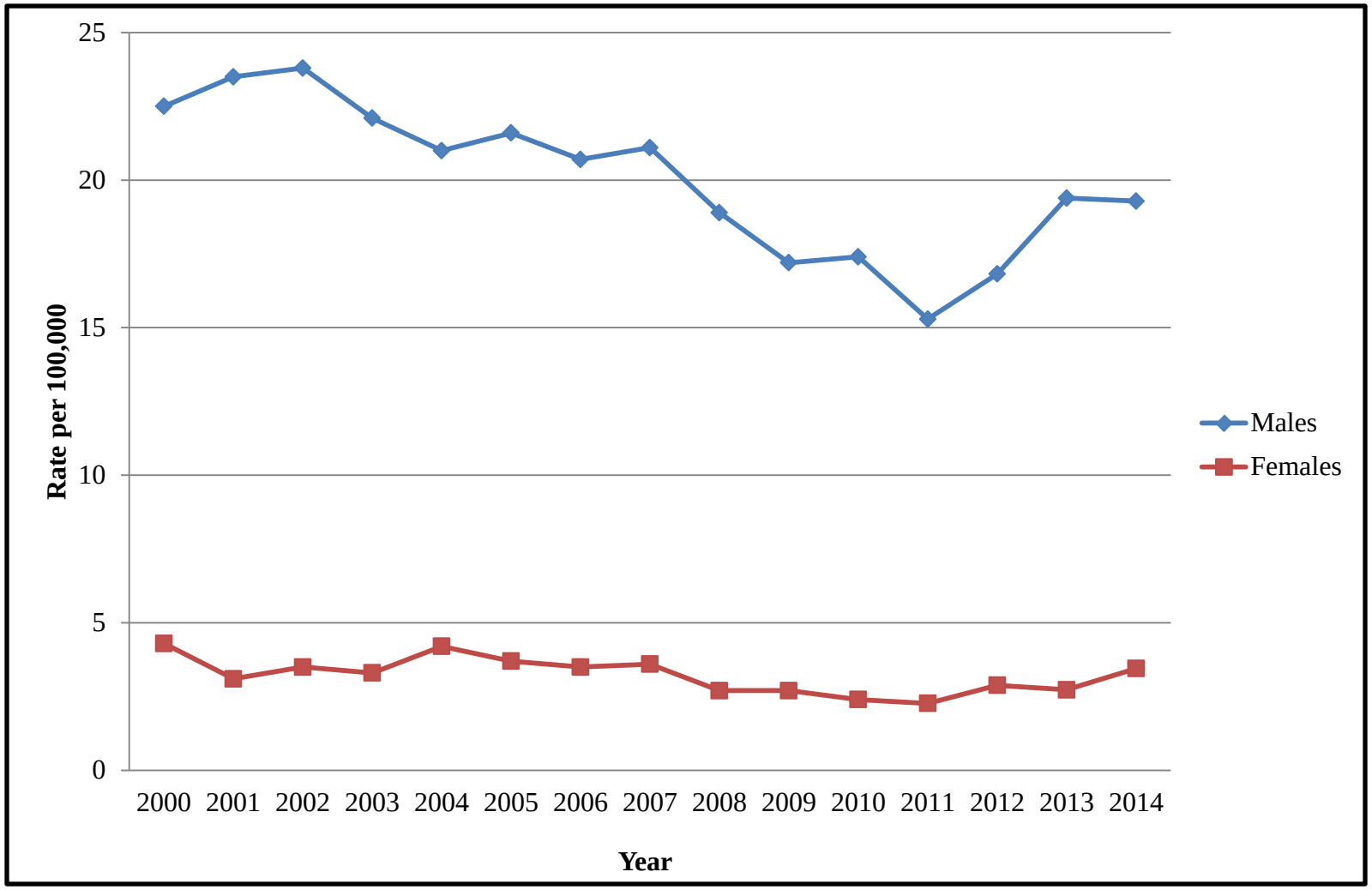
Health and Wellness for all Arizonans

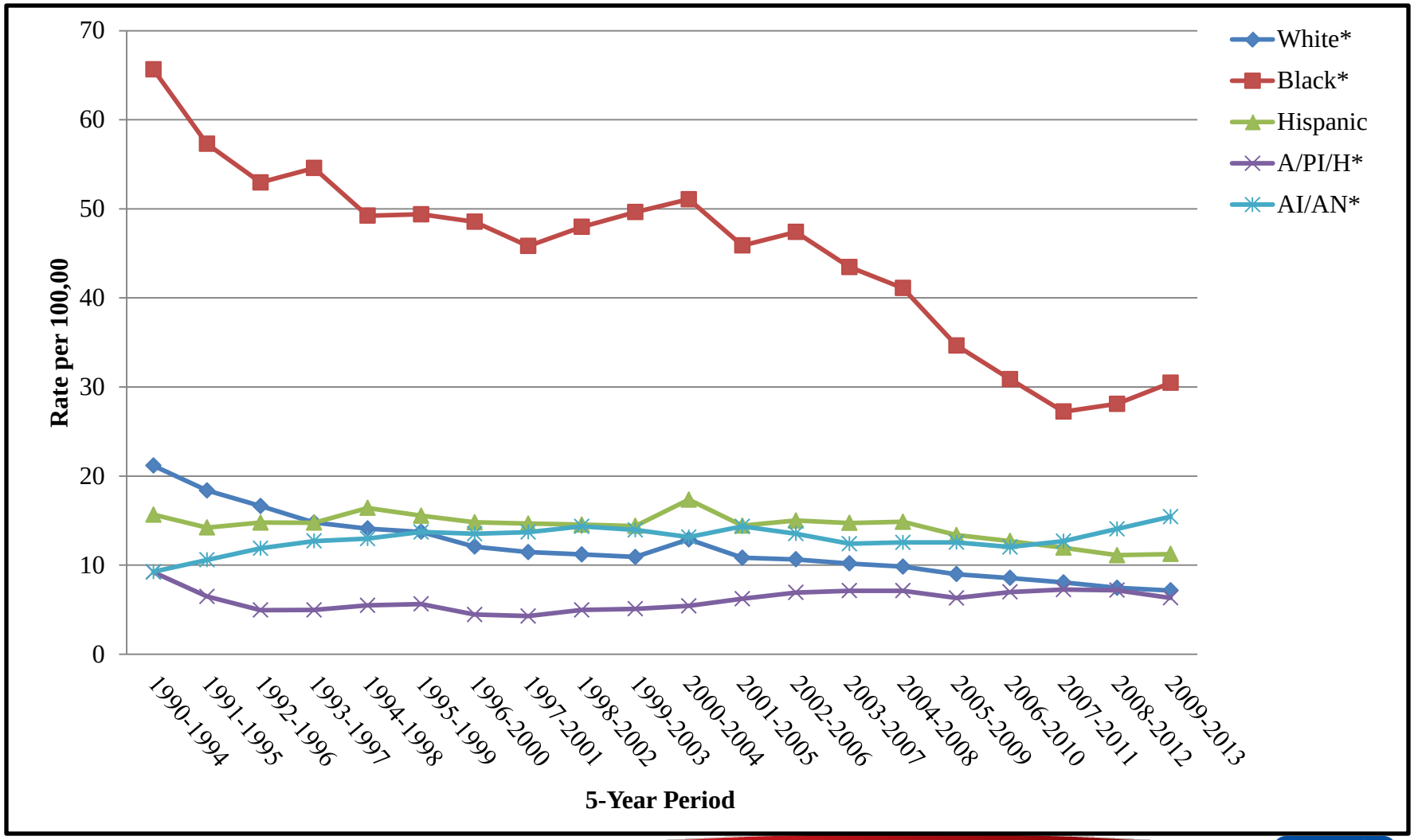
Arizona Prevalent HIV, AIDS, and HIV/AIDS cases
January 2005 – December 2014



Arizona Emergent HIV/AIDS by Gender, 2000-2014



Arizona 5-Year New HIV/AIDS Rate by Race/Ethnicity, 1990-2013

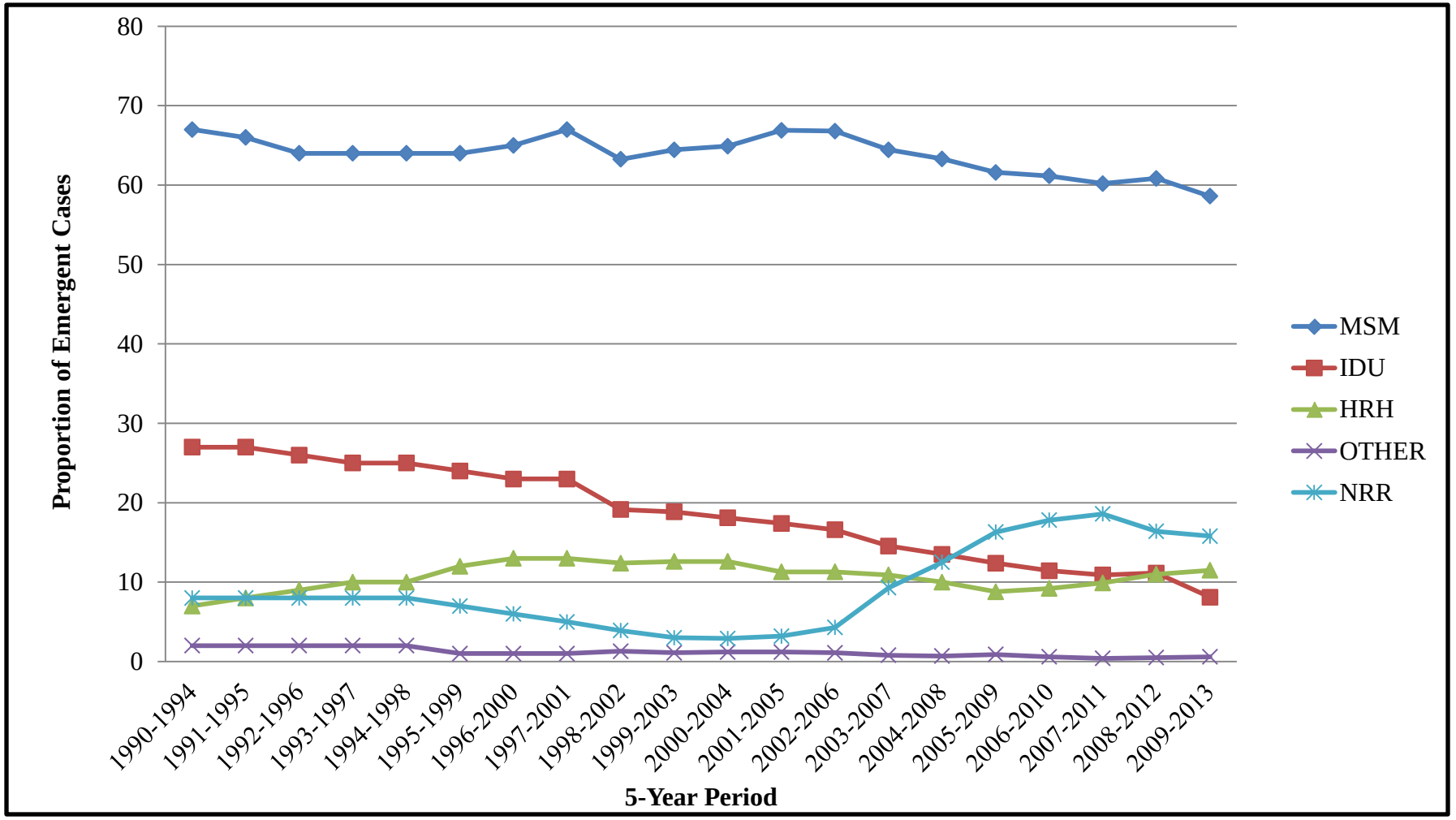


*Non-Hispanic, A/PI/H=Asian/Pacific Islander/Native Hawaiian, AI/AN=American Indian/Alaska Native

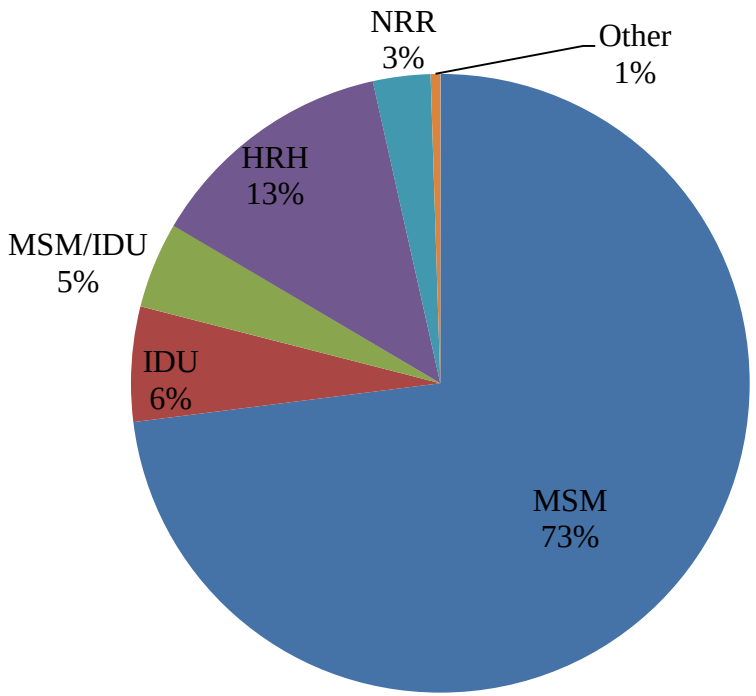
Arizona Department of Health Services

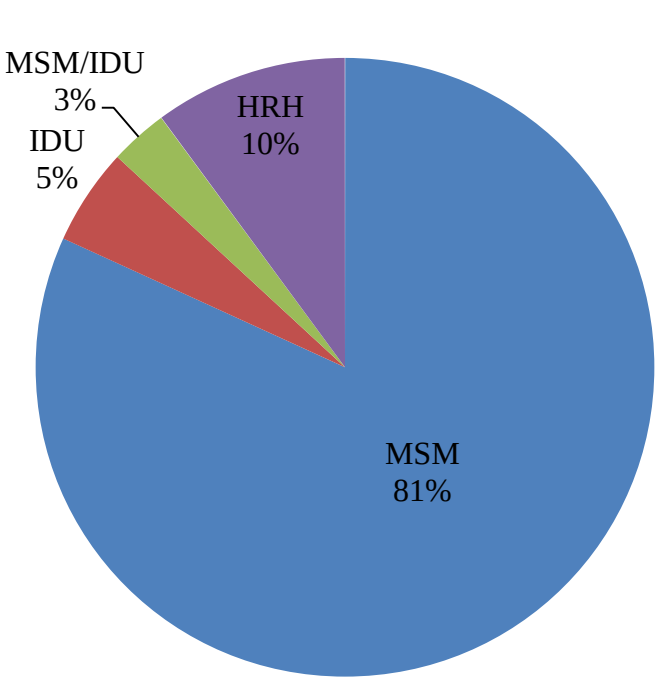
Health and Wellness for all Arizonans

Arizona Relative Percentage of Emergent Cases by Reported Risk Behavior, 1990-2013



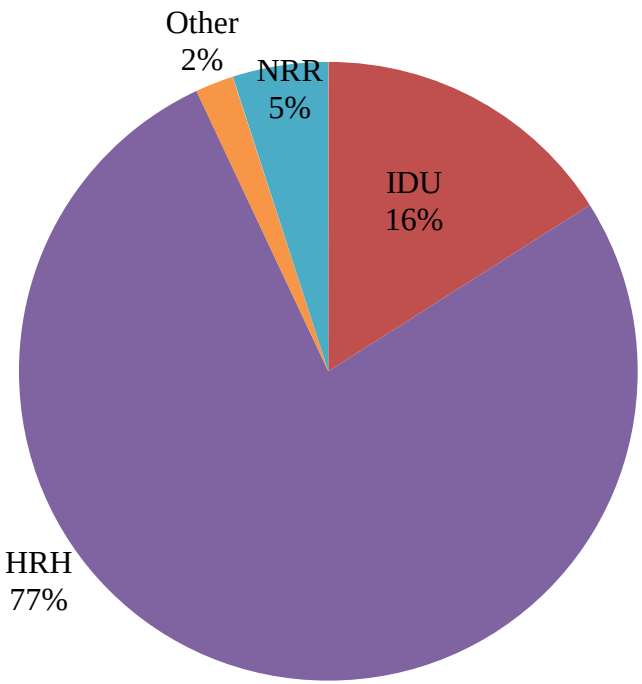
Male United States and Arizona Estimates of New HIV Infections, By Transmission Category

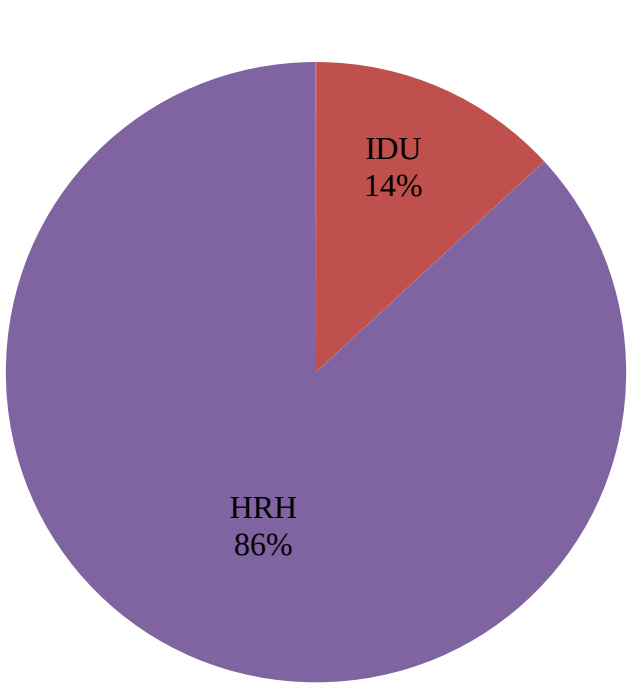




MSM =Men Who Have Sex with Men
IDU = Injection Drug User
HRH= High-Risk Heterosexual
NRR =No Risk Reported
The United States estimate does not include an NRR category

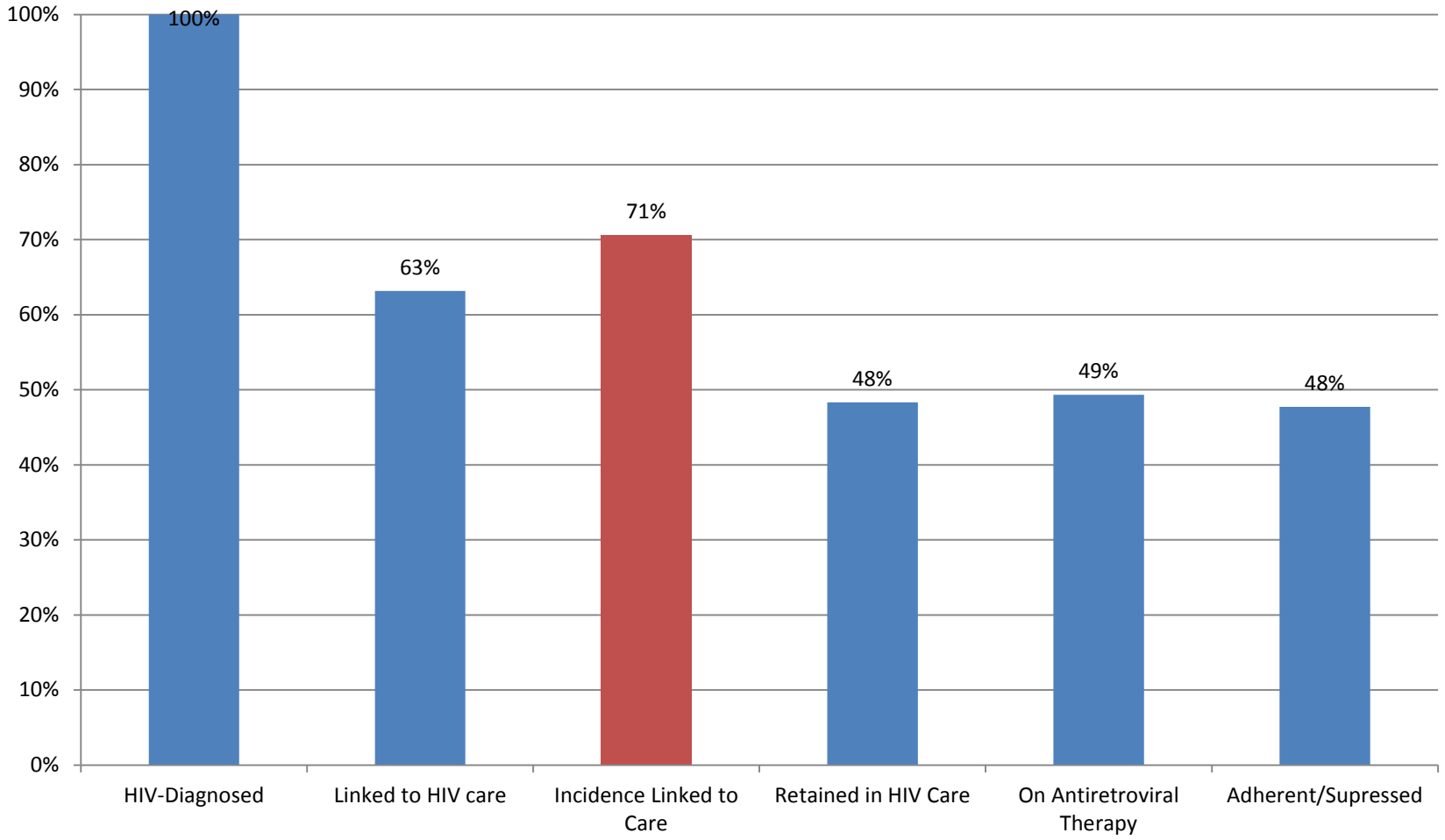
Female United States and Arizona Estimates of New HIV Infections, By Transmission Category





IDU = Injection Drug User
HRH= High-Risk Heterosexual
NRR =No Risk Reported
The United States estimate does not include an NRR category

Arizona Continuum of Care, 2014

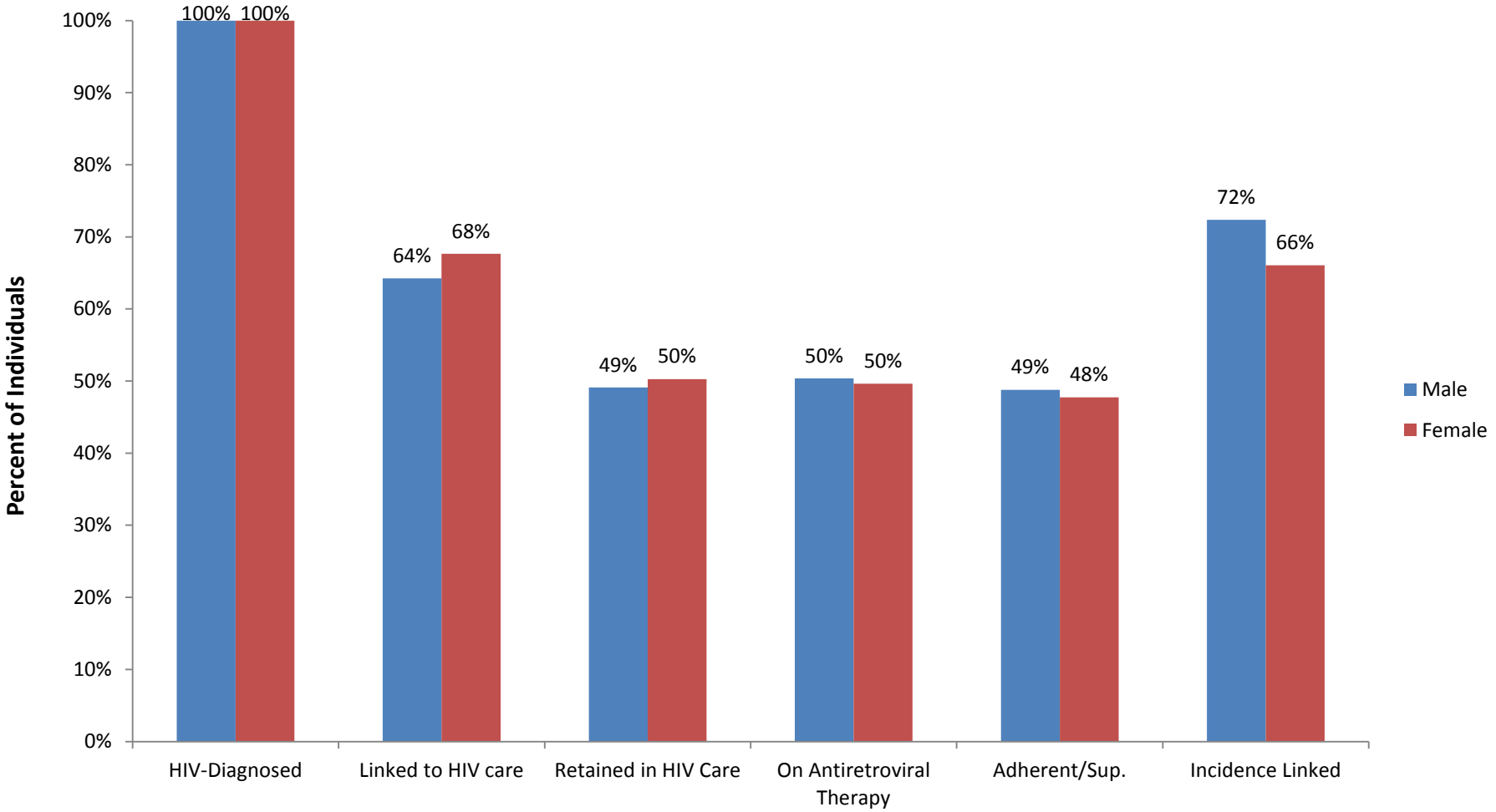


Note: HIV infected is derived using CDC's national infection estimation guidelines

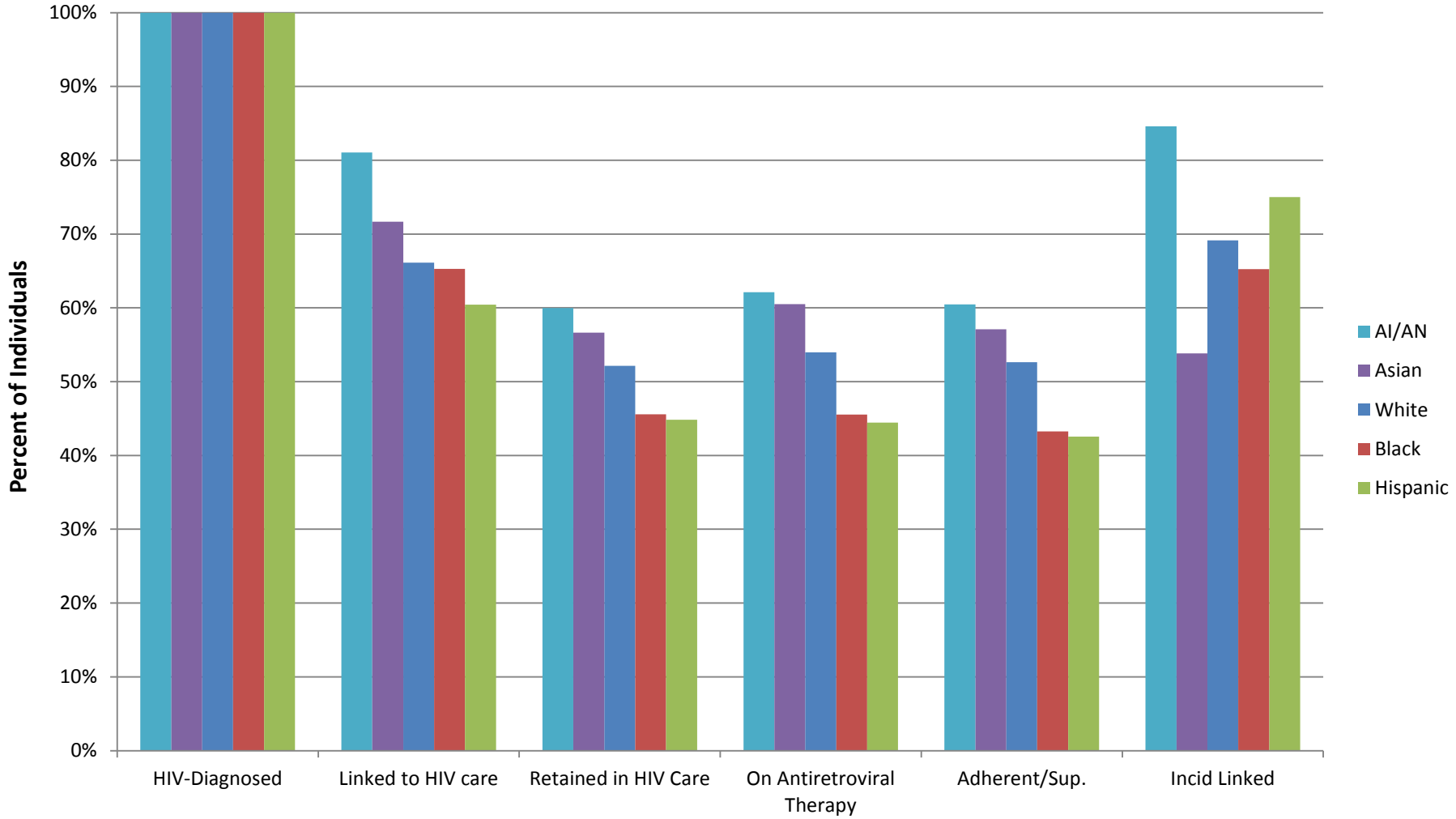
Arizona Department of Health Services

Health and Wellness for all Arizonans

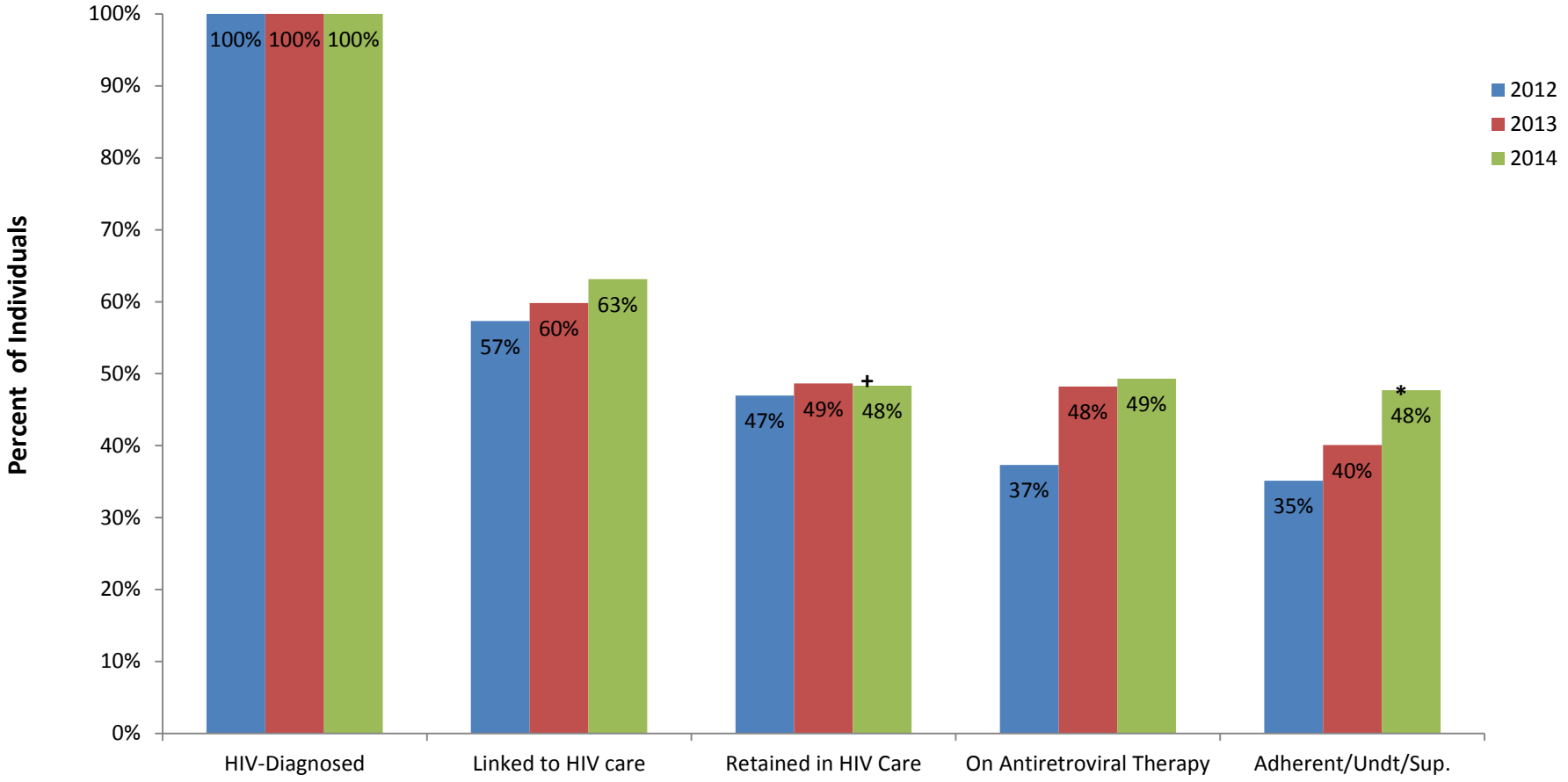
2014 SPECTRUM OF CARE ENGAGEMENT BY SEX



2014 SPECTRUM OF CARE ENGAGEMENT BY RACE/ETHNICITY



ARIZONA CONTINUUM OF CARE 2012-2014



+ Retained measure changed in 2014 to 2 tests in one year or <200 measure from in care two years in a row

* Adherant changed from <50 C/mL to <200 C/mL in 2014

HOW YOU CAN HELP HIV EPIDEMIOLOGY

- What we need:
  - Negative test reporting, including undetectable viral loads and CD4, which are not reportable by state law
  - Risk, Race, Address, 1st Positive
  - HIV Medication History

HIV PREVENTION REQUIRED COMPONENTS

HIV Testing
Healthcare Opt-Out Screening
Urban and Rural programs
Partner Services
Linkage to Care
4th Generation testing
Acute Case Identification

Comprehensive Prevention with Positives
Partner Services to all Positives (initial and ongoing)
Linkage to Care and Re-engagement
Referral and linkage to other medical and social services
Evidence Based Interventions
Behavioral Risk Screenings

Policy Initiatives
Opt-Out Testing and removal of written consent
Sharing of Epidemiologic Data
Testing in Emergency Departments who currently do not offer testing

Condom Distribution
Ryan White Providers and Case Mangers-RW Parts A and B
ADAP Pharmacies- paired with medication delivery
Prevention funded programs
Targeted Community Partners
IDU services and Needle Exchange

HIV PREVENTION
REQUIRED PROGRAM ACTIVITIES

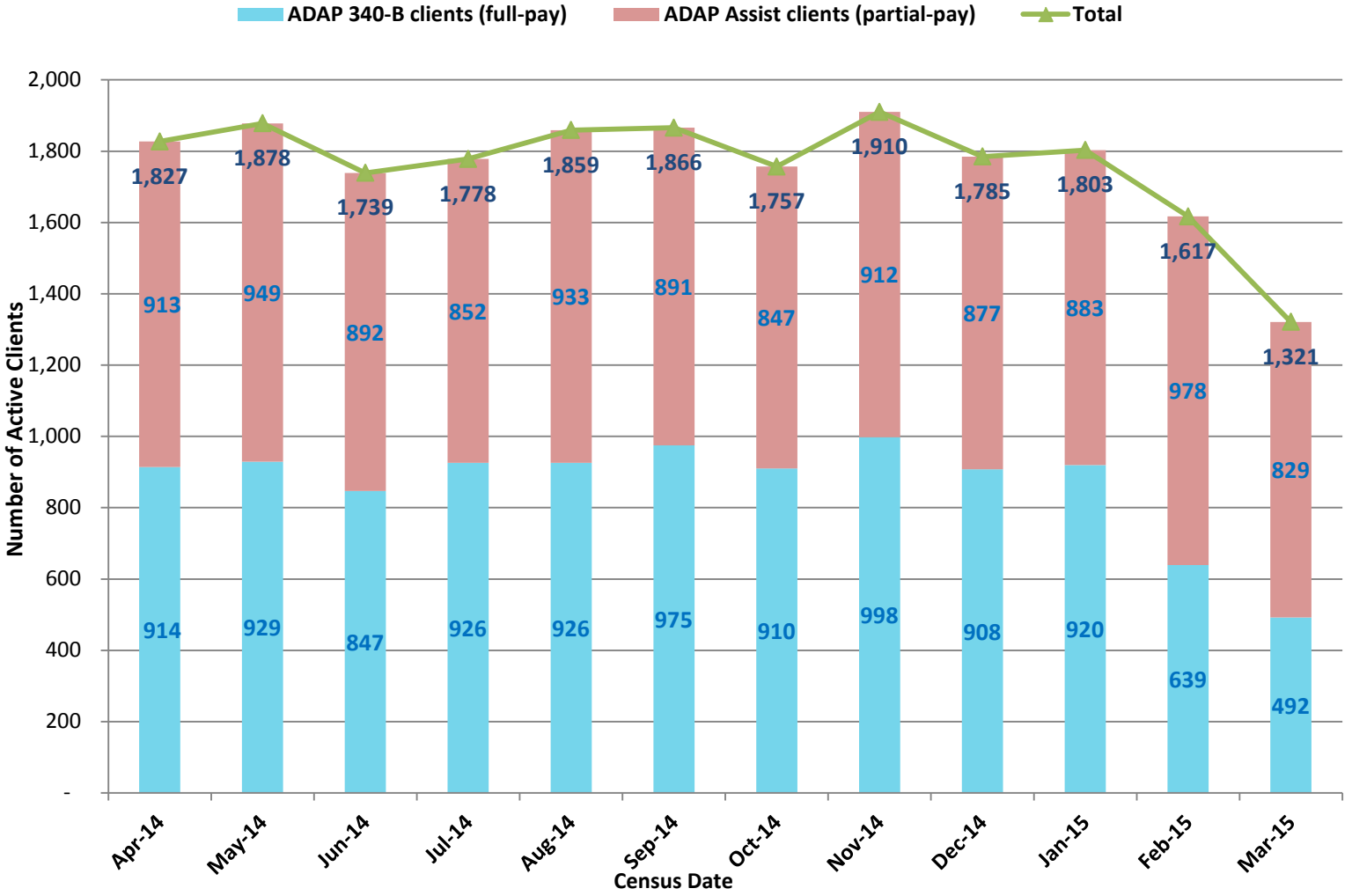
HIV Prev Planning
Prevention Planning Group of Arizona (HPG)
Jurisdictional Plan
Engagement Process

Program Planning M&E, QA
Comprehensive Program Plan
Data Quality
Program monitoring
Site Visits and Communication
Materials Review
Surveillance data use for allocations

Capacity Building & TA
Contractors' Meeting, Training and CRIS Requests for CDC Assistance
TA- all areas including: Social Determinants of Health, Health Disparities, Cultural competency, data quality, security and sharing
Develop collaborations, referral networks
Training to Medical Providers referred to AZ AIDS Education and Training Center

Social marketing media and Community Mobilization
Use of CDC developed campaign "Let's Stop HIV Together" for targeted populations
Internal new media options
Community mobilization through partnerships, collaborations and involvement of community members

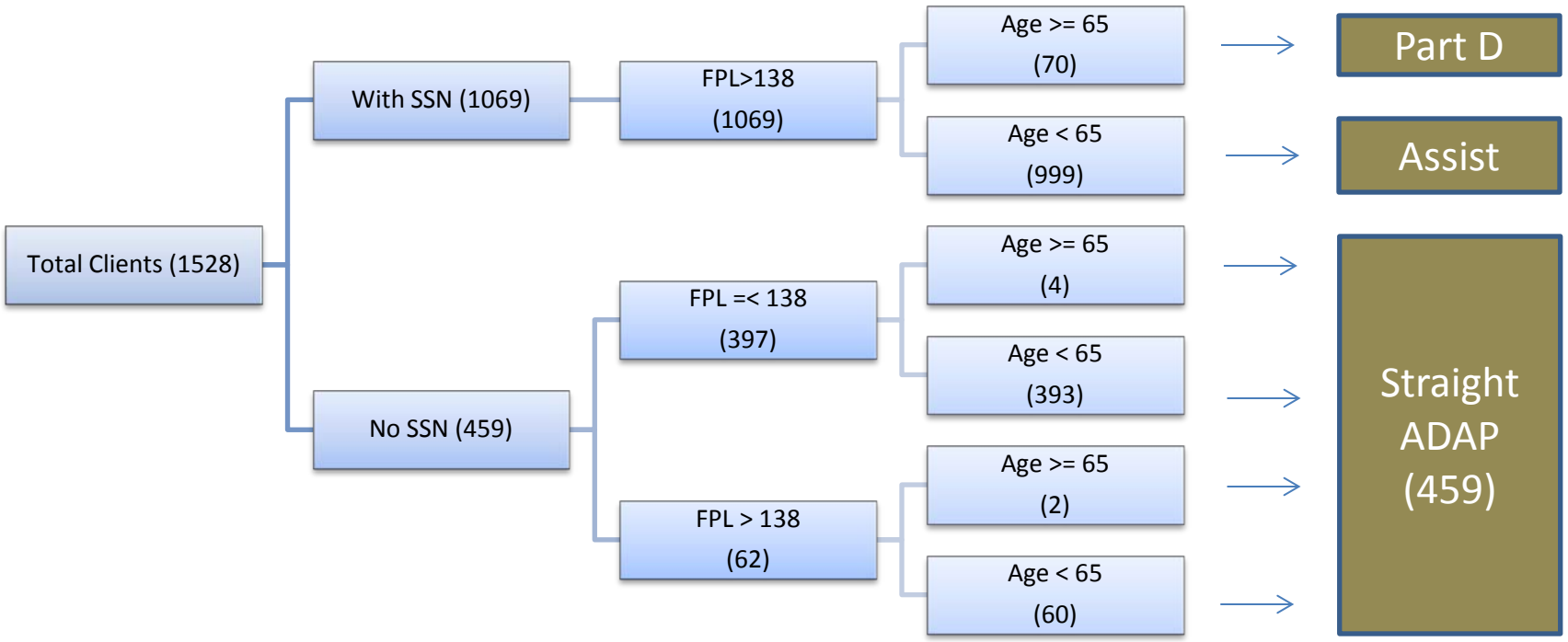
ADAP Monthly Enrollment Census: GY2015



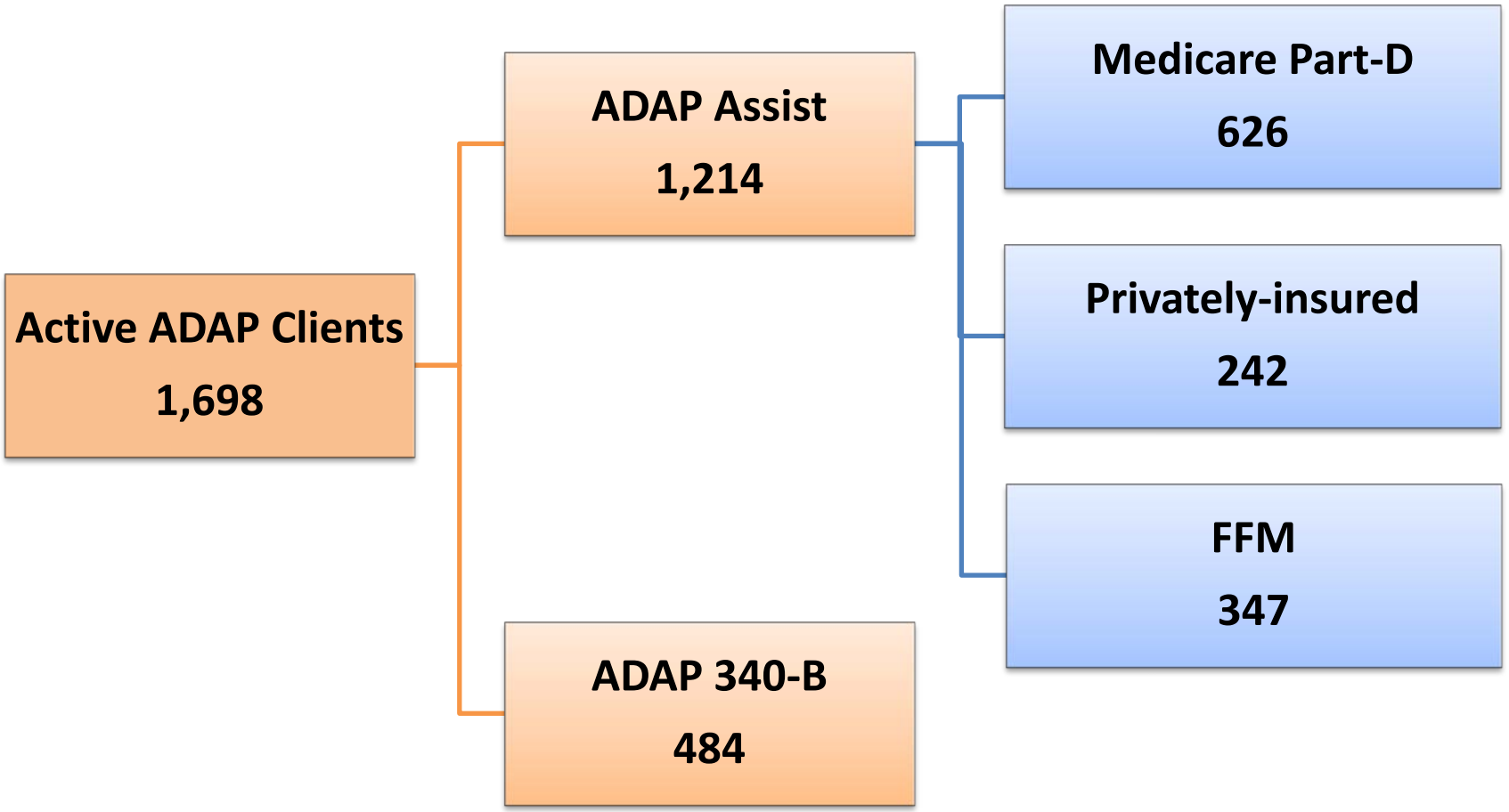
Arizona Department of Health Services

Health and Wellness for all Arizonans

ADAP Enrollment Estimate: January 2015



Insurance Type of ADAP Clients Served: July 2015



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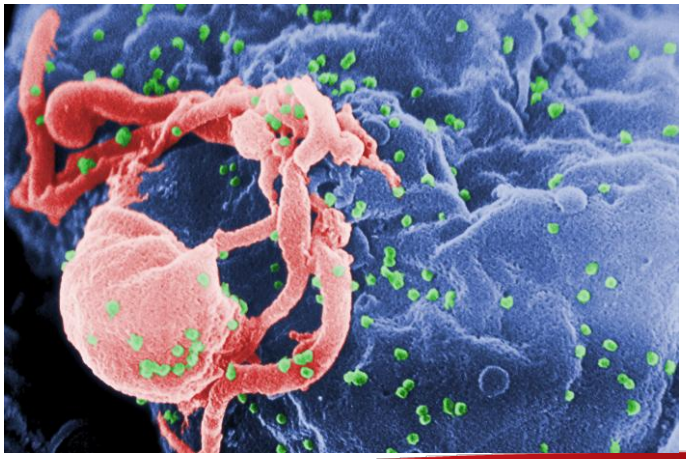
- The spectrum of engagement in HIV care and its relevance to test-and-treat strategies for prevention of HIV infection. Gardner et.al. Clin Infect Dis. 2011 Mar 15;52(6):793-800. http://www.ncbi.nlm.nih.gov/pubmed/21367734
- Ryan White Part B: http://www.azdhs.gov/phs/edc/odis/hiv-care/index.htm



http://phil.cdc.gov/phil/details.asp?pid=10000

Questions?

Tuberculosis in Arizona

January 22nd, 2016

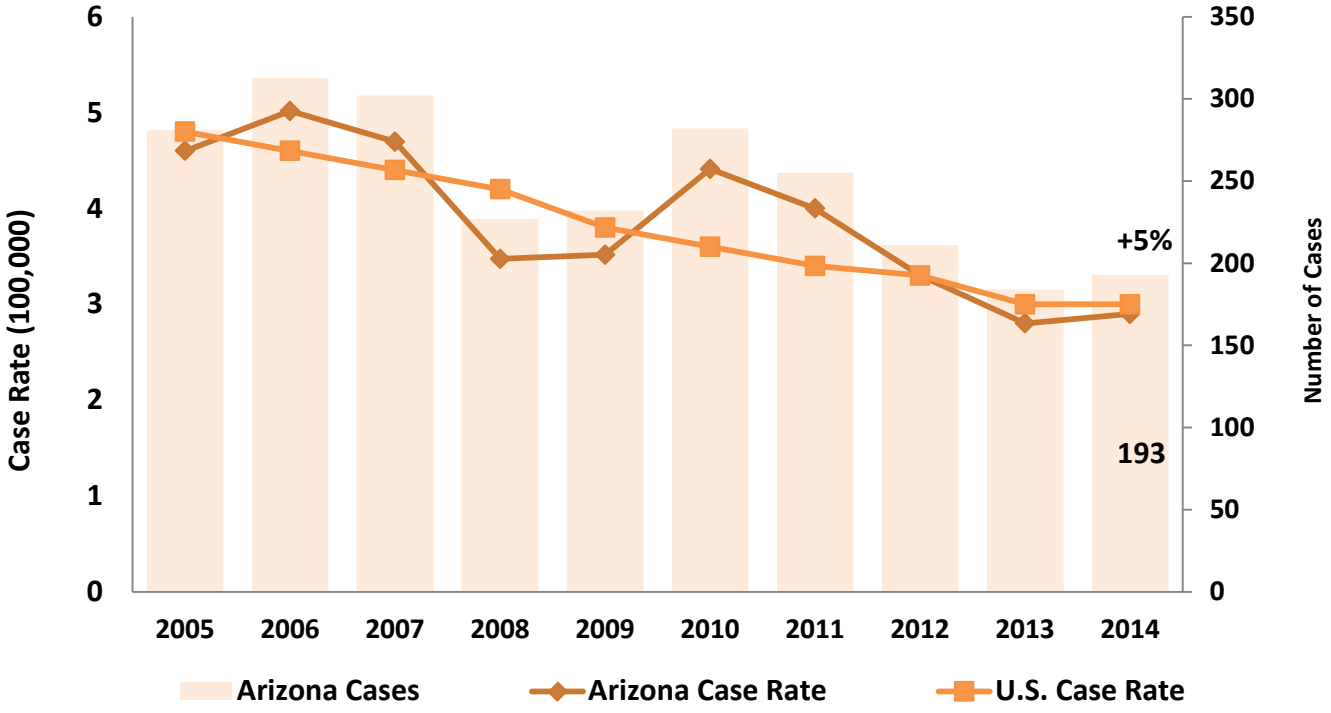
APIC State of State

Amanda Baker

Tuberculosis Control Program

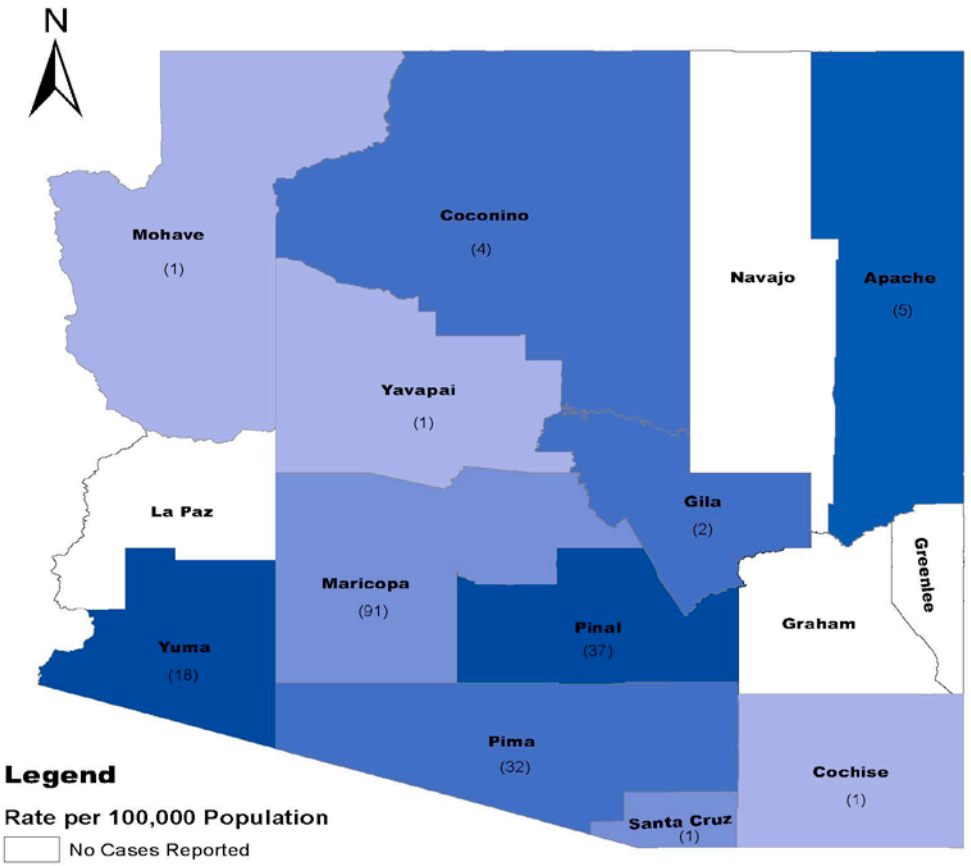
Arizona Department of Health Services

TB Case Rates per 100,000 population



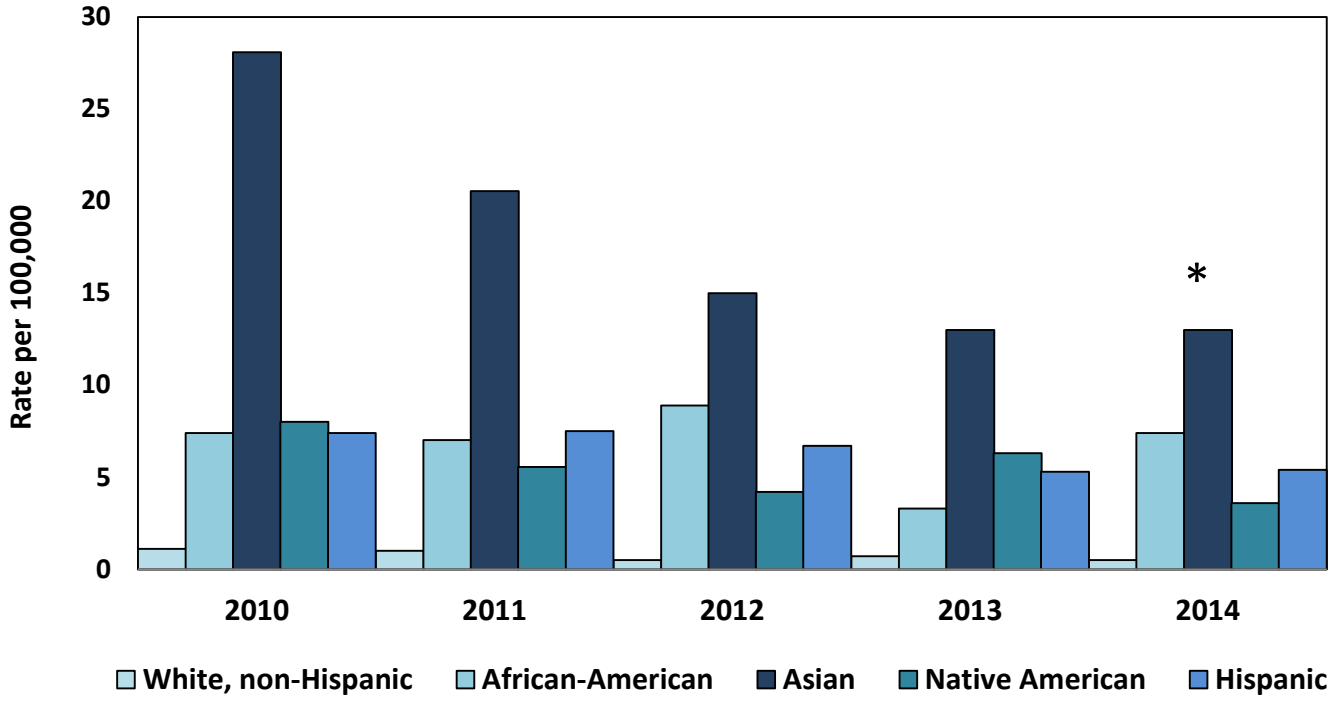
In 2014, there were 9,421 TB Cases reported in the US. The lowest EVER.

Figure 1. TB Cases and Case Rates by County, Arizona, 2014

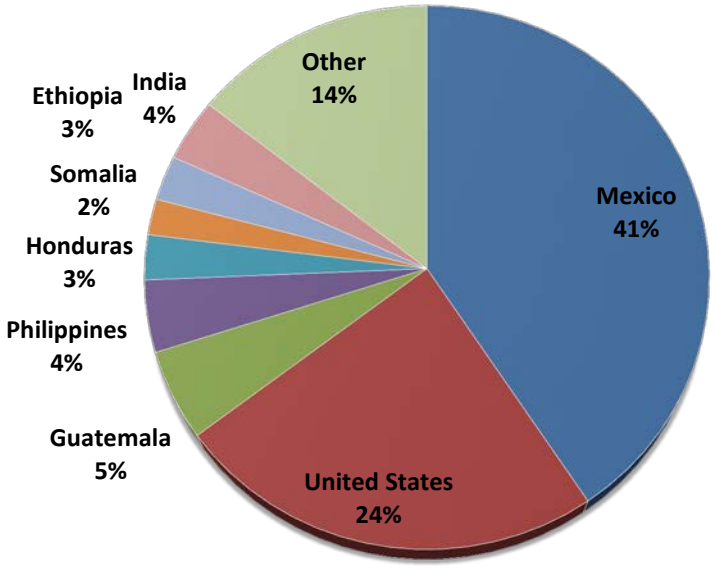


Data Source: ADHS Tuberculosis Control Program

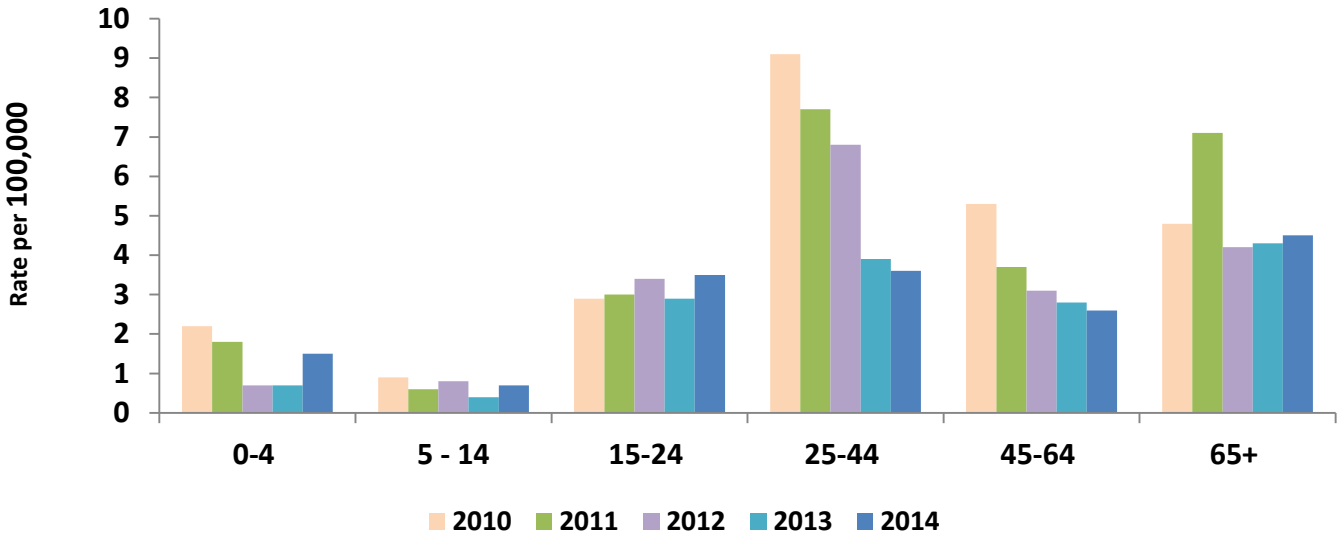
TB Case Rates by Race & Ethnicity



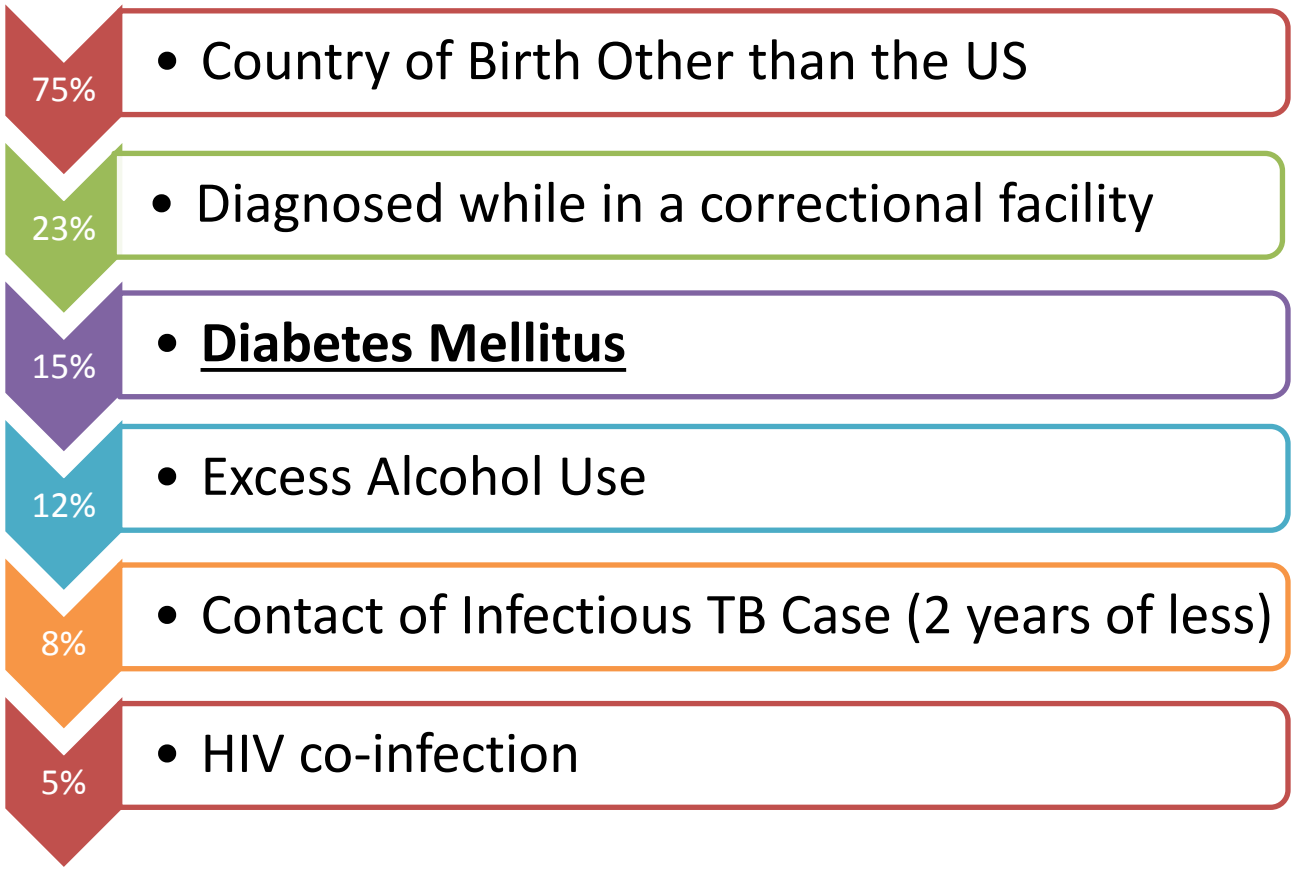
TB Cases by Country of Birth



TB Case Rates by Age Groups



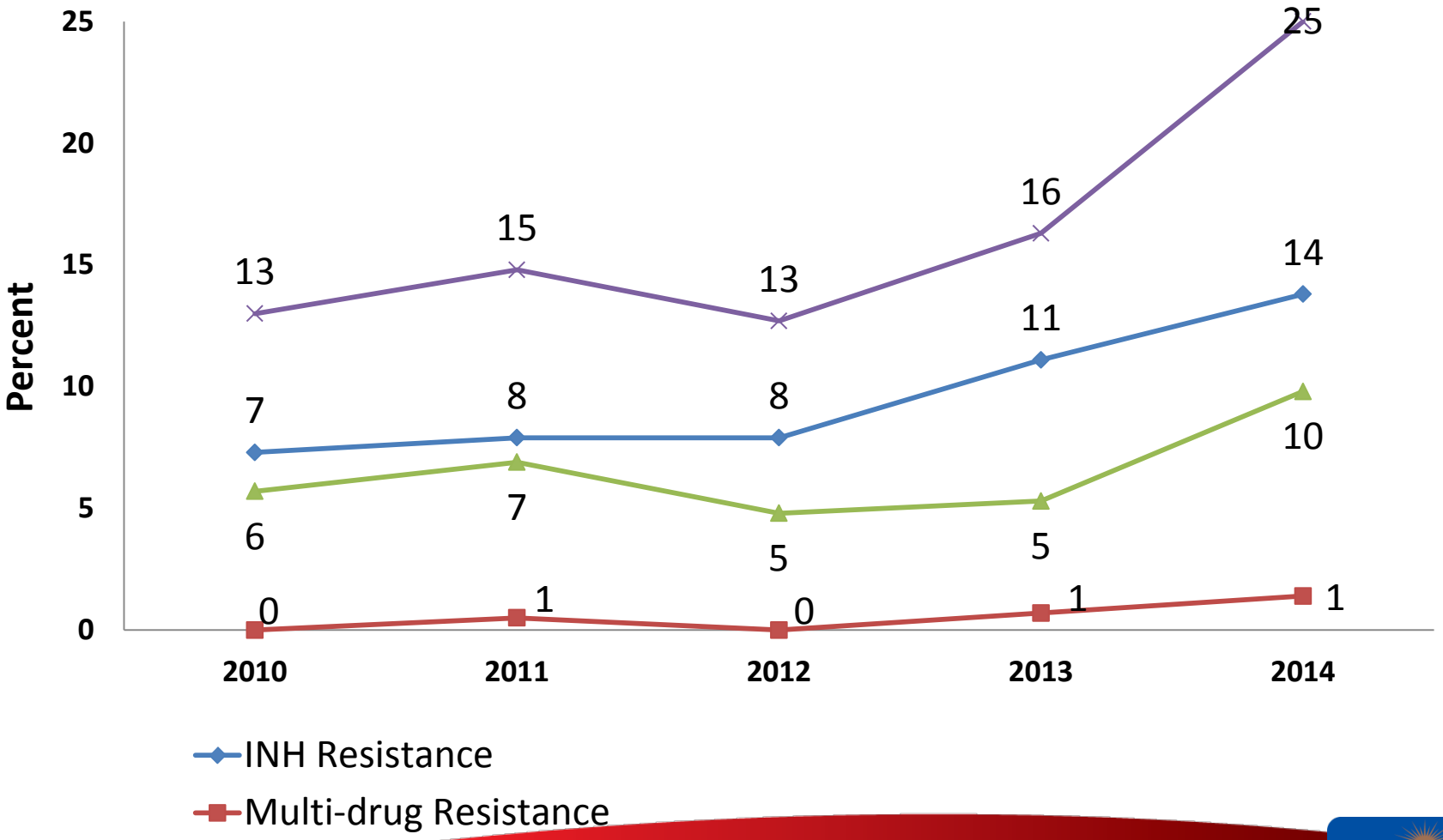
Notable TB Risk Factors



Drug Resistance Definitions

- Mono-Resistant – Resistance to one anti-TB medication
- MDR-TB – Resistance to both isoniazid and rifampin
- XDR-TB – Resistance to isoniazid, rifampin, at least one injectable, and at least one fluoroquinolone

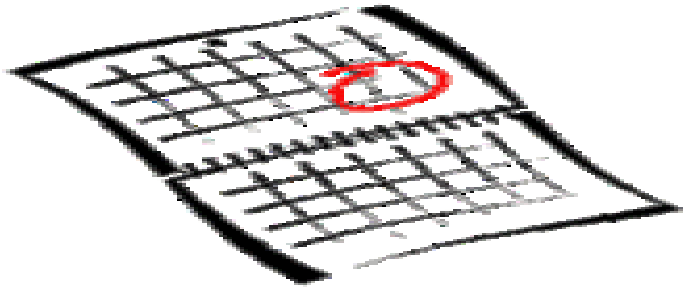
Primary Resistance to Anti-TB Drugs,



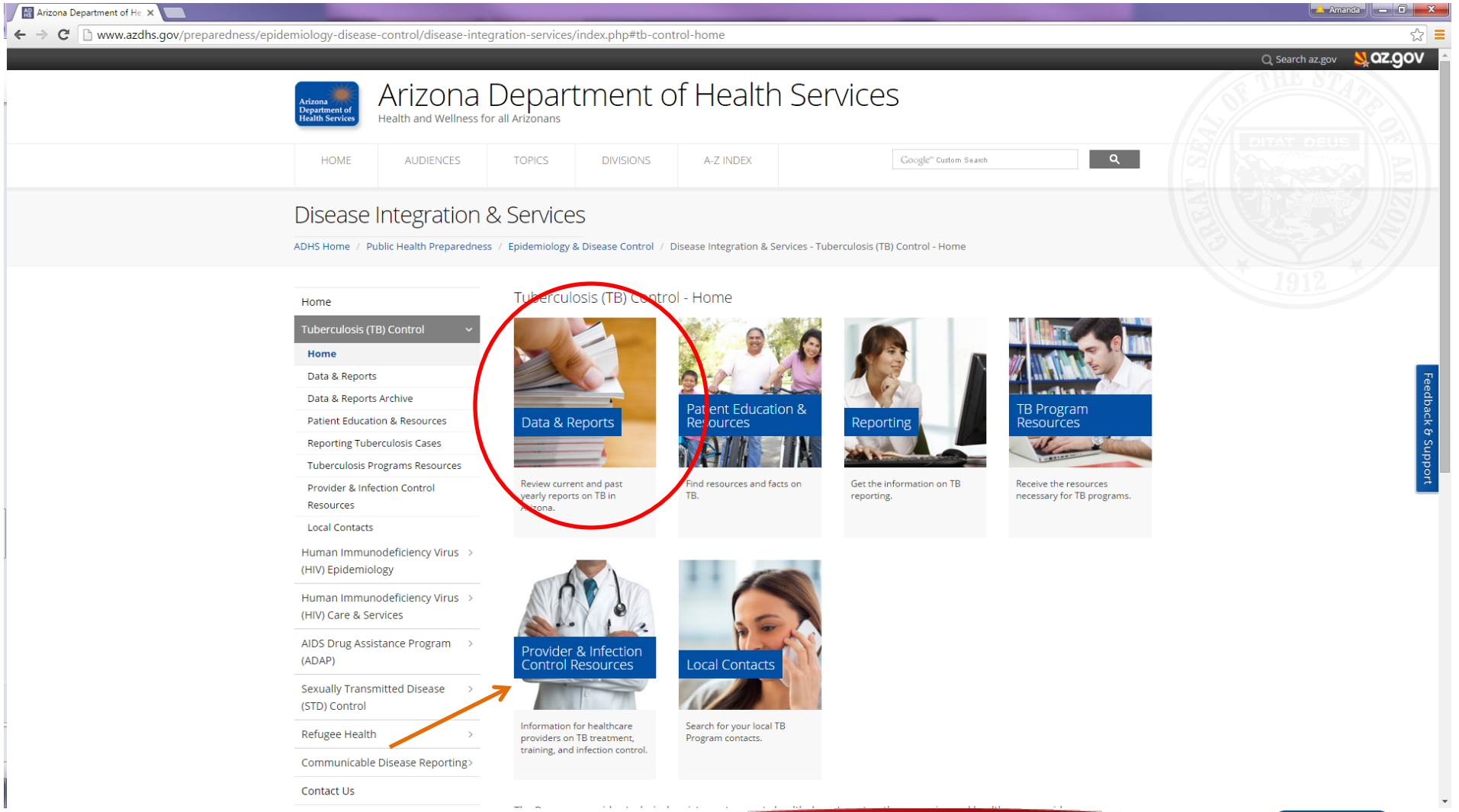
2015 Numbers will be available on:

World TB Day!

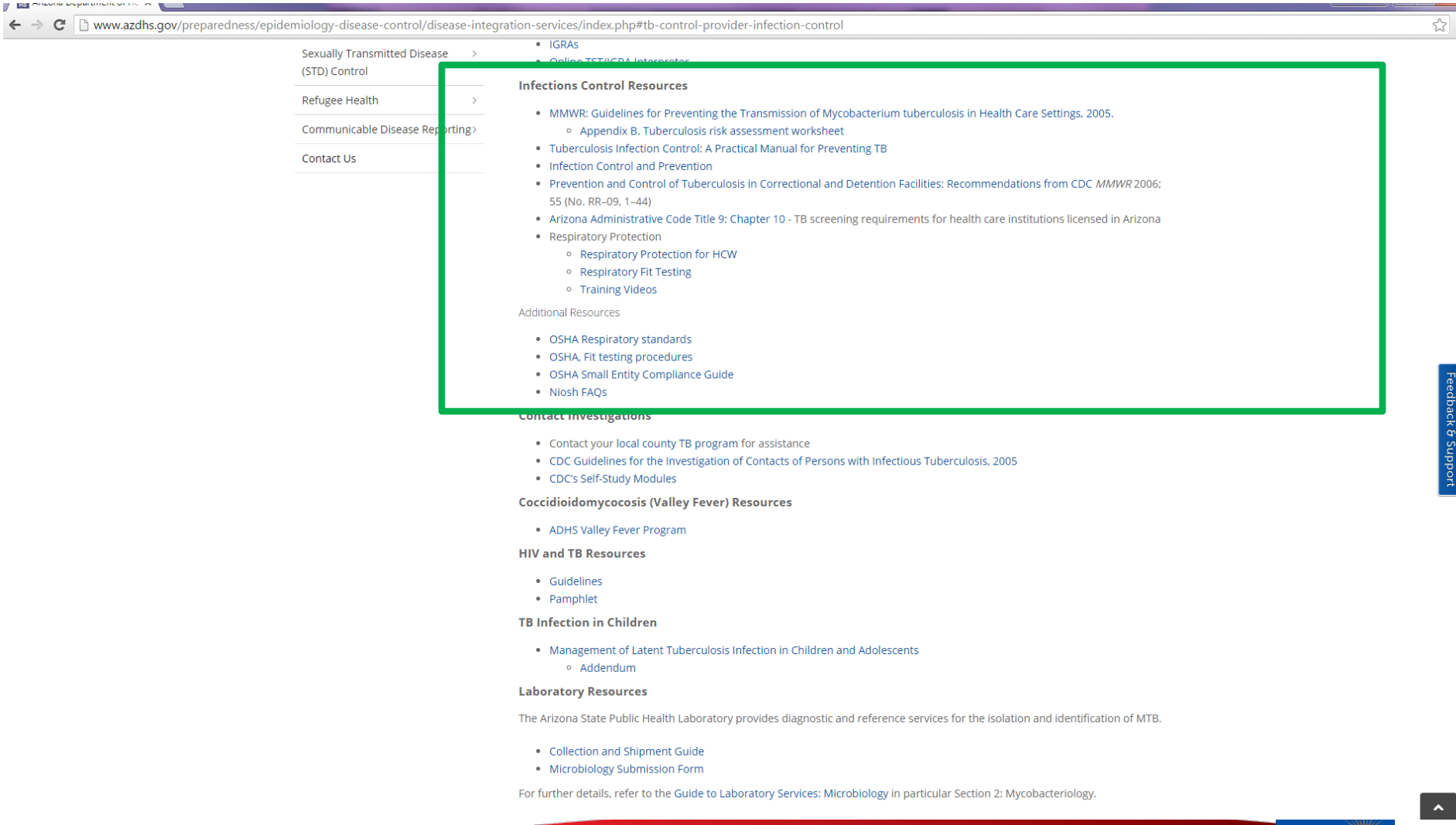
March 24th 2016



New Website


Arizona Department of He
www.azdhs.gov/preparedness/epidemiology-disease-control/disease-integration-services/index.php#tb-control-home
Search az.gov
az.gov
Arizona Department of Health Services
Health and Wellness for all Arizonans
HOME
AUDIENCES
TOPICS
DIVISIONS
A-Z INDEX
Google™ Custom Search
Disease Integration & Services
ADHS Home / Public Health Preparedness / Epidemiology & Disease Control / Disease Integration & Services - Tuberculosis (TB) Control - Home
Home
Tuberculosis (TB) Control
Home
Data & Reports
Data & Reports Archive
Patient Education & Resources
Reporting Tuberculosis Cases
Tuberculosis Programs Resources
Provider & Infection Control Resources
Local Contacts
Human Immunodeficiency Virus (HIV) Epidemiology
Human Immunodeficiency Virus (HIV) Care & Services
AIDS Drug Assistance Program (ADAP)
Sexually Transmitted Disease (STD) Control
Refugee Health
Communicable Disease Reporting
Contact Us
Tuberculosis (TB) Control - Home
Data & Reports
Review current and past yearly reports on TB in Arizona.
Patient Education & Resources
Find resources and facts on TB.
Reporting
Get the information on TB reporting.
TB Program Resources
Receive the resources necessary for TB programs.
Provider & Infection Control Resources
Information for healthcare providers on TB treatment, training, and infection control.
Local Contacts
Search for your local TB Program contacts.
Feedback & Support

Infection Control Resources



TB Program

602-364-4750

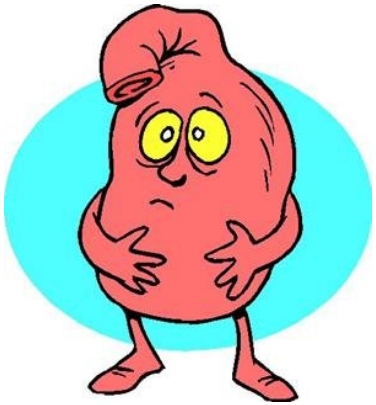
Thanks!

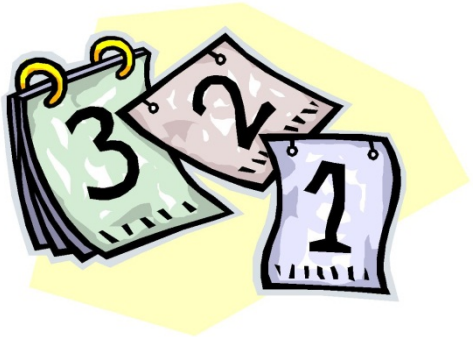
"Eat what you like and let the food fight it out inside."

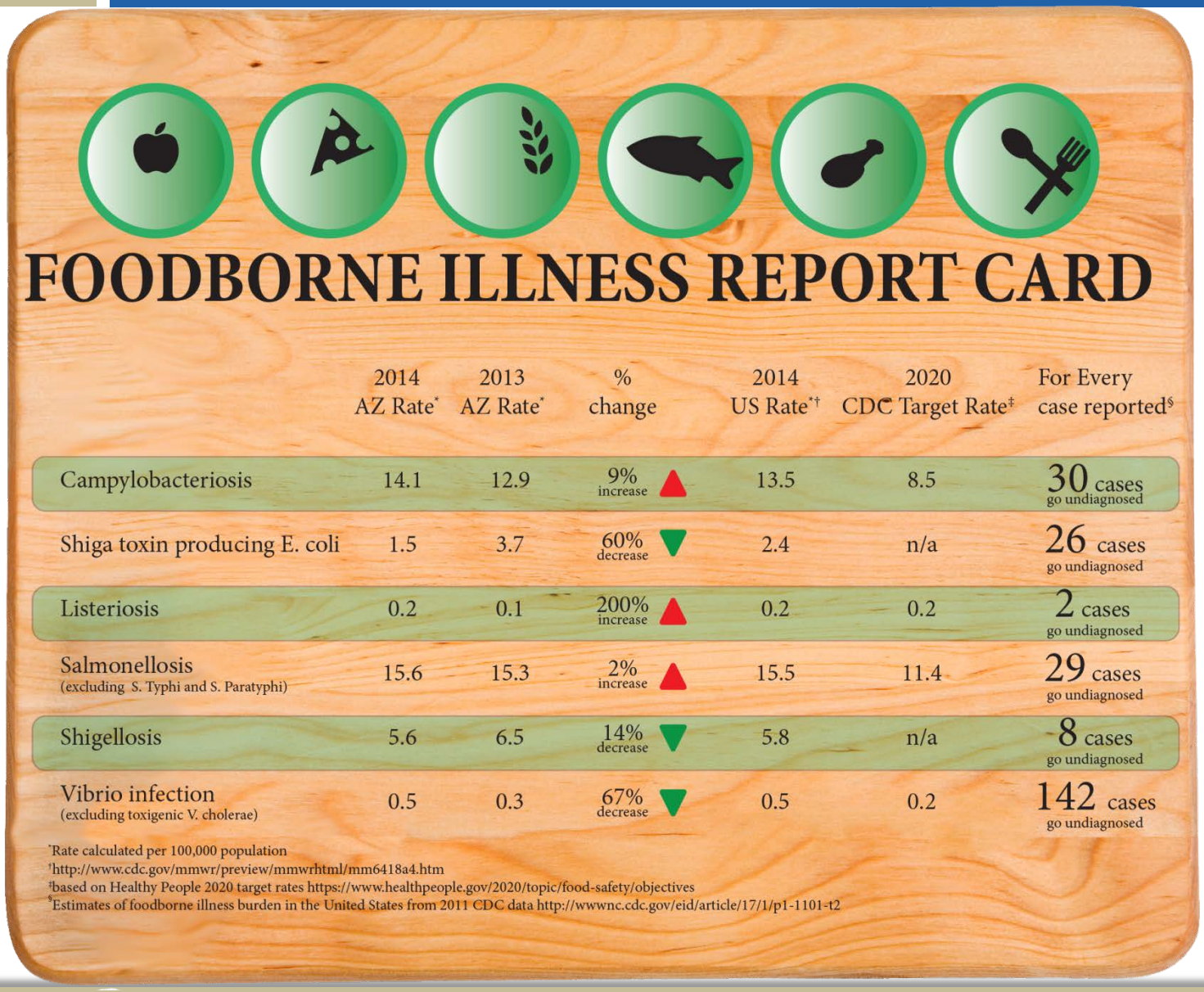
Foodborne Disease Outbreak Update

Bria Hamlet, *Public Health Associate*
Enteric Disease Investigation Team
Arizona Department of Health Services

Foodborne Illnesses Are….






FOODBORNE ILLNESS REPORT CARD
2014 AZ Rate*
2013 AZ Rate*
% change
2014 US Rate*†
2020 CDC Target Rate‡
For Every case reported§
Campylobacteriosis 14.1 12.9 9% increase 13.5 8.5 30 cases go undiagnosed
Shiga toxin producing E. coli 1.5 3.7 60% decrease 2.4 n/a 26 cases go undiagnosed
Listeriosis 0.2 0.1 200% increase 0.2 0.2 2 cases go undiagnosed
Salmonellosis (excluding S. Typhi and S. Paratyphi) 15.6 15.3 2% increase 15.5 11.4 29 cases go undiagnosed
Shigellosis 5.6 6.5 14% decrease 5.8 n/a 8 cases go undiagnosed
Vibrio infection (excluding toxigenic V. cholerae) 0.5 0.3 67% decrease 0.5 0.2 142 cases go undiagnosed
*Rate calculated per 100,000 population
†http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6418a4.htm
‡based on Healthy People 2020 target rates https://www.healthpeople.gov/2020/topic/food-safety/objectives
§Estimates of foodborne illness burden in the United States from 2011 CDC data http://wwwnc.cdc.gov/eid/article/17/1/p1-1101-t2

OUTBREAKS OF 2015

S. Enteritidis at ASPC Perryville

- Onset dates: ~4/3 to 4/26
- 9 PFGE-confirmed cases
- 7 case interviews
- No food samples tested positive for *Salmonella* Enteritidis
- There are likely more cases that went undiagnosed

[Photo credit: Enricovcd CC BY-SA 4.0]

S. Enteritidis at ASPC Winslow

- First onset 9/1, 4 p.m.
- Last onset 9/7
- Total ill inmates: 240
- Total ill staff (DOC & contractors): 11
- 11 PFGE-confirmed cases
- 1 positive food sample

S. Paratyphi B in Raw Tuna

- Rare strain of *Salmonella*
- As of May 20th, 2015, there were 69 national cases
  - 11 were in AZ
- Almost all cases (98%) reported eating a sushi item containing raw tuna
- A recall was issued in late May

S. Poona in Cucumbers

- 134 PFGE-confirmed cases in AZ
- Onset dates range nationally from 7/3 to 9/17
- Preliminarily positive cucumber on 9/3
- 4 deaths were associated with this outbreak, including 1 in AZ

Photo by woodlywonderworks_CC –BY 2.0

Which Enteric Diseases are Mandated as Reportable in Arizona?

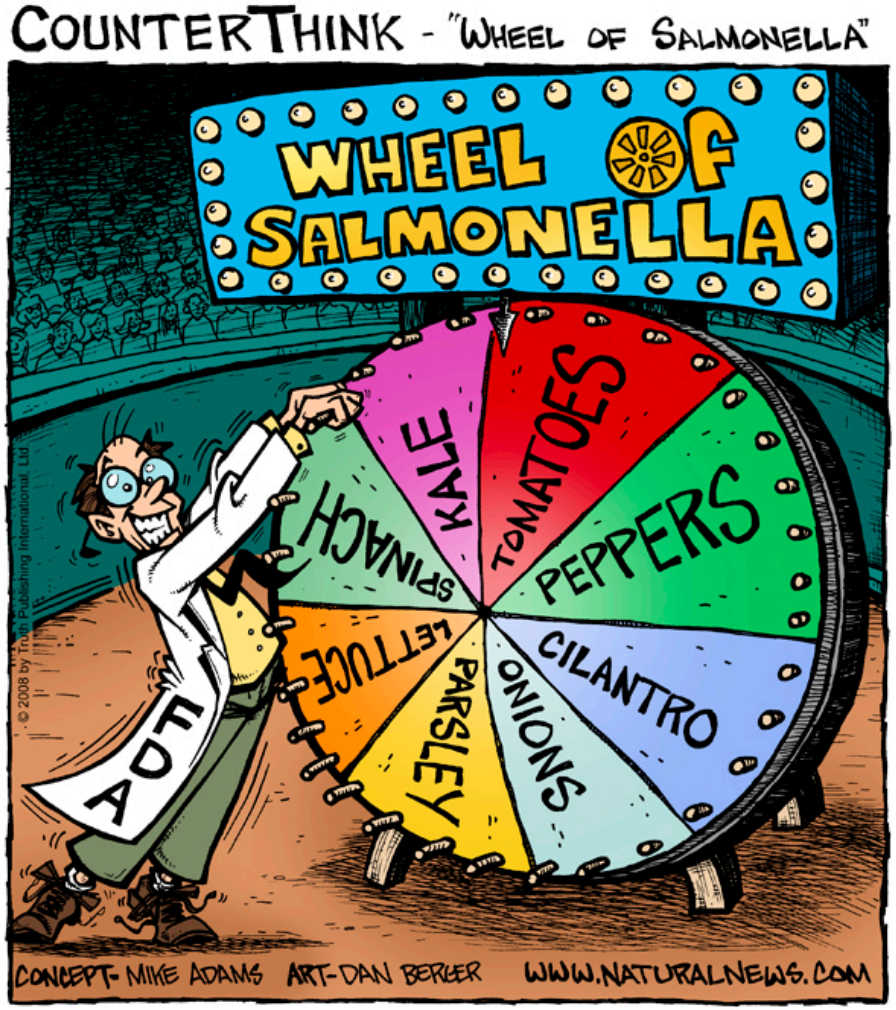
- Amebiasis
- **Botulism***
- Brucellosis
- Campylobacteriosis
- Cholera
- Cryptosporidiosis
- *Cyclospora*
- Cysticercosis
- **Enterohemorrhagic *E. coli****
- **Entertoxigenic *E. coli****
- Giardiasis
- Hepatitis A and E
- **Listeriosis***
- Salmonellosis
- Shigellosis
- **Typhoid Fever***
- *Vibrio* infection (including cholera)
- Yersiniosis
- **Outbreaks of diarrhea, nausea or vomiting**

Foodborne Specimens & The Lab

By law, the following positive specimens must be forwarded to ASPHL:

- Salmonella
- Shigella
- Enterohemorrhagic E. coli
- Listeria
- Vibrio

Specimens are then serotyped to determine species (i.e. *S.* Enteritidis)



Questions?

Bria Hamlet, PHAP
Office of Infectious Disease Services
Arizona Department of Health Services
(602) 364-4693
Bria.Hamlet@azdhs.gov
lho0@cdc.gov

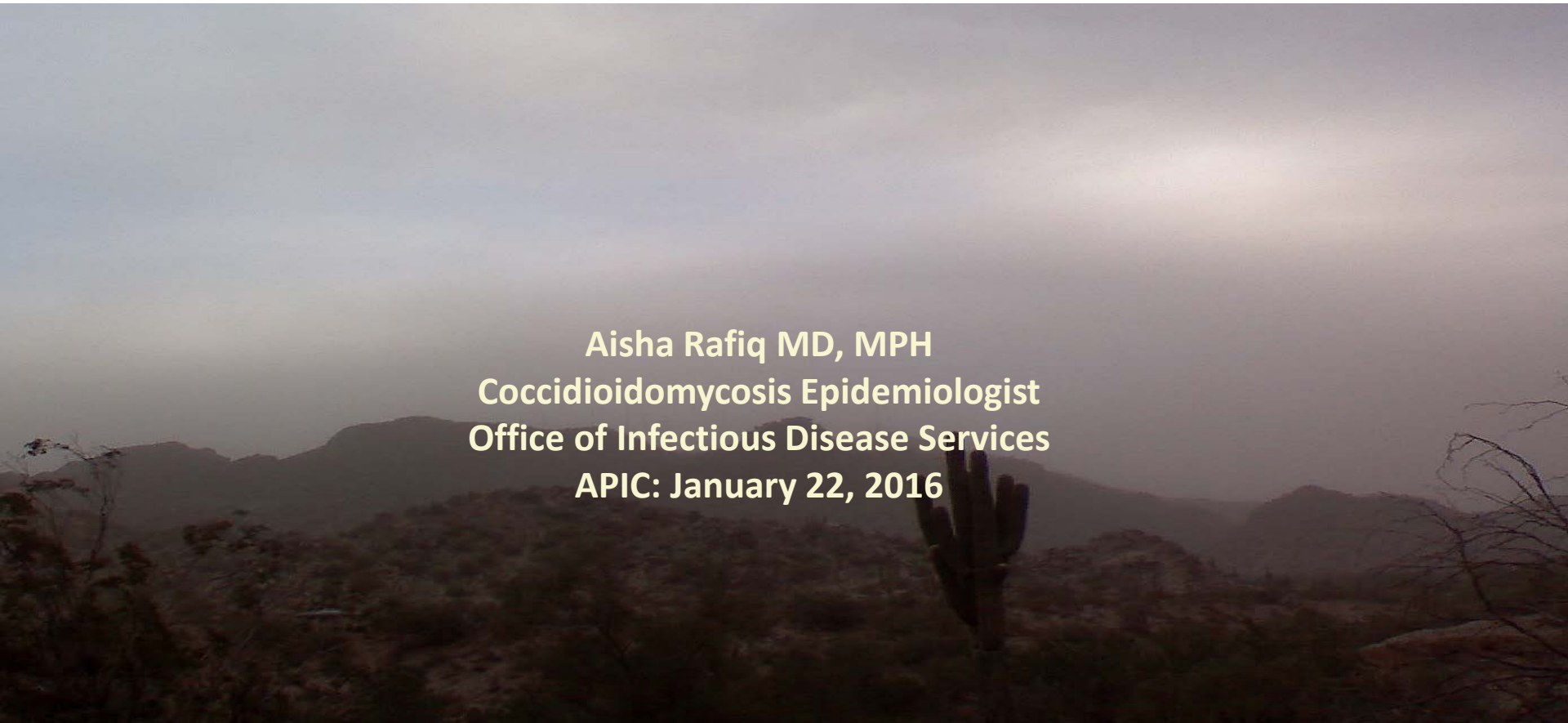
OUTBREAKS HAPPEN.

food@azdhs.gov

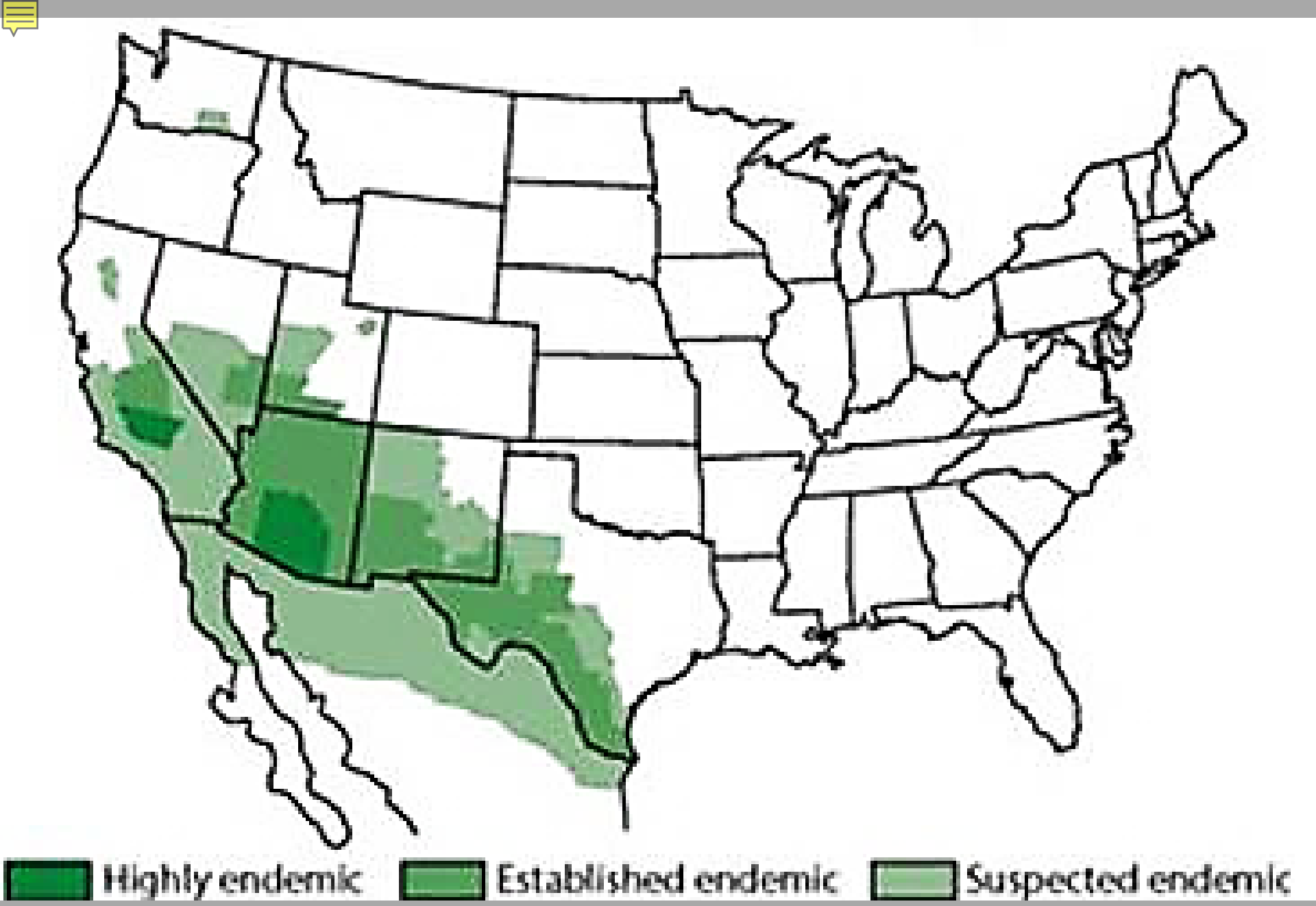
Resources

- http://www.amazon.co.uk/Giant-Microbes-Typhoid-Fever-Salmonella/dp/B000LU7GY2

Coccidioidomycosis in Arizona



Aisha Rafiq MD, MPH
Coccidioidomycosis Epidemiologist
Office of Infectious Disease Services
APIC: January 22, 2016



www.cdc.gov/fungal/diseases/coccidioidomycosis/causes

Clinical Features of Cocci

High Risk Group For Severe and Disseminated Disease

Photo by The U.S. Army BY 2.0)

Photo by Fresno Bostrom (CC BY-NC-ND 2.0)

Photo by Jack Fusell CC BY-NC-ND 2.0)

Cocci Affects Animals Too

Photos by David Sanders, The Arizona Daily Star

Barney, a 3-year-old Lhasa apso, above left, is checked by Panzero, above right, as Adsit waits

Deadly diseases stalk Ariz. pets

By Jane Erikson
The Arizona Daily Star
First in a two-day series

Veterinarians throughout Southern Arizona are urging clients to protect their dogs from two deadly

"Of all the infectious diseases we treat, valley fever is the most prevalent, the most serious and the most financially draining on the pocketbook," said Dr. Jack Quick, a Tucson veterinarian.

Quick and his partners estimate 15 percent of

Photo by David Smith(CC BY-NC-ND 2.0)

Photo by Purée (CC BY-NC-ND 2.0)

Surveillance

Labs

Photo by Wayne National Forest (CC BY 2.0)

Symptoms

www.cdc.gov/fungal/diseases/coccidioidomycosis/symptoms

Climate Related Factors

Photo by Mike Olbinski

Changes In Lab Practices

Photo by Sanofi Pasteur (CC BY-NC-ND 2.0)

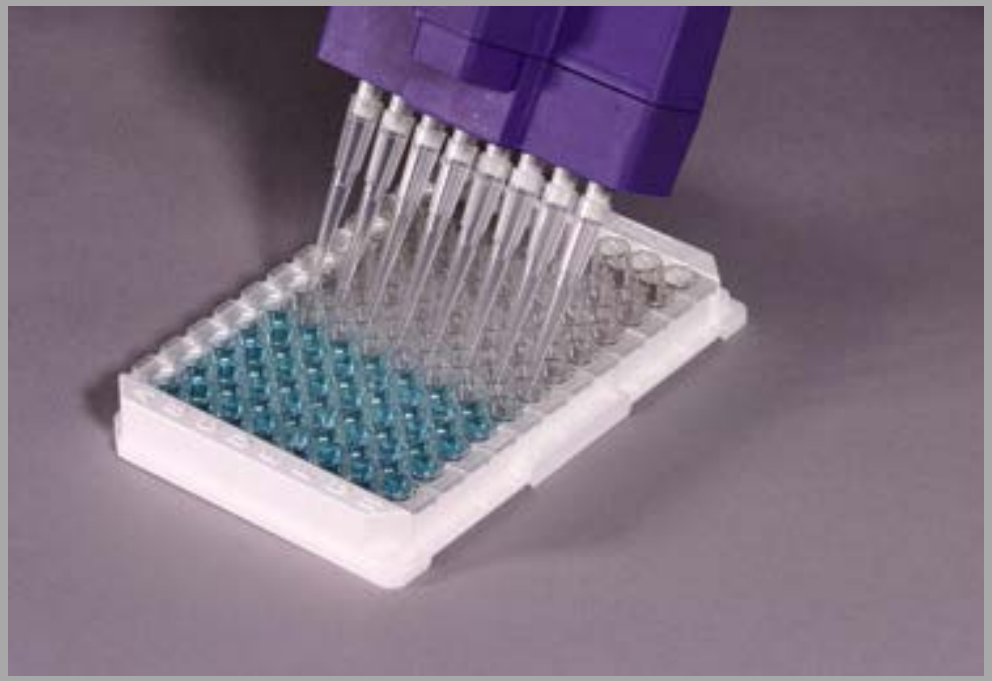


Photo by PATH global health

Increased Recognition and Testing

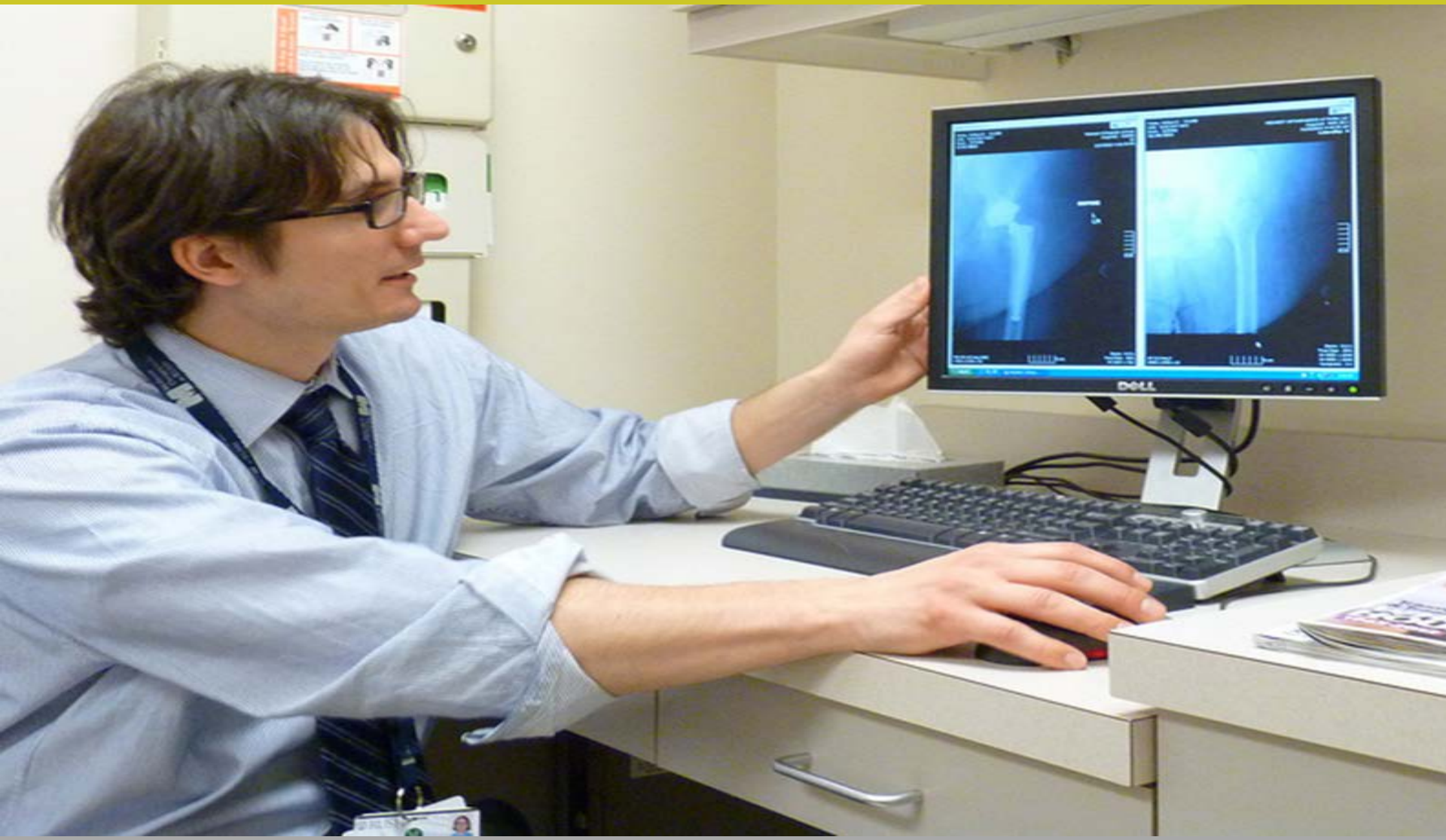
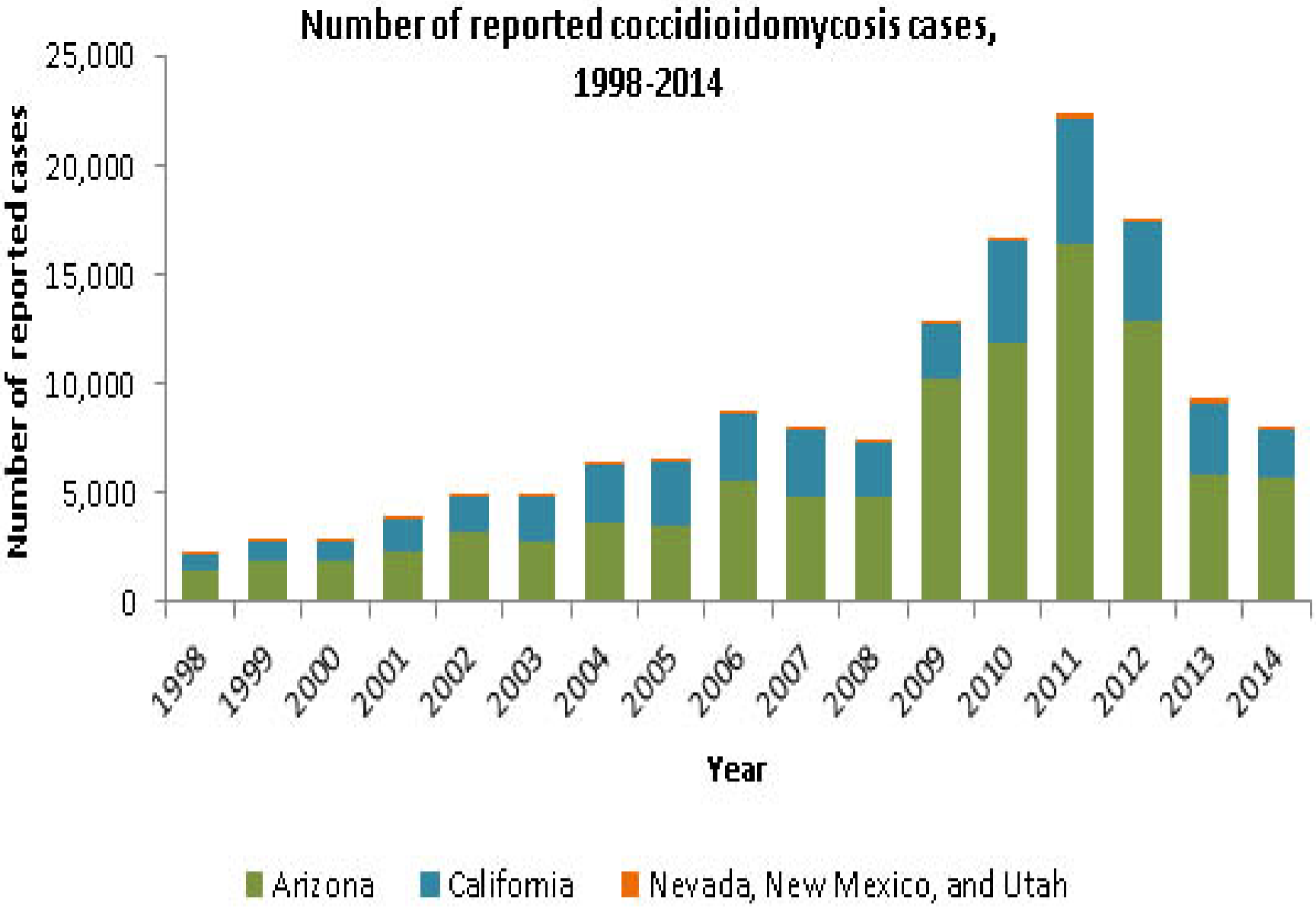
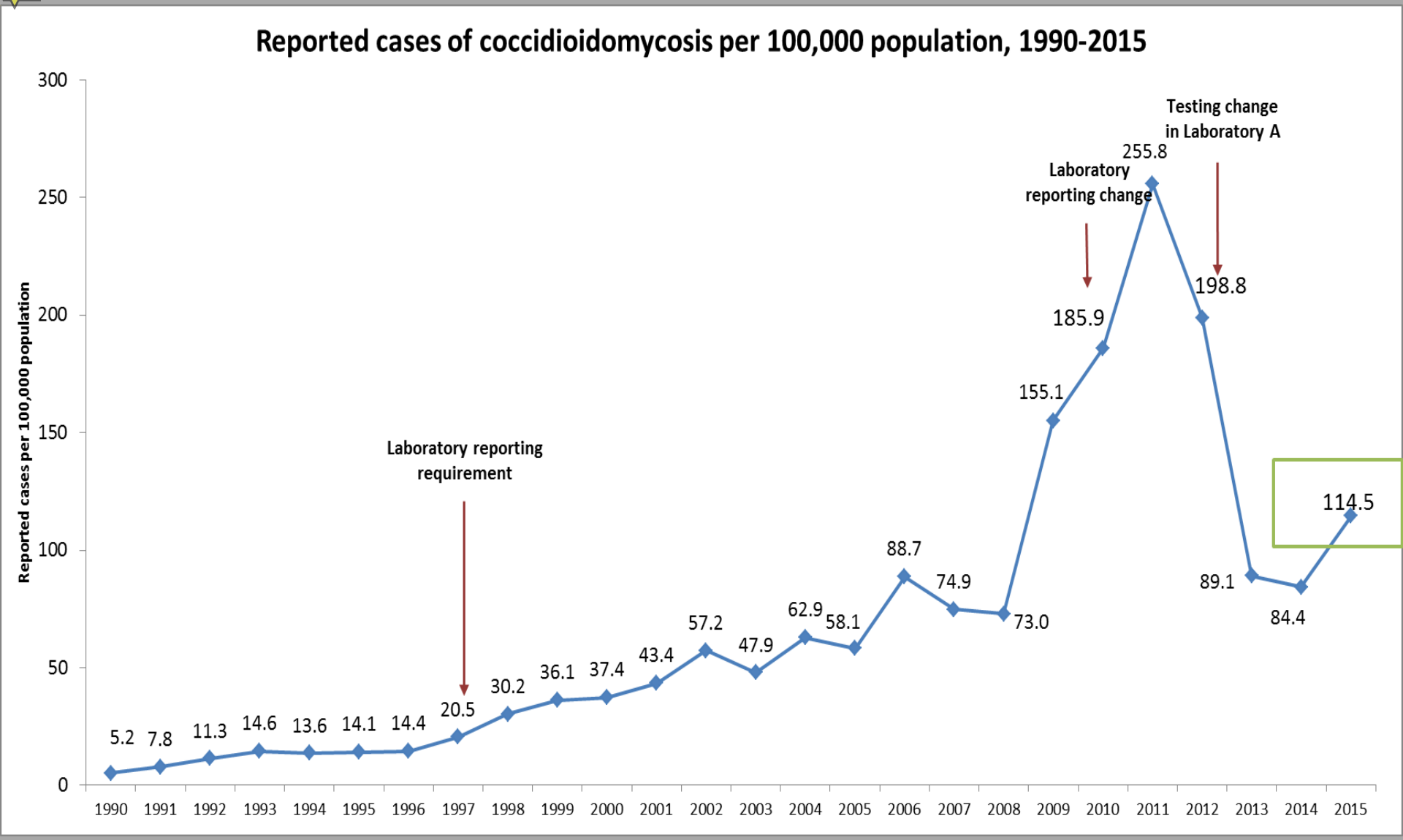


Photo by Yooperann

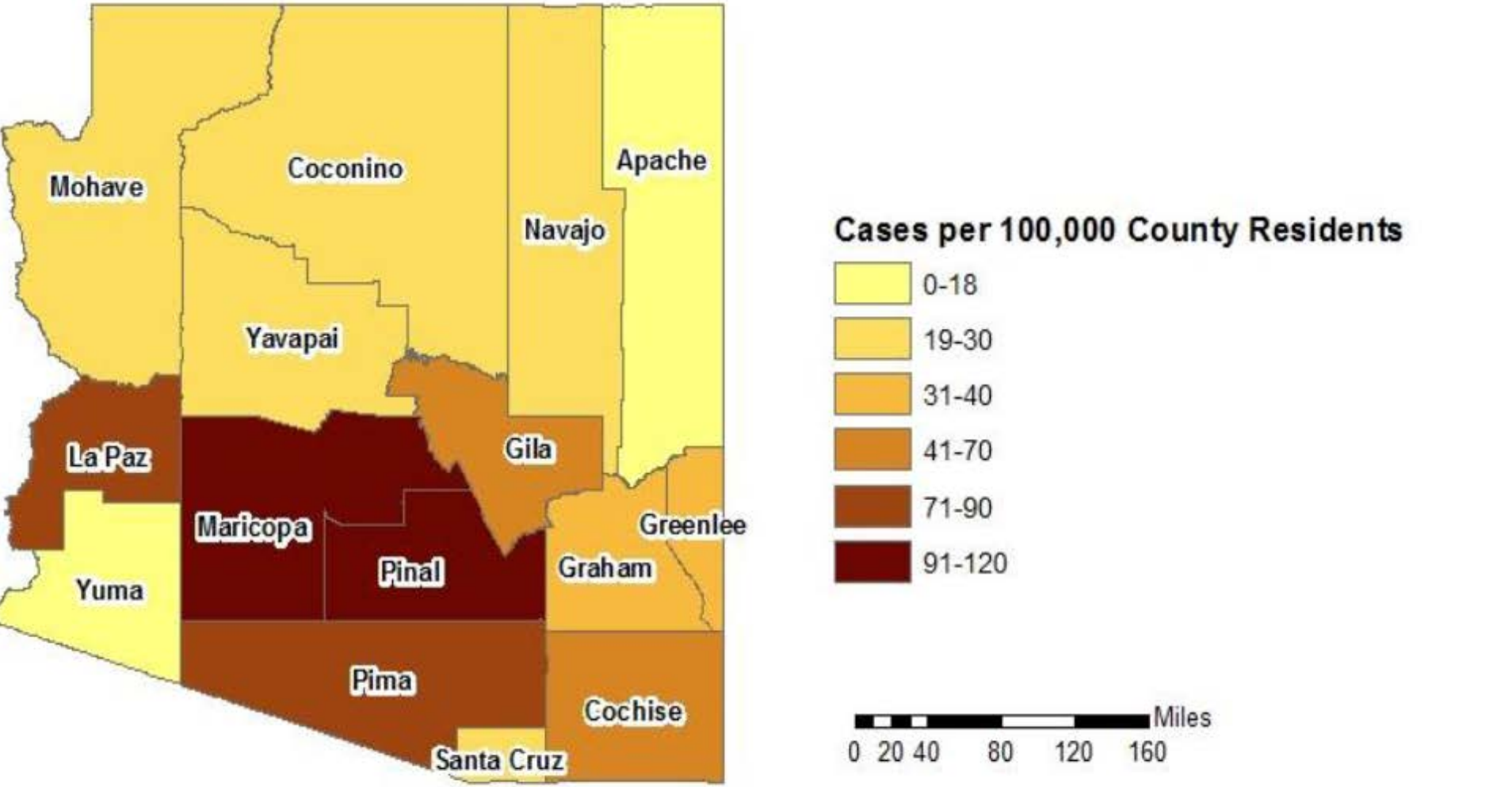


www.cdc.gov/fungal/diseases/coccidioidomycosis/statistics



www.azdhs.gov/documents/preparedness/epidemiology-disease-control/valley-fever/reports/valley-fever-2014.pdf

Rates of Cocci Cases by County



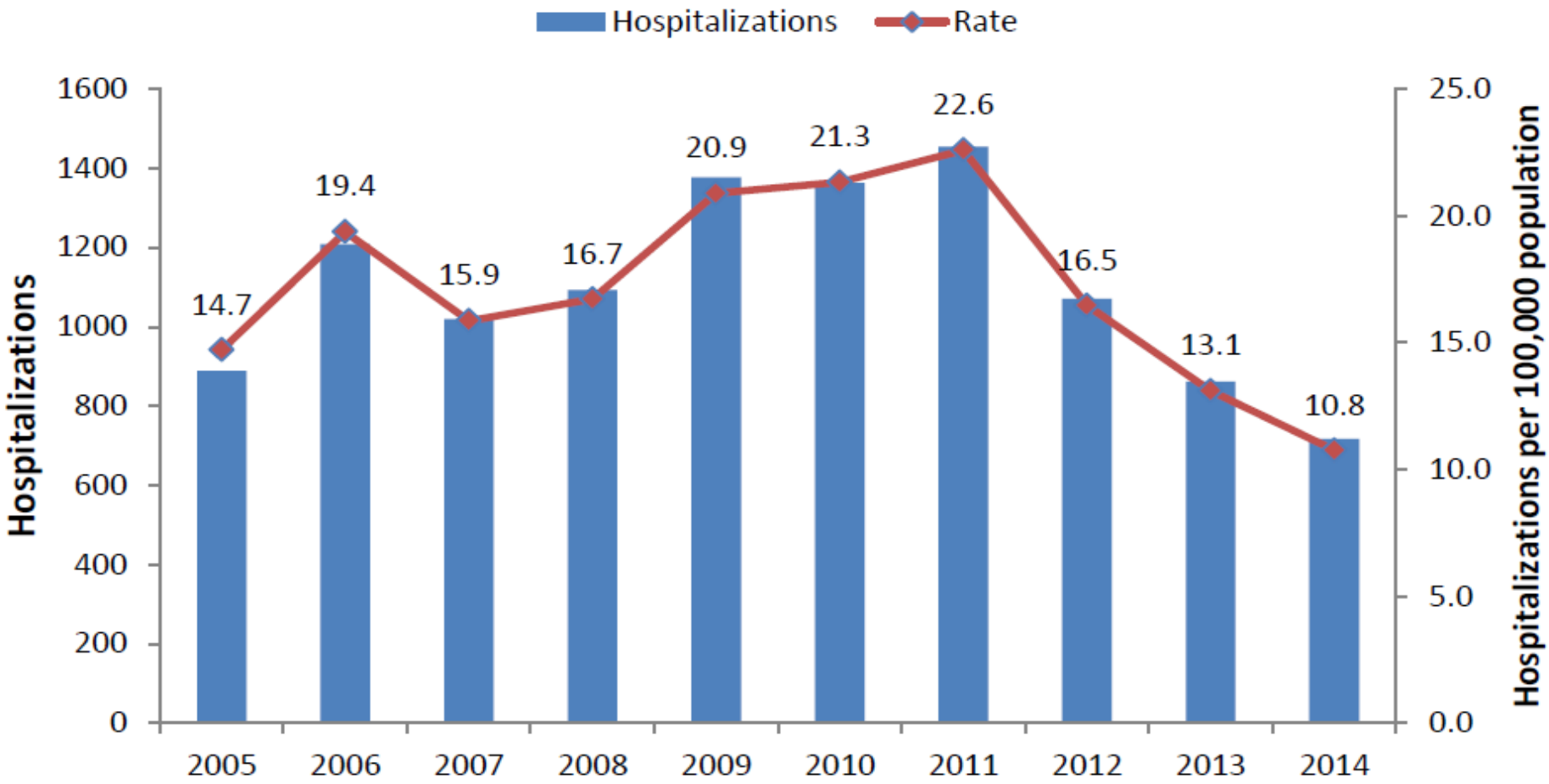
www.azdhs.gov/documents/preparedness/epidemiology-disease-control/valley-fever/reports/valley-fever-2014.pdf

Increasing Reported Cases and Rates by Age Groups - 2014

Age Group* (Years)	Cases	Cases per 100,000
<5	22	5.1
5-14	174	18.9
15-24	512	54.4
25-34	637	71.8
35-44	764	91.5
45-54	891	105.9
55-64	940	120.3
65-74	902	151.9
75-84	571	183.3
85+	202	168.4

www.azdhs.gov/documents/preparedness/epidemiology-disease-control/valley-fever/reports/valley-fever-2014.pdf

Hospitalizations with a Primary Diagnosis of Cocci, 2005 – 2014

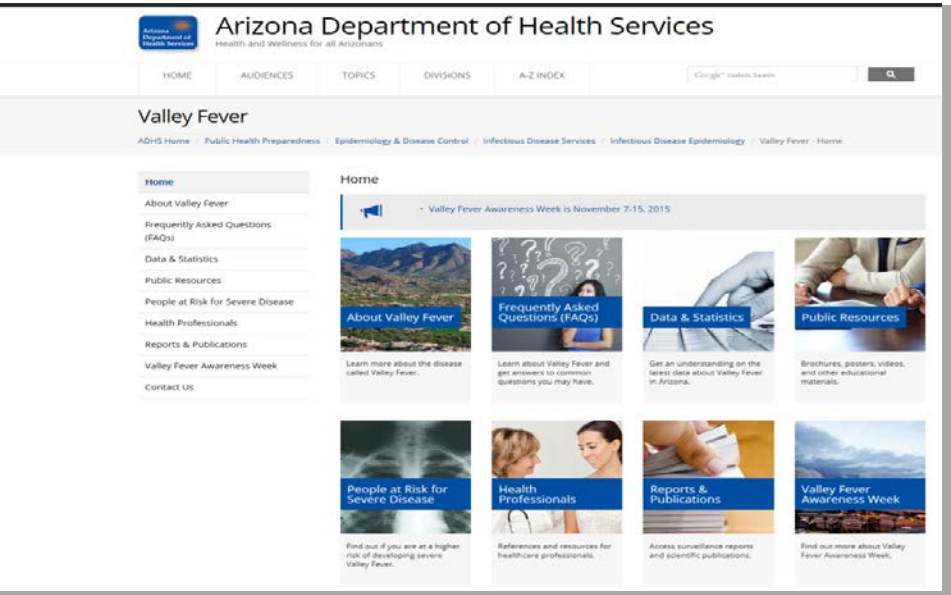


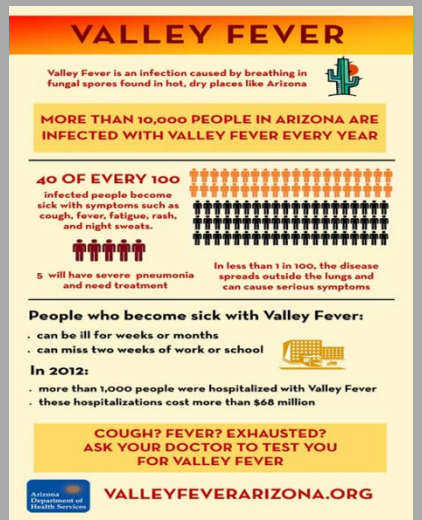
www.azdhs.gov/documents/preparedness/epidemiology-disease-control/valley-fever/reports/valley-fever-2014.pdf

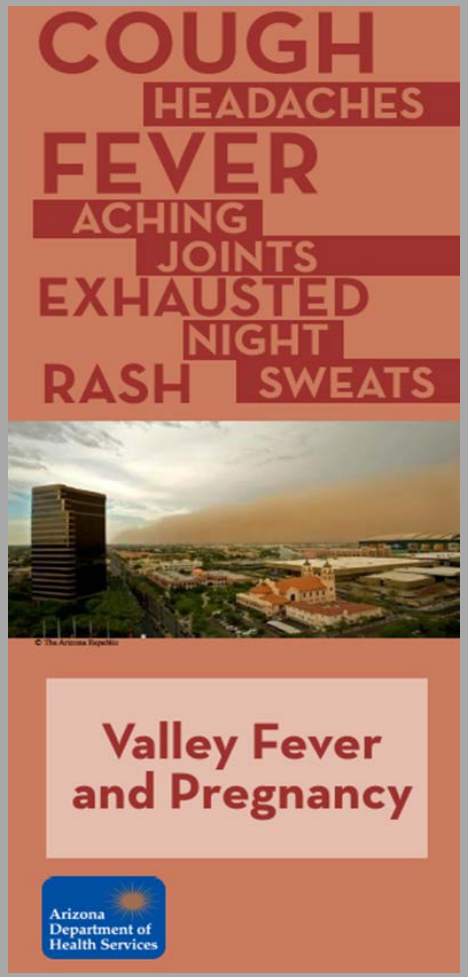
Impact

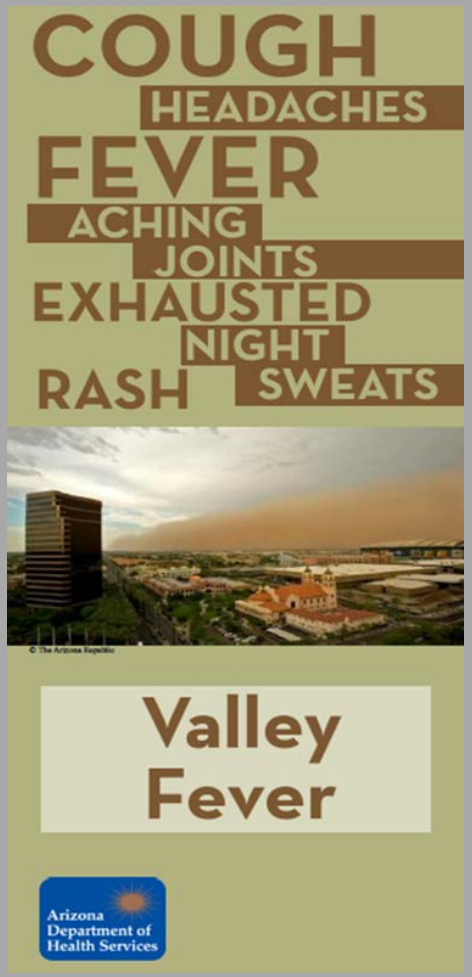
Photo by Gcsphotos

Education









www.azdhs.gov/preparedness/epidemiology-disease-control/valleyfever/index.php#resources-public

Coccidioides Skin Test

Photo by Francisco Aquino

Shane Brady
Shane.Brady@azdhs.gov
602-364-3147

Aisha Rafiq
Aisha.Rafiq@azdhs.gov
602-364-4068

APIC Grand Canyon

State of the State

Final Comments

Arizona Department of Health Services

Health and Wellness for all Arizonans