

**04/14/15**

**PRESENTATION:**

**ALASKA**

**SECTION OF**

**EPIDEMIOLOGY**

<TARGET><BILL></BILL><SUBJECT>04-14-15 PRESENTATION  
ALASKA SECTION OF  
EPIDEMIOLOGY</SUBJECT><COMM>HHSS29</COMM></TARGET>

# -EPIDEMIOLOGISTS- THE DISEASE DETECTIVES

**Joe McLaughlin, MD, MPH**  
**State Epidemiologist and Chief**  
**Alaska Section of Epidemiology**



# Definitions

- **What is epidemiology?**

- ▣ **The study of how and why disease occur in populations**

Epi

-demos

-ology

upon

people

study of

- **What is an epidemic?**

- ▣ **The occurrence of cases of an illness in a community that are in excess of normal expectancy**

# Fundamental Assumptions and Goal

3

- **Disease does not occur at random**
  - ▣ **Disease can be studied and described**
- **Disease, once understood, can be mitigated or prevented**
- **Goal is to determine what, who, where, when, and why**

# Alaska Section of Epidemiology

4



## Health and Social Services

Office of the Commissioner  
Alaska Pioneer Homes  
Behavioral Health  
Health Care Services  
Juvenile Justice  
Office of Children's Services  
Public Assistance  
Public Health  
Senior and Disabilities Services  
Finance and Management  
Services

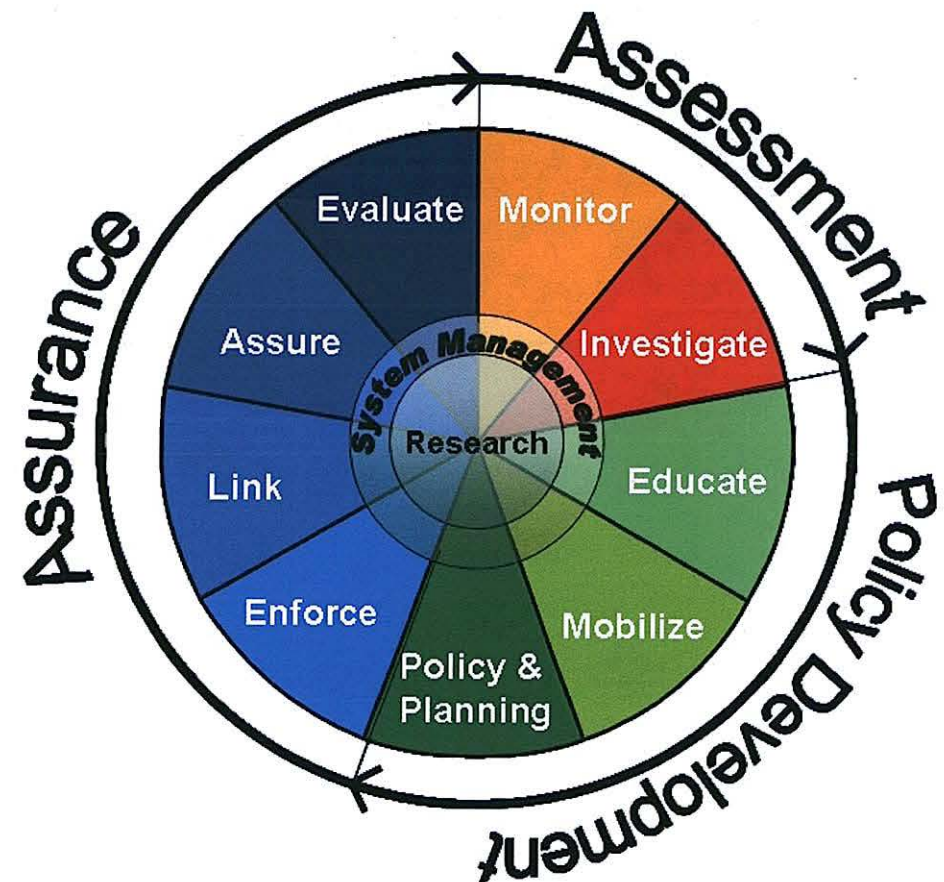
## Division of Public Health

Public Health Home  
Director's Office  
Chronic Disease Prevention &  
Health Promotion  
Emergency Programs  
Epidemiology  
Health Planning & Systems  
Development  
Laboratories  
Public Health Nursing  
State Medical Examiner  
Vital Statistics  
Women's, Children's & Family  
Health

# What specifically does the Section of Epidemiology do?

5

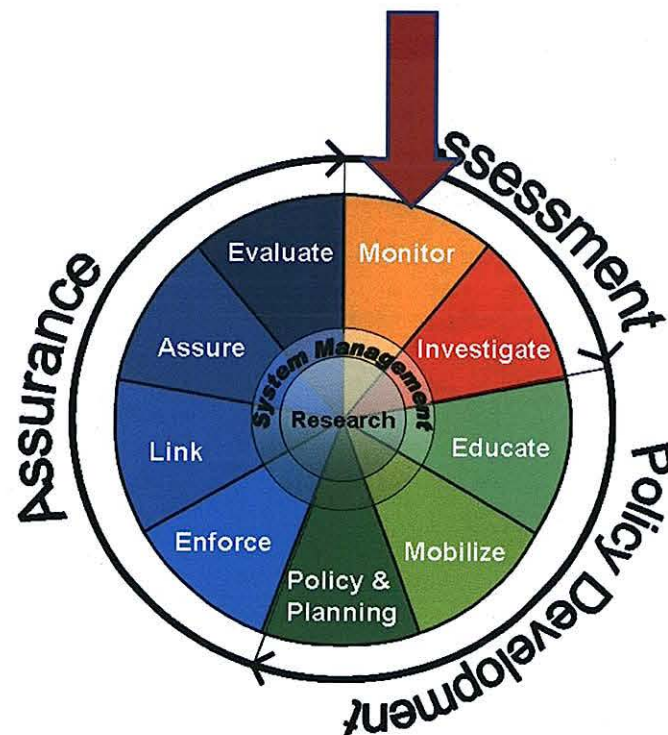
- Six program areas
  - ▣ Infectious diseases
  - ▣ HIV/STD
  - ▣ Immunization
  - ▣ Injury
  - ▣ Environmental
  - ▣ Health impact assessment
- Address most (if not all) of the essential functions of public health



# Essential Service #1: Monitor

6

- Surveillance is the backbone of public health practice
- Definition
  - ▣ Ongoing collection, analysis, and interpretation of health data
- Closely integrated with timely dissemination to stakeholders



# Why Do Surveillance?



- **Monitor trends**
- **Determine the need for public health action**
- **Prioritize resources**
- **Evaluate the effectiveness of interventions**
- **Provide feedback to stakeholders**

## Conditions Reportable to Public Health in Alaska

This site provides information to help health care providers and laboratories comply with public health reporting requirements in Alaska. Further assistance may be obtained by calling the Section of Epidemiology at (907) 269-8000.



Conditions  
Reportable to Public  
Health Manual



**To report Public Health Emergencies call  
(907) 269-8000 or after hours (800) 478-0084**

### What Is Reportable

#### by Health Care Providers

-  Infectious Diseases
-  Sexually Transmitted Diseases, HIV Infections and AIDS
-  Firearm Injuries
-  Occupational Disease and Injuries
-  Blood Lead Level Testing
-  Toxic or Hazardous Exposures
-  Healthcare-Associated Infections
-  Immunization Administration Data
-  Cancer
-  Birth Defects
-  Newborn Hearing Loss

#### by Laboratories

-  Infectious Disease Pathogens
-  Submission of Isolates or Source Material

### How To Report

#### Methods

#### Report Forms

-  Influenza-Associated Mortality
-  Infectious Diseases
-  Sexually Transmitted Diseases, HIV Infections and AIDS
-  Firearm Injuries
-  Occupational Disease and Injuries
-  Blood Lead Level Testing
-  Toxic or Hazardous Exposures
-  Healthcare-Associated Infections
-  Immunization Administration Data
-  Cancer
-  Birth Defects
-  Newborn Hearing Loss



# Surveillance

## Conditions Reportable

9

### Infectious Diseases Reportable by Health Care Providers

#### *Immediate Reporting:*

<b>Anthrax</b>	<b>Poliomyelitis</b>
<b>Botulism</b>	<b>Rabies in a human or an animal</b>
<b>Diphtheria</b>	<b>Rubella</b>
<b>Glanders</b>	<b>Severe Acute Respiratory Syndrome (SARS)</b>
<b>Hemorrhagic fever, including dengue fever</b>	<b>Smallpox</b>
<b>Influenza, suspected novel strains</b>	<b>Tetanus</b>
<b>Measles</b>	<b>Tularemia</b>
<b>Melioidosis</b>	<b>Yellow fever</b>
<b>Meningococcal invasive disease</b>	<b>An outbreak or unusual number or clustering of diseases or other conditions of public health importance</b>
<b>Paralytic shellfish poisoning</b>	
<b>Plague</b>	

Diseases shown in bold are public health emergencies; if you suspect or diagnose a disease that represents a public health emergency, immediately call 1-907-269-8000 during business hours or 1-800-478-0084 after hours.

# Report Out to Stakeholders

10

State of Alaska  
Epidemiology



# Bulletin

Department of Health and Social Services

William J. Streur, Commissioner  
Ward B. Hurlburt, MD, MPH, CMO

3601 C Street, Suite 540

Anchorage, AK 99503

<http://www.epi.Alaska.gov>

Division of Public Health

Kerre Shelton, Director

Local (907) 269-8000

24 Hour Emergency 1-800-478-0084

Editors:

Joe McLaughlin, MD, MPH

Louisa Castrodale, DVM, MPH

Bulletin No. 9 June 5, 2014

## 2013 Annual (January–December) Infectious Disease Report

Confirmed and probable cases of infectious diseases reported to the Alaska Section of Epidemiology (SOE) from January 1 through December 31, 2013 are presented in the table below. This table includes both military and civilian reports. Cases without a known onset date were attributed to the date of specimen collection, diagnosis, or report to SOE, whichever was earliest. National reporting standards assign cases to the patient's state of residence (case definitions are available at: <http://www.cdc.gov/nndss/>).

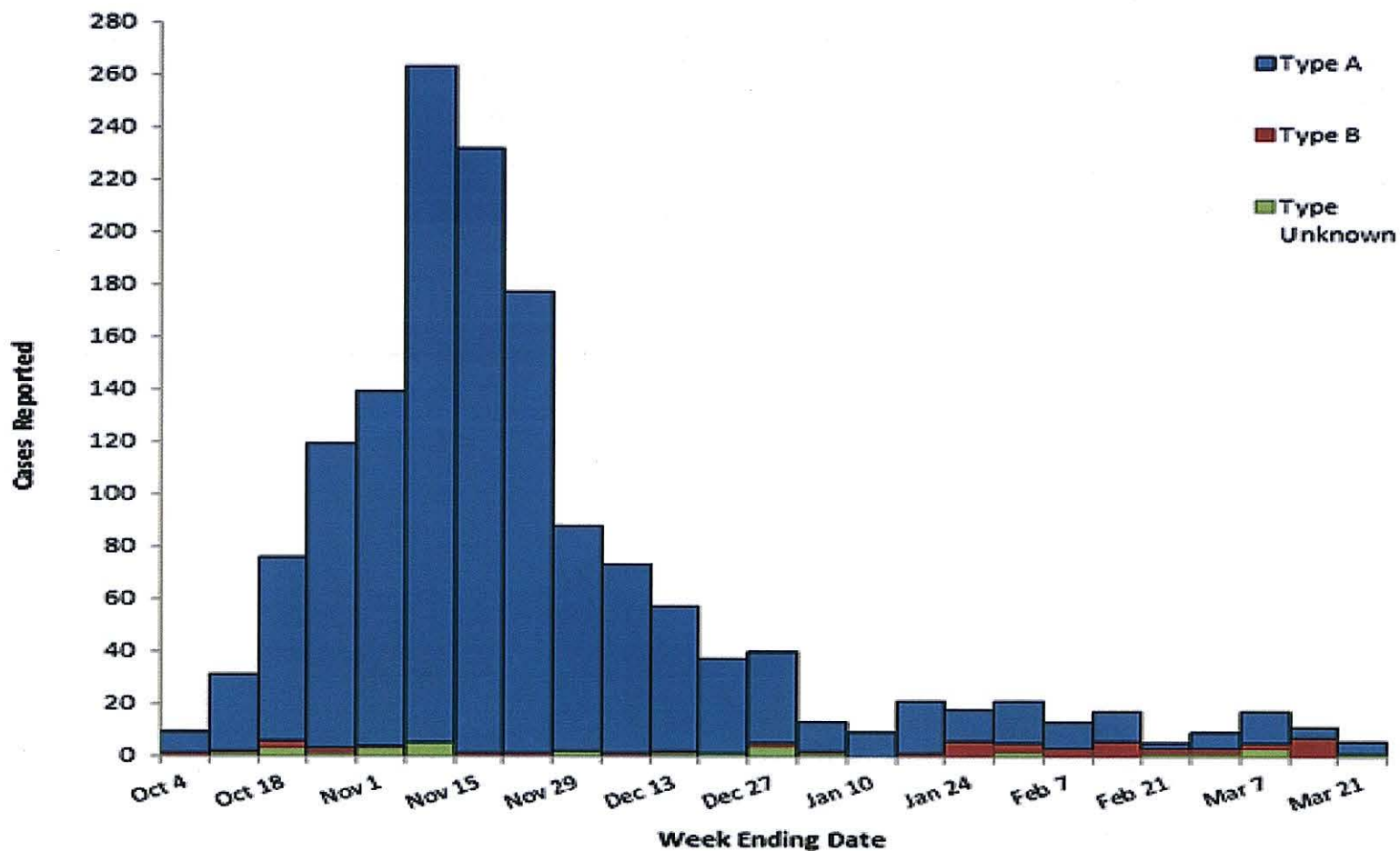
Because not all reportable conditions are diagnosed or reported, these figures represent trends for some diseases rather than the actual incidence or burden of disease in Alaska. There were no cases of several reportable diseases; a complete list of diseases mandated by regulation to be reported to Alaska public health authorities is available at: <http://www.epi.alaska.gov/pubs/conditions/>. Effective December 29, 2013, several new conditions were added to the list of diseases; summary data for those conditions will be presented in 2014.

Disease Name	Anch/Mat-Su		Gulf Coast		Interior		Northern		Southeast		Southwest		Total*	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
AIDS†	8	6	0	1	3	1	0	1	0	0	0	0	19§	22§
Botulism	0	0	0	0	0	0	0	0	0	0	5	6	5	6
Brucellosis	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Campylobacteriosis	49	49	10	29	12	14	2	5	10	6	10	4	93¶	107
Chicken pox	28	36	12	10	8	9	0	0	4	3	6	3	58	61
<i>Chlamydia trachomatis</i> infection	2848	3119	334	265	687	738	620	610	362	381	631	679	5482	5792
Cryptosporidiosis	3	2	1	1	2	2	0	0	0	1	1	0	7	6
Dengue fever**	0	1	0	0	0	1	1	0	0	0	0	0	1	2
Echinococcosis	0	0	0	0	1	0	0	0	1	0	0	0	2	0

# Monitor Trends

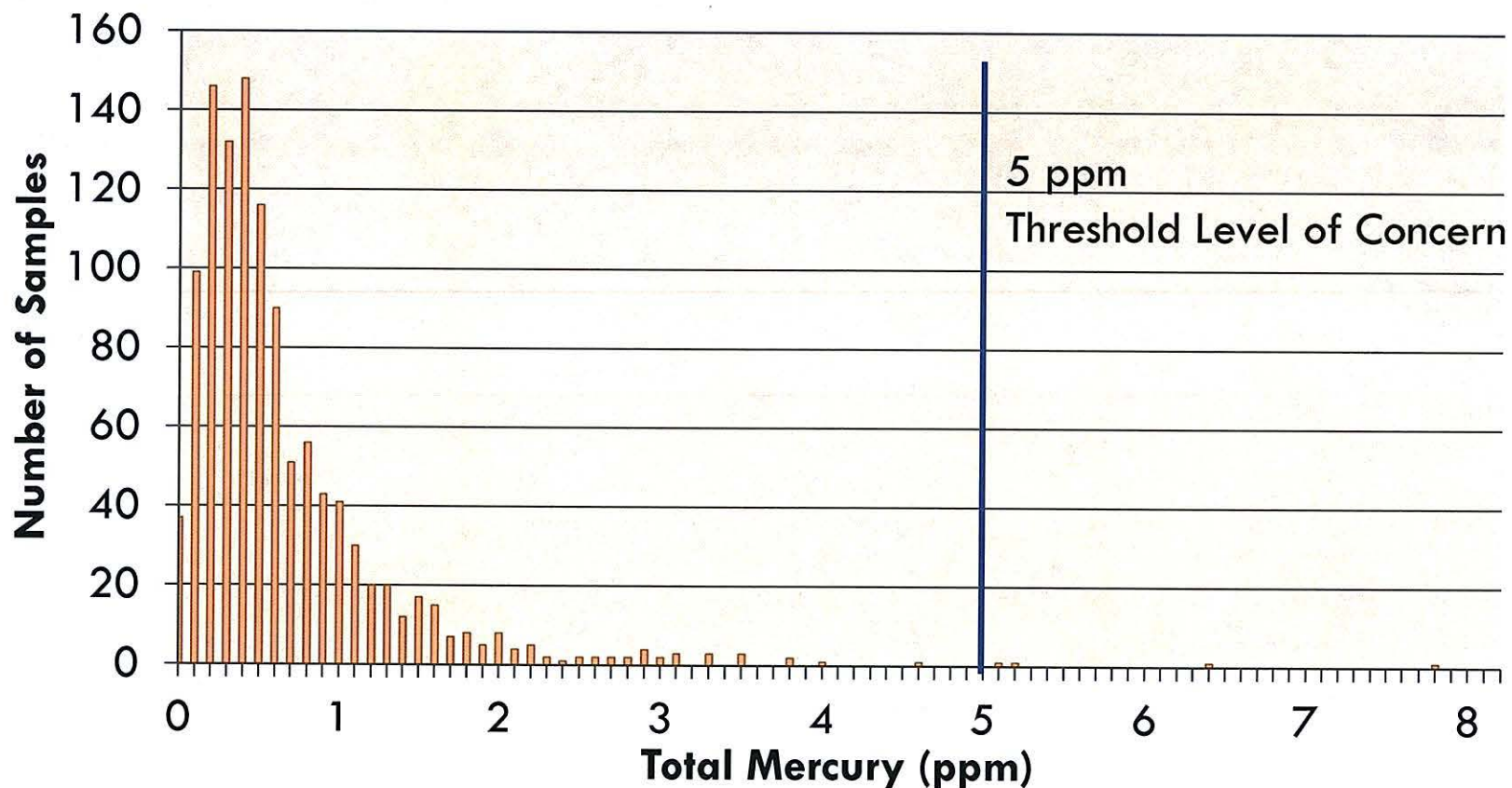
11

## Influenza by subtype 2014-2015



# Provide Reassurance

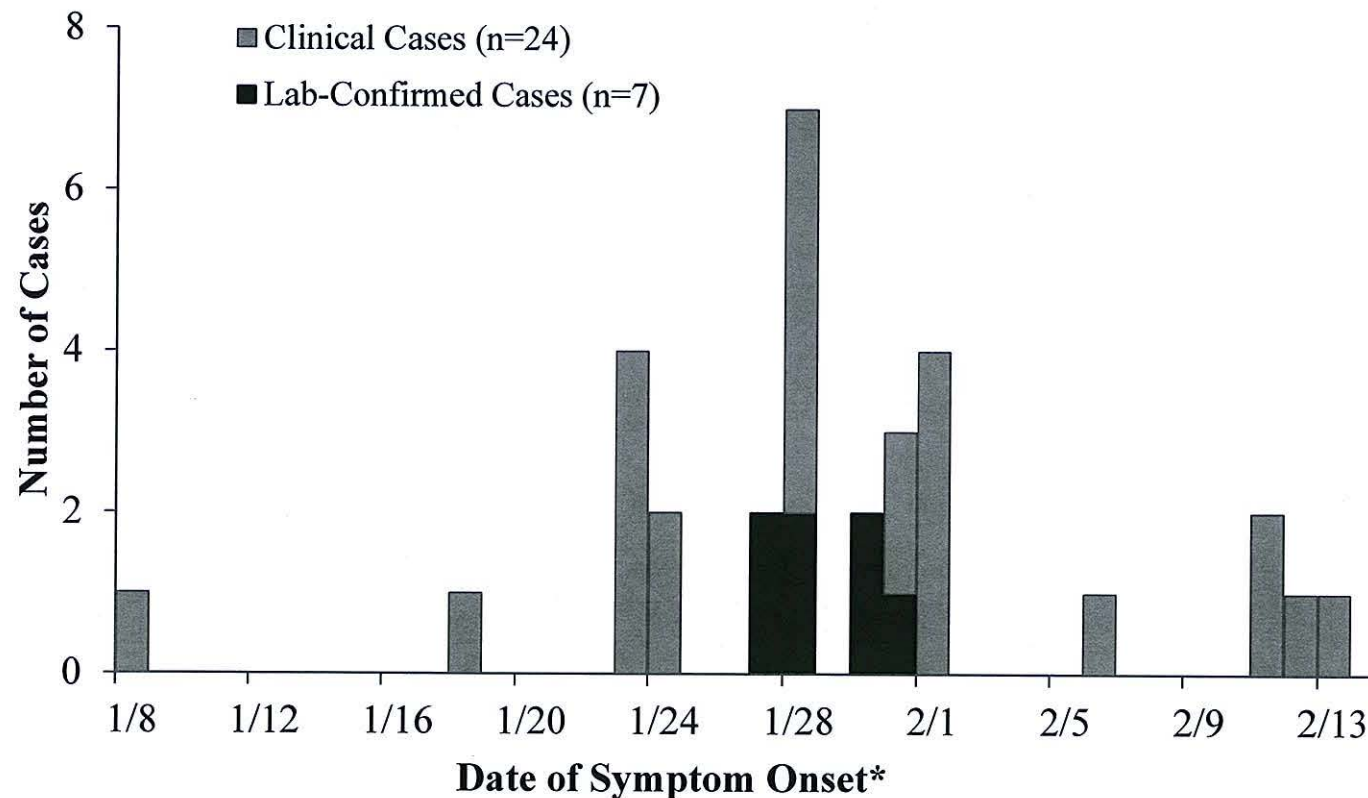
## Hair Mercury Concentrations among Women Aged 15–45 Years — Alaska, 2002–2014



# Detect Outbreaks

13

## Outbreak of Campylobacter Infection Associated with Consumption of Raw Milk – Alaska, 2013



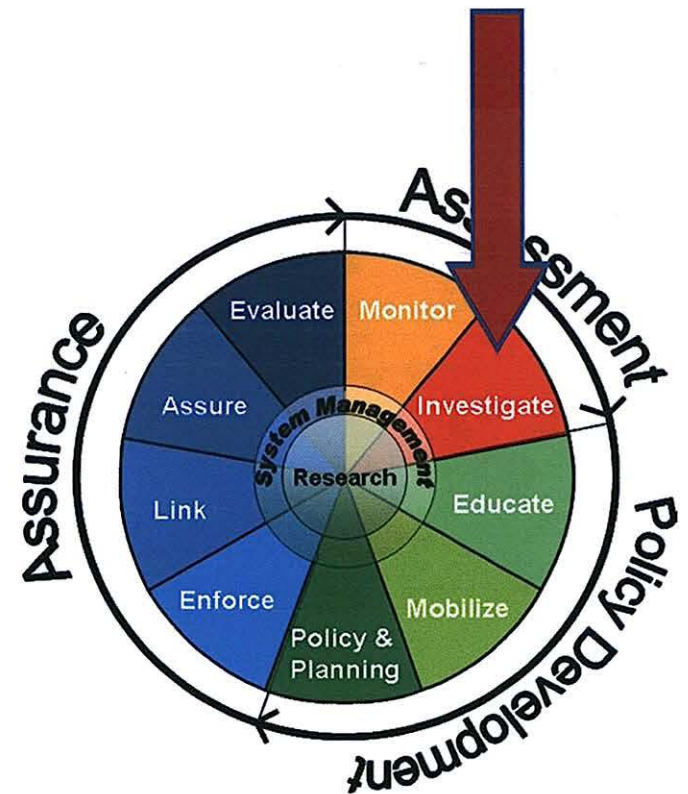
# Essential Service #2: Investigate

14

- Often prompted by an unusual clustering of cases
- For very serious diseases, only one case constitutes an outbreak and requires prompt investigation

## □ Eg., Botulism

- Clostridium botulinum
- Botulinum toxin
- Neuroparalytic Illness
- Potentially fatal



# Recent Outbreak Example

## 12/19/14

15

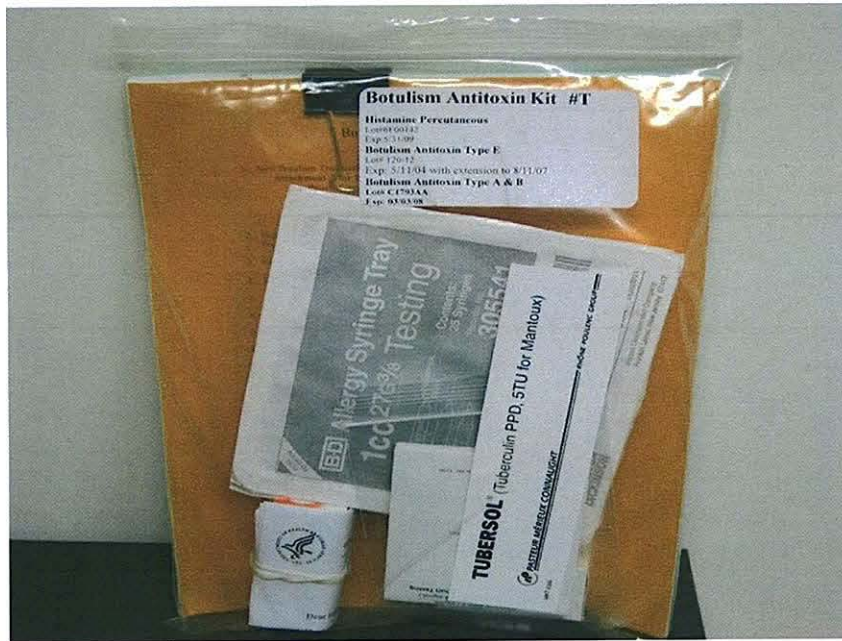
- 3:30 PM, Epi nurse gets call from YKDRH



# 12/19/14

16

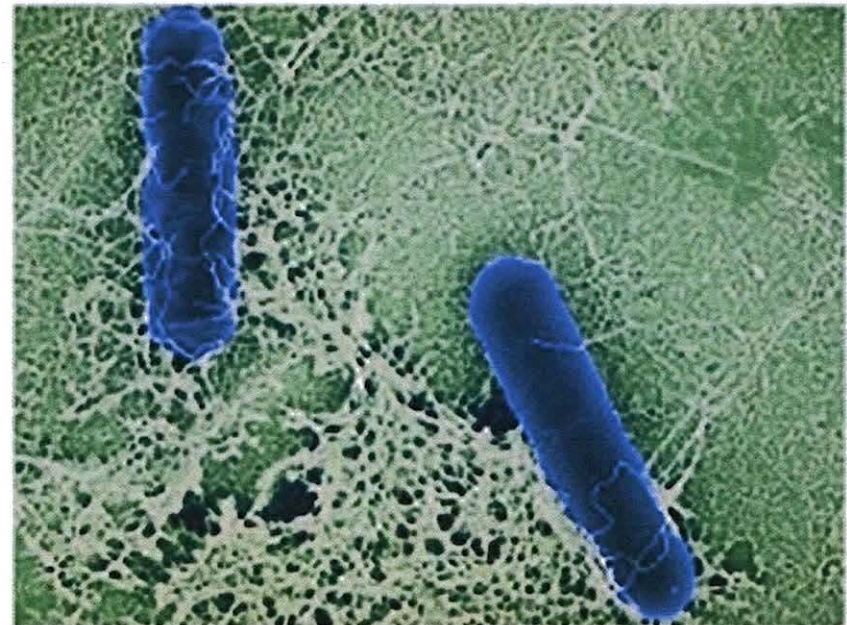
- Immediate consult SOE Chief/MD
- Action plan developed



# 12/21/14

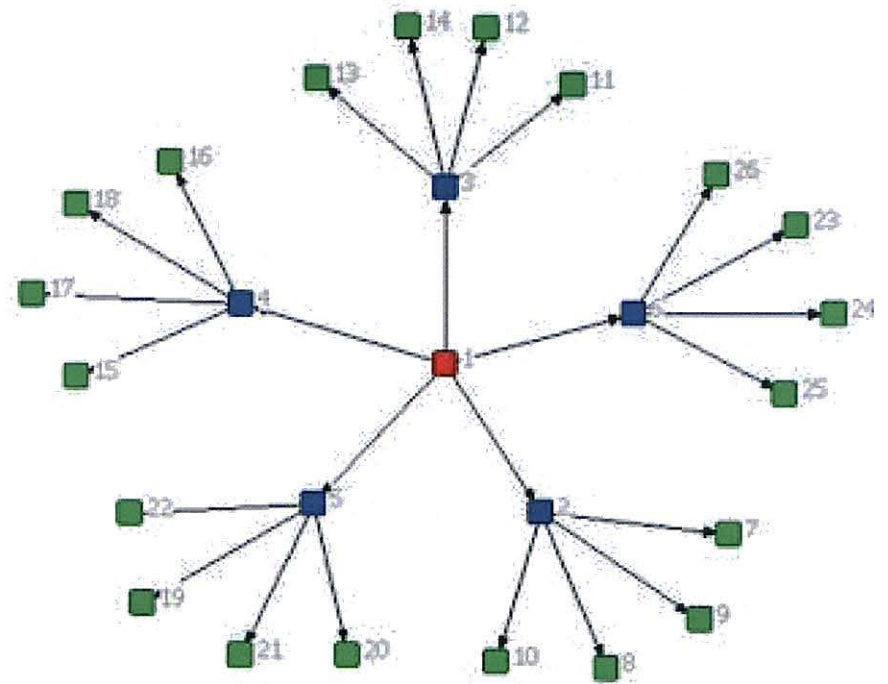
17

- YK MD reports the 8 yo female now has dilated, fixed pupils & excessive thirst
  - ▣ Considering antitoxin
  - ▣ Needs consult



# 12/22/14

18



# 12/23/14

19

- Ongoing monitoring of exposed persons
- Laboratory results highly positive for botulinum toxin



# 12/24/14

20

- Epi nurse flew to Dillingham
- Established a collaborative monitoring plan
- Media Interviews

## Alaska Dispatch News 3: Ar

NEWS POLITICS VOICES ARCTIC CULTURE SPORTS ADVENTURE MULT

Health

### Tainted seal oil linked to botulism outbreak in Southwest Alaska

Dave Bendinger | KDLG News | December 24, 2014

 Email  Print

Tweet

 +1  2

  Text Size

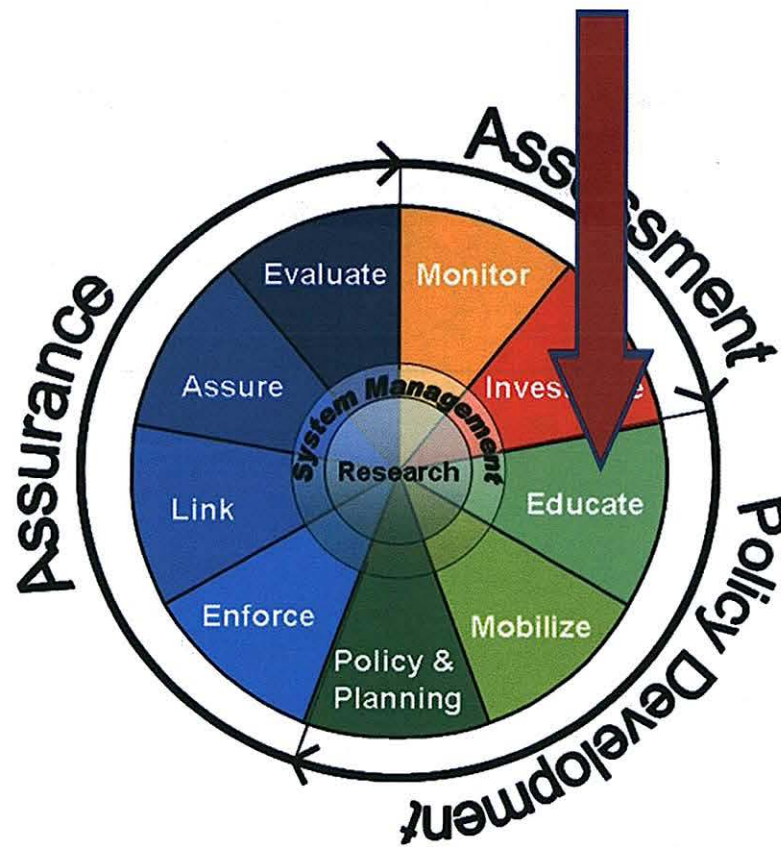
DILLINGHAM -- A botulism outbreak in Bristol Bay communities is being monitored by state and local health officials, according to the state Department of Epidemiology, which said Wednesday that more than 25 people have so far been linked to a batch of contaminated seal oil produced in the

## Summary of Botulism Surveillance and Investigation by Community, December 2014

Community	# Cases	# Possibly exposed	# Who ate oil	# Monitored X 10 days*
Village A	3	5	5	2
Village B	0	6	6	5
Dillingham area	0	12	12	12
Wasilla	0	2	0	0
<b>Total</b>	<b>3</b>	<b>25</b>	<b>23</b>	<b>19</b>

# Essential Service #3: Educate

22



# Working with the Media

23



## Alaska Dispatch News

NEWS POLITICS VOICES ARCTIC CULTURE SPORTS ADVENTURE MULTIMEDIA  
Obituaries Anchorage Fairbanks Mat-Su Crime Aviation Economy Energy Nation-World Science

### Dozens of Anchorage students sickened with stomach bug

Casey Grove | April 5, 2013

Email Print Tweet 3+1 1 + - Text Size

Health officials are investigating the outbreak of a mystery illness this week among Anchorage School District students that caused dozens to call in sick or get sent home with nausea, vomiting and diarrhea.

The hardest hit were Dimond and Service high schools, though the number of absentees was unknown Friday. It wasn't clear exactly how many students reported having similar symptoms or if other schools had seen outbreaks, a school district spokeswoman said. Some school staff members were also reportedly affected.

The outbreak has been characterized by sudden, unexpected vomiting. The illness does not appear to be life-threatening. Most of those affected have recovered in 12 to 48 hours, according to state health officials.

Friday alone, school nurses across the district sent home as many as 80 students with roughly the same symptoms from what Nancy Edtl, the Anchorage School District's head nurse, said appeared to be a

A microscopic image showing a cluster of blue, spherical virus particles with a textured surface, set against a light brown background.

# Epidemiology

To report  
Public Health  
Emergencies  
call  
(907) 269-8000  
or after hours  
(800) 478-0084



Conditions  
Reportable to  
Public Health  
Manual

New CR Forms



Report  
Suspected

## Spotlight

### › Marijuana Health Information

Tuesday, February 24, 2015

### › Measles Information

Wednesday, January 28, 2015

### › Ebola Virus Disease (EVD)

Wednesday, November 26, 2014



### › Alaska Vaccine Assessment Program

Friday, October 10, 2014

### › AVAP Information for Providers

Monday, November 03, 2014

### › VacTrAK Reminder Recall – Basics

Wednesday, March 12, 2014



Influenza Information

## Bulletins

### › HIV Update — Alaska, 2014

Wednesday, April 01, 2015

### › Trichinellosis Cases — Alaska, 2005–2014

Wednesday, March 18, 2015

### › Marijuana Use among Women Delivering Live Births in Alaska, 2002–2011

Tuesday, February 24, 2015

### › Suspected Measles Case in Alaska — January 2015

Thursday, February 05, 2015

### › Pertussis Outbreak in the Interior Region — Alaska, Fall 2014

Wednesday, January 28, 2015

### › Chickenpox (Varicella) Update

Tuesday, January 13, 2015

### › Paralytic Shellfish Poisoning — Alaska, 1993–2014

Wednesday, January 07, 2015

## Highlights

- › Conditions Reportable
- › Epidemiology Bulletins
- › Confidentiality & Privacy Protection Resources
- › Epidemiology Publications
- › Links of Interest
- › Epidemiology Contact List

## Epidemiology Programs

- › Environmental Public Health
- › Health Impact Assessment
- › HIV & Sexually Transmitted Disease
- › Immunization
- › Infectious Diseases & Tuberculosis Control
- › Injury Surveillance

## Public Health

- › Public Health Home
- › Director's Office
- › Chronic Disease Prevention

## Alaska Public Health Advisory

### Spike in Varicella (Chickenpox) Cases, Kenai Peninsula — Fall 2012

Distributed via AK PHAN  
September 28, 2012, 11:15 AM ADT  
AK PHAN 002-2012-09-28

Varicella (chickenpox) is a condition reportable to the Alaska Section of Epidemiology (SOE) by health care providers and laboratories. Since January 1, 2012, over 50 confirmed and probable cases have been reported to SOE statewide. **Of the nine cases reported in September, all were among unvaccinated or incompletely vaccinated children living in Homer and Soldotna.** The six Homer cases occurred in three separate clusters involving several schools.

The recently reported cases occurred among children attending different schools and unrelated pre-school aged children. This suggests that there is ongoing transmission in the wider community and that additional cases are likely to occur throughout the Kenai Peninsula.

For most healthy people, varicella (chickenpox) is usually a mild rash illness, but it has the potential for serious complications and death, especially for certain high risk groups – infants, adolescents, adults, pregnant women, and the immune compromised.


The primary tools to contain an outbreak are vaccination and isolation of ill and at-risk people.

**The purpose of this advisory is to:**

1. Remind health care providers that varicella is a condition reportable to SOE;
2. Encourage health care providers, parents, school and daycare administrators to review children's immunization records and ensure that recommended doses are given to susceptible children;
3. Encourage anyone with varicella to stay away from school or other congregate settings until lesions have crusted over, especially settings where vulnerable populations might be; and

# Epi Bulletins

**State of Alaska  
Epidemiology**




# Bulletin

**Department of Health and Social Services**  
William J. Streur, Commissioner  
Ward B. Hurlburt, MD, MPH, CMO  
3601 C Street, Suite 540  
Anchorage, Alaska 99503  
<http://www.epi.Alaska.gov>

**Division of Public Health**  
Kerre L. Shelton, Director  
Local (907) 269-8000  
24 Hour Emergency (800) 478-0084

**Editor:**  
Joe McLaughlin, MD, MPH  
Louisa Castrodale, DVM, MPH  
Bulletin No. 8 June 3, 2014

**State of Alaska  
Epidemiology**



# Bulletin

**Department of Health and Social Services**  
William J. Streur, Commissioner  
Ward B. Hurlburt, MD, MPH, CMO  
Suite 540  
Anchorage, Alaska 99503  
<http://www.epi.Alaska.gov>

**Division of Public Health**  
Kerre L. Shelton, Director  
Local (907) 269-8000  
24 Hour Emergency (800) 478-0084


**Editors:**  
Joe McLaughlin, MD, MPH  
Louisa Castrodale, DVM, MPH  
Bulletin No. 6 Ma

## Drowning Deaths in Alaska

**Background**  
A descriptive study on unintentional drowning deaths in Alaska during 2000–2006 found that the statewide average annual drowning rate was 8.9 per 100,000 persons, which was over seven times the national rate of 1.2 per 100,000 persons during that period.<sup>1,2</sup> During 2001–2010, Alaska experienced a statistically significant decline in drowning death rates among both adults and children (Figure 1);<sup>3</sup> however, in 2010 Alaska still had the highest drowning rate in the nation.<sup>2</sup> This *Bulletin* provides an update on drowning deaths in Alaska.

- 25 (11%) of the victims were riding ATVs (n=8) or snowmachines (n=17), and 3/17 (18%) deaths associated with snowmachining occurred while attempting to hydroplane a snowmachine across an open body of water;
- 20 (9%) of victims were in bathtubs or hot tubs, of which, 19 (95%) were adults and 12 (60%) involved alcohol, illicit drugs, or prescribed medication(s); and
- 16 (7%) of the victims were children aged 0–9 years, of which, 9 (38%) were unattended prior to the incident.

**State of Alaska  
Epidemiology**




# Bulletin

**Department of Health and Social Services**  
Valerie J. Davidson, Commissioner  
3601 C Street, Suite 540  
Anchorage, Alaska 99503  
<http://www.epi.Alaska.gov>

**Division of Public Health**  
Jay C. Butler, MD, Chief Medical Officer and Director  
Local (907) 269-8000  
24 Hour Emergency (800) 478-0084

**Editor:**  
Joe McLaughlin, MD, MPH  
Bulletin No. 1 Janu

**State of Alaska  
Epidemiology**



# Bulletin

**Department of Health and Social Services**  
Valerie J. Davidson, Commissioner  
3601 C Street, Suite 540  
Anchorage, Alaska 99503  
<http://www.epi.Alaska.gov>

**Division of Public Health**  
Jay C. Butler, MD, Chief Medical Officer and Director  
Local (907) 269-8000  
24 Hour Emergency (800) 478-0084

**Editors:**  
Joe McLaughlin, MD, MPH  
Louisa Castrodale, DVM, MPH  
Bulletin No. 3 January 28, 2015

## Paralytic Shellfish Poisoning — Alaska, 1993–2014

**Background**  
On December 28, 2014, the Section of Epidemiology (SOE) was notified of a case of paralytic shellfish poisoning (PSP) in a middle-aged man from Southeast Alaska who consumed four butter clams that he harvested from a local beach a few days before. His symptoms consisted of paresthesias of the lips, which started about 30 minutes after shellfish

The most frequently implicated shellfish were mussels, and cockles (Table). Of the 49 during which shellfish were tested, the saxitoxin from non-detect to 19,418 µg per 100g. Ninety values (i.e., >3,500 µg per 100g) were tested. Dose-response analyses were not done because shellfish consumed, patient body weight

## Pertussis Outbreak in the Interior Region — Alaska, Fall 2014

**Background**  
A vaccine-preventable disease, pertussis (or whooping cough) remains endemic nationally, with cyclical peaks in disease incidence occurring every 3–5 years.<sup>1</sup> Before pertussis vaccines became widely available in the 1940s, about 200,000 U.S. children became ill with pertussis annually, and about 9,000 died. Currently, 10,000–40,000 U.S. cases and 10–20 deaths are reported annually.<sup>1</sup> Many states, including Alaska,

strains of the bacterium may be critical in developing efficacious vaccines.<sup>6</sup> Continued outbreaks in communities likely to occur when pertussis is widely circulating present, age-appropriate pertussis vaccinations with DTaP are still the best protection against infection and disease. If pertussis has flares in a community, prompt antibiotic treatment and prophylaxis may limit spread.

# Bulletin Recommendations and Reports

## Fish Consumption Advice for Alaskans

## A Risk Management Strategy To Optimize the Public's Health

Ali K. Hamade, PhD, DABT  
on behalf of the  
Alaska Scientific Advisory Committee for Fish Consumption

Section of Epidemiology  
Division of Public Health  
Department of Health and Social Services  
State of Alaska

Updated July 21, 2014

## Guidelines for Alaska Women and Children

Mix and match your fish meals for up to:

**12 POINTS PER WEEK**

Note: A *meal size* is 6 ounces, uncooked weight (or roughly the size of a deck of cards).

Alaska fish is rich in nutrients and good for you. State health officials recommend that everyone eat fish at least twice per week. However, all fish contain some mercury, a toxic metal that can harm the developing nervous systems of unborn babies and children. Because of this, women who are or can become pregnant, nursing mothers and children should follow these guidelines to limit their mercury intake. Everyone else can eat as much seafood as they like.

PER MEAL  
**0**  
Points

### Unrestricted amounts

Arctic Cisco	Pacific Ocean Perch
Big Skate	Rainbow Trout
Black Rockfish	Rougheye Rockfish
Broad Whitefish	Sablefish
Dolly Varden	Salmon, Chinook (King)
Dusky Rockfish	Salmon, Chum
Grayling	Salmon, Pink
Halibut <40 pounds	Salmon, Red (Sockeye)
Humpback Whitefish	Salmon, Silver (Coho)
Least Cisco	Sheefish
Lingcod <35 inches	Walleye Pollock
Pacific Cod	

PER MEAL  
**3**  
Points

Halibut 40–80 pounds  
Lake Trout  
Lingcod 35–40 inches

PER MEAL  
**4**  
Points

Halibut 80–140 pounds  
Lingcod 40–45 inches  
Longnose Skate

PER MEAL  
**6**  
Points

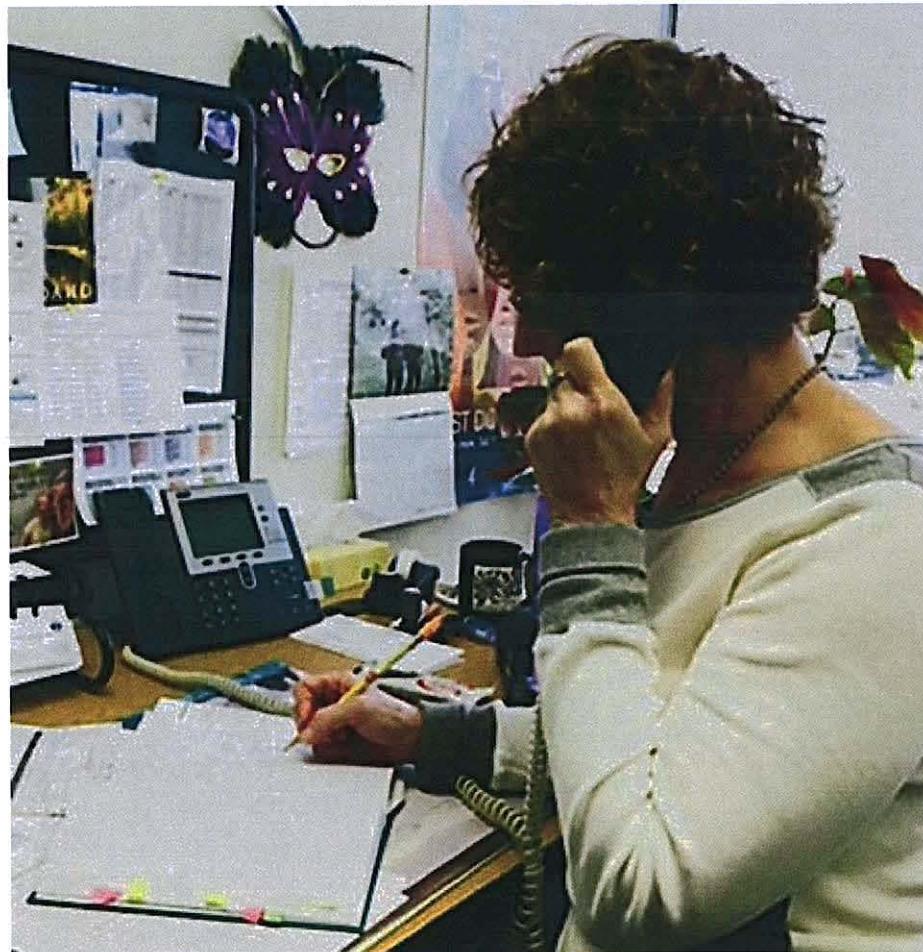
Yelloweye Rockfish  
Halibut 140–220 pounds

PER MEAL  
**12**  
Points

Halibut >220 pounds  
Lingcod >45 inches  
Salmon Shark  
Spiny Dogfish

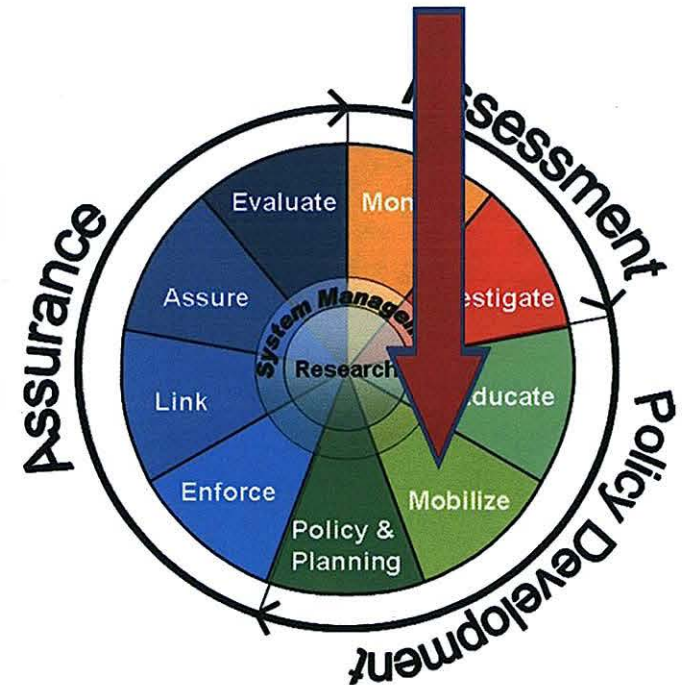
# Phone Calls from the Public

28



# Essential Service #4: Mobilize Community Partnerships

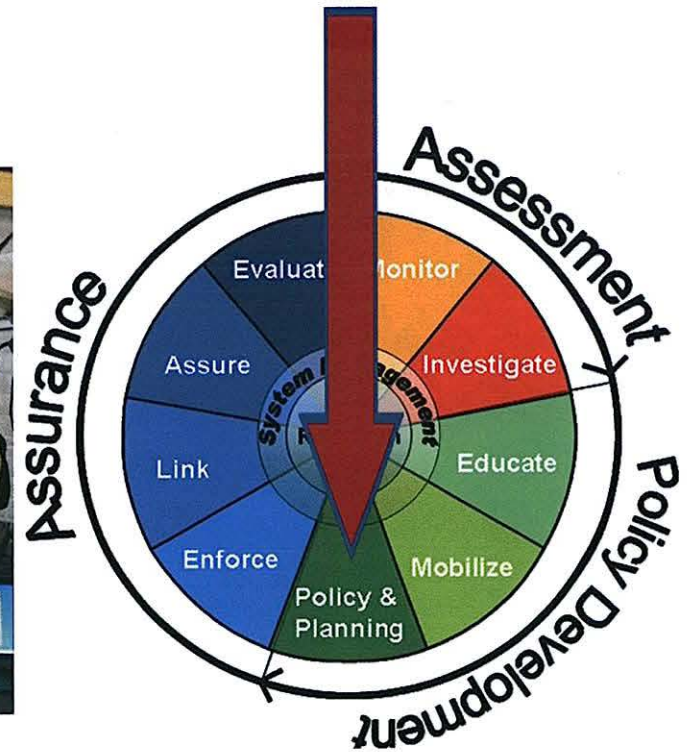
29



# Essential Service #5: Develop Policies and Plans that Support Individual/Community Health

30

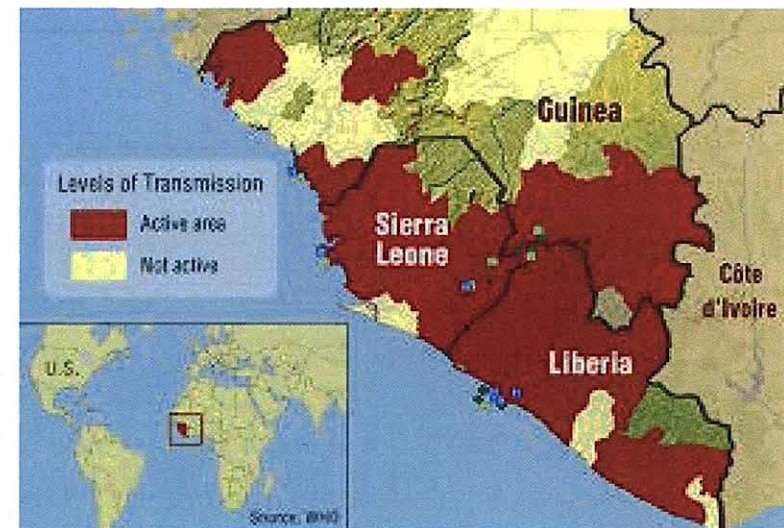
- Emergency response planning
  - ▣ Infectious diseases
  - ▣ All hazards



# The 2014 Ebola Epidemic

31

- Largest Ebola outbreak in history
- Primarily affecting 3 West African countries
- U.S. involvement



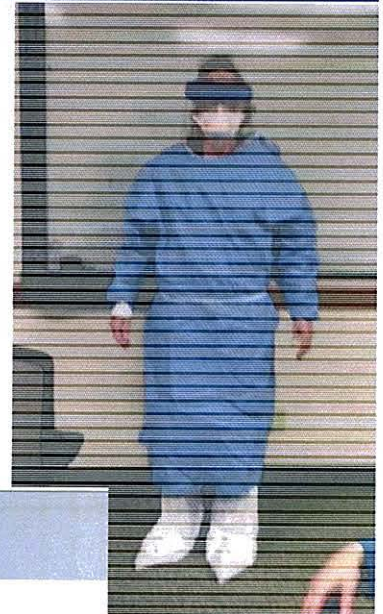
# Case Counts and Deaths in Guinea, Liberia, and Sierra Leone (4/10/15)

32

<b>Country</b>	<b>Total Cases (Suspected, Probable, and Confirmed)</b>	<b>Laboratory- Confirmed Cases</b>	<b>Total Deaths</b>
<b>Guinea</b>	<b>3,524</b>	<b>3,096</b>	<b>2,337</b>
<b>Liberia</b>	<b>9,862</b>	<b>3,151</b>	<b>4,408</b>
<b>Sierra Leone</b>	<b>12,170</b>	<b>8,559</b>	<b>3,842</b>
<b>Total</b>	<b>25,556</b>	<b>14,806</b>	<b>10,587</b>

# Ebola Preparedness in Alaska

- Ebola Task Force created
- Active monitoring of travelers
- Website – [epi.alaska.gov](http://epi.alaska.gov)
- Lectures
- Exercises



## Epidemiology

Public Health > Epidemiology > Infectious Disease > Ebola

### **Ebola Virus Disease (EVD)**

Ebola disease is caused by the Ebola virus and is one of a number of hemorrhagic fever diseases. Ebola disease causes severe illness in which 50-90 percent of those infected die. Ebola disease was first discovered in 1976 in what is now the Democratic Republic of Congo near the Ebola River.

Ebola symptoms include fever, headache, joint and muscle aches, weakness, diarrhea, vomiting, stomach pain and lack of appetite. Some patients have a rash, red eyes, hiccups, cough, sore throat, chest pain, difficulty breathing or swallowing, or bleeding inside and outside the body.

Symptoms usually start 4-10 days after coming into contact with Ebola virus but can occur as early as 2 days to up to 21 days after exposure.

# DHSS Ebola Response Plan

## Contents

Introduction.....

Annex A. Travel Screening.....

Annex B. Infection Control (CDC Guidelines)

Annex C. Notification Protocol.....

Annex D. Air and Ground Transportation.....

Annex E. Active Monitoring, Isolation, and C

Annex F. Specimen Management and Labora

Annex G. Medical Waste Management.....

Annex H. Communications.....

Annex I. Community Outreach.....

Annex J. Fatality Management.....

### Recommended actions for people without symptoms

RISK LEVEL	PUBLIC HEALTH ACTION		
	Monitoring	Restricted Public Activities	Restricted Travel
<b>HIGH risk</b>	Yes- Direct Active Monitoring	Yes	Yes
<b>SOME risk</b>	Yes- Direct Active Monitoring	Case-by-case assessment	Case-by-case assessment
<b>LOW risk</b>	Yes- Active Monitoring for some; Direct Active Monitoring for others	No	No
<b>NO risk</b>	No	No	No

36

40

# All Hazards Example

35

## Epidemiology

Public Health > Epidemiology > Environmental Health > Radiation

### Fukushima Radiation Information for Alaskans

The nuclear reactor accident in northeast Japan caused by the March 11, 2011 earthquake and tsunami released radioactive material into the North Pacific Ocean and neighboring environments. This event has raised concerns about whether radiation from the nuclear reactor will impact Alaska's air, water, and seafood.

Alaska-specific information about Fukushima-related radiation exposure is available at the links below:

- » [Is the air safe?](#)
- » [Is the water safe?](#)
- » [Are the fish and other seafood safe to eat?](#)
- » [Are wild foods safe to eat?](#)
- » [What about marine debris?](#)

State of Alaska  
Epidemiology



# Bulletin

Department of Health and Social Services  
William J. Streur, Commissioner

3601 C Street, Suite 540  
Anchorage, Alaska 99503

<http://www.epi.alaska.gov>

Division of Public Health

Ward Hurlbut, MD, MPH, CMO Director

Local (907) 269-8000

24 Hour Emergency (800) 478-0084

Editors:

Joe McLaughlin, MD, MPH

Louisa Castrodale, DVM, MPH

Bulletin No. 5 March 16, 2011

### The 2011 Japan Earthquake and Tsunami and Public Health Preparedness

#### Introduction

The powerful earthquake and tsunami that severely damaged

the co  
remind

#### Radiation Sickness

Radiation sickness, known as acute radiation syndrome

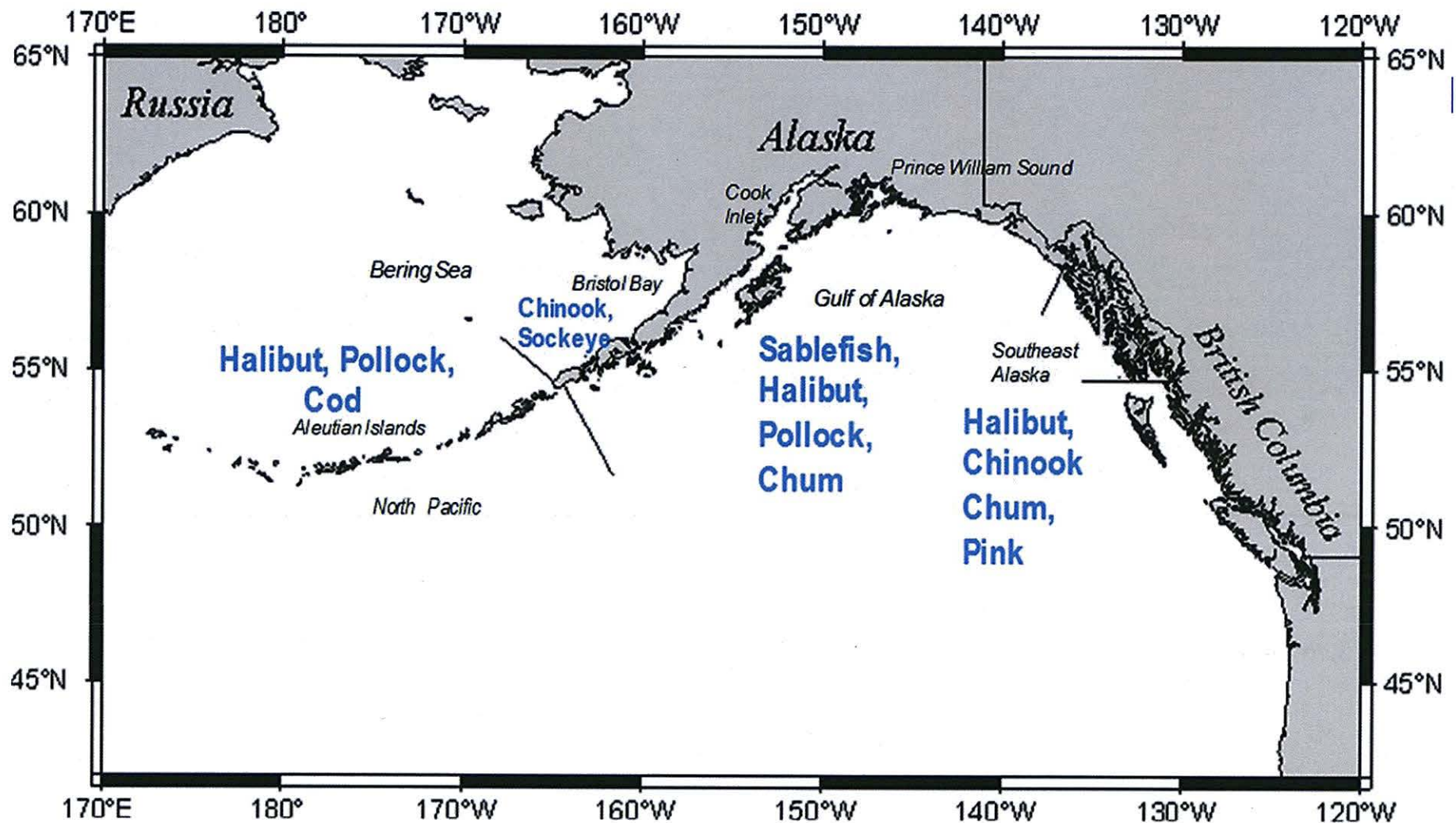


#### INFORMATION ABOUT RADIATION AND WILD FOODS SAFETY IN ALASKA

April 27, 2011

The nuclear reactor accident in northeast Japan caused by the March 11, 2011, earthquake and tsunami has raised some concerns about radiation from Japan reaching Alaska. Alaska's health, wildlife, and environmental agencies are working together to provide information for subsistence users, hunters, and

# Where were samples collected?



# Water Samples Tested for Radiation

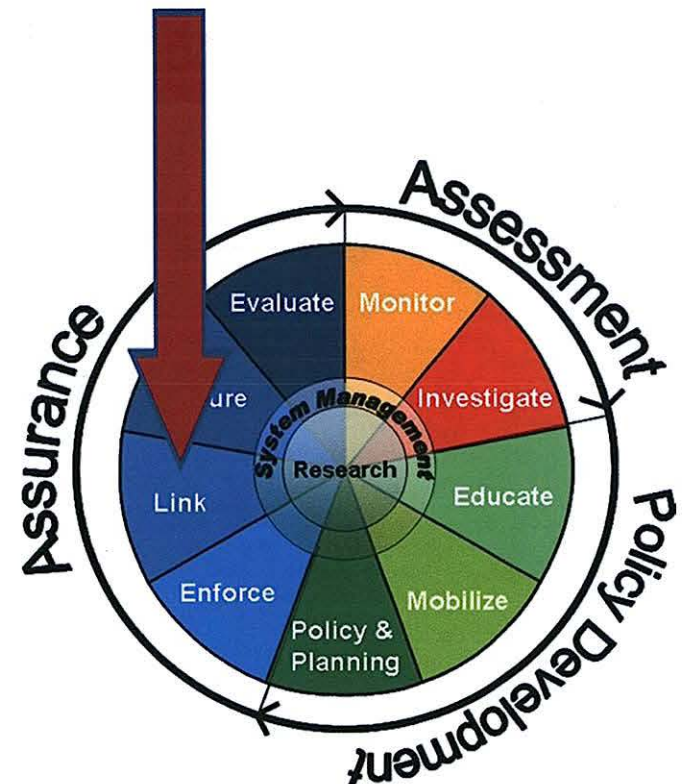
37



# Essential Service #7: Linking People to Needed Services and Assure Access to Care

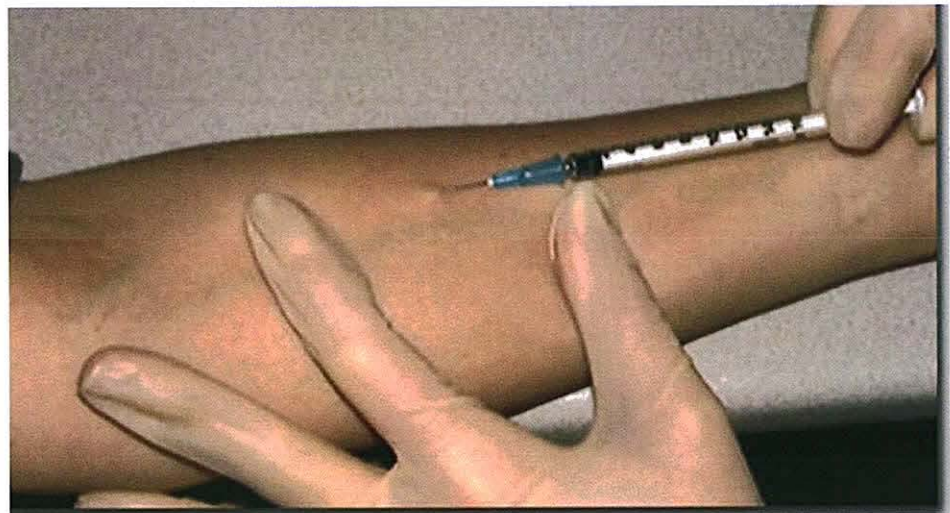
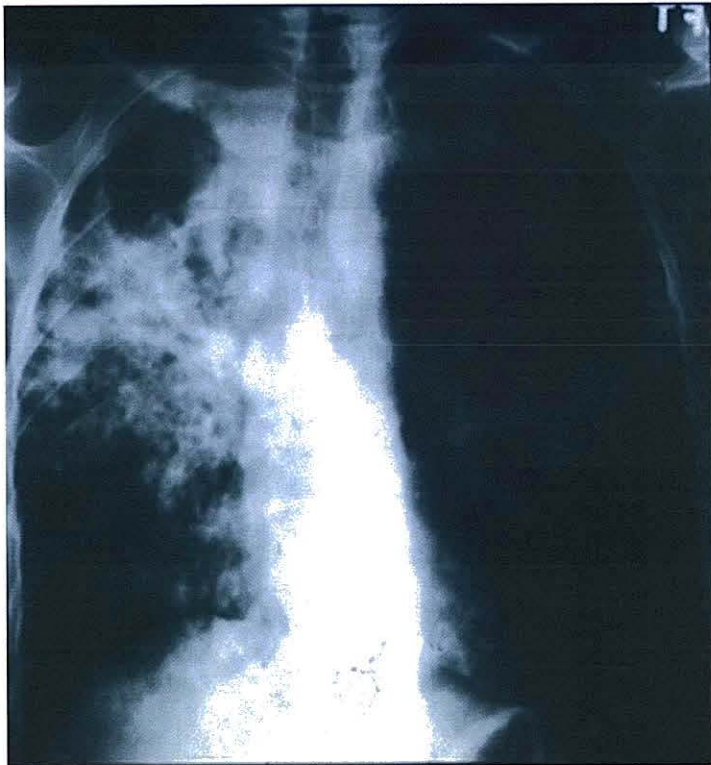
38

- Infectious Disease
- HIV/STD
- Immunization



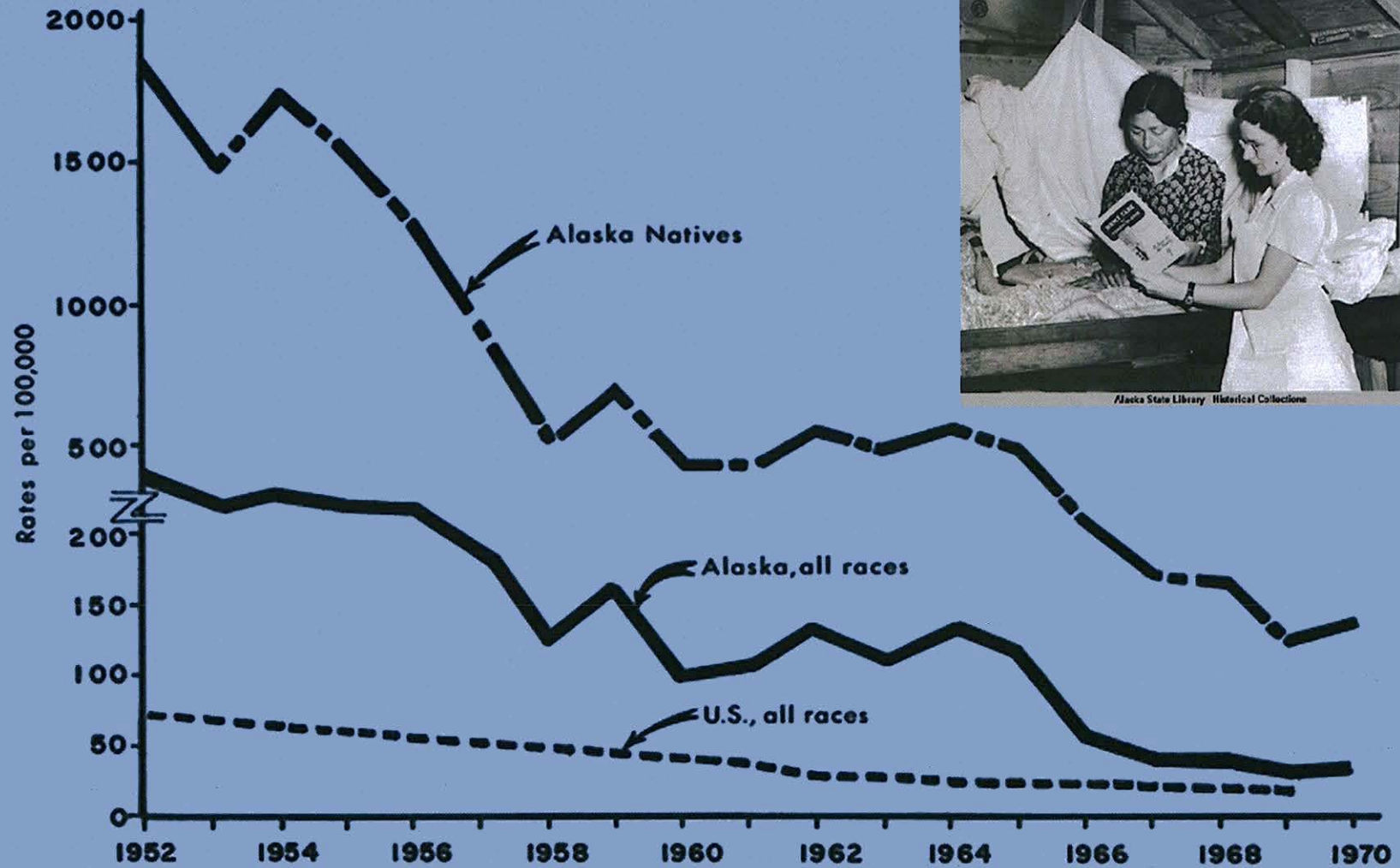
# Tuberculosis Control Program

- Case manage all suspect and active TB cases
- Perform outbreak investigations



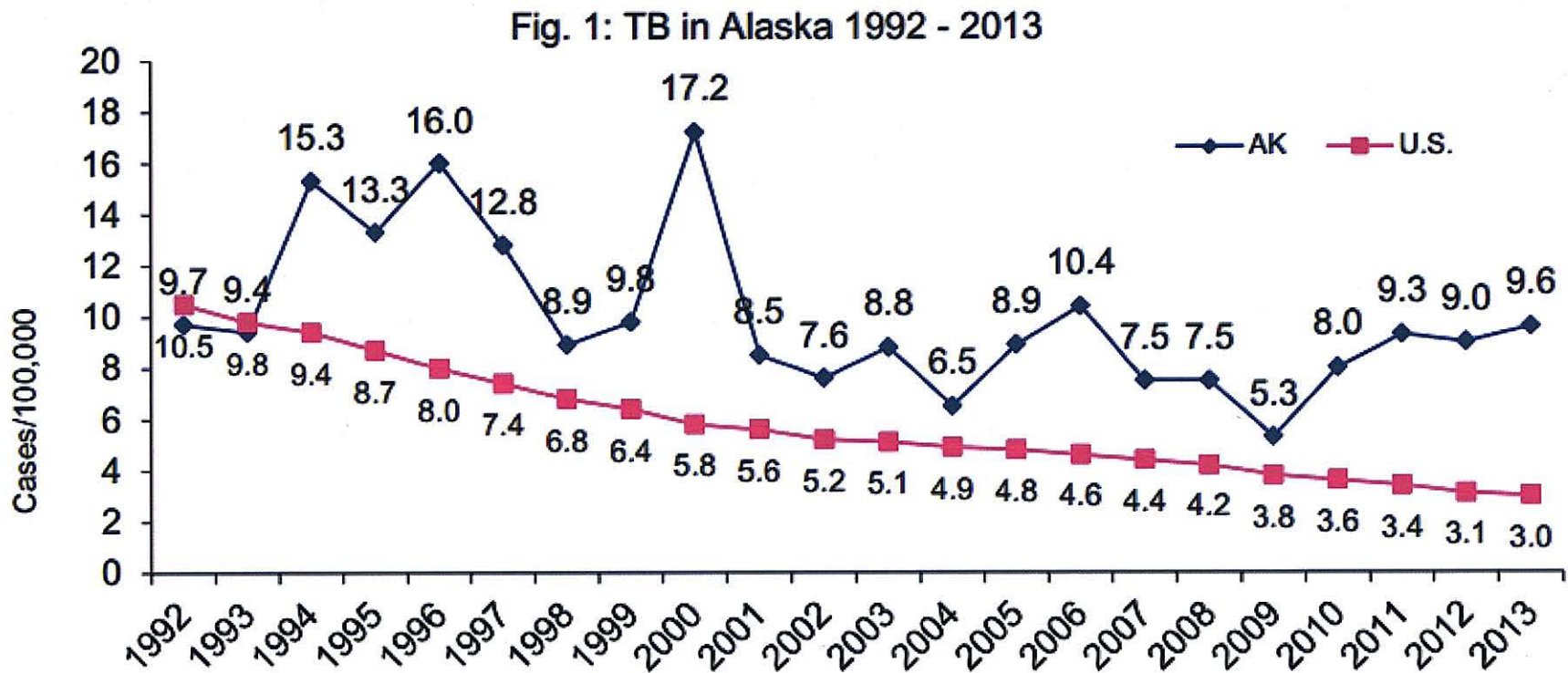
**Figure 3. Tuberculosis incidence rates, 1952-70**

Johnson MW, Health Serv Rep. 1973 March; 88(3): 247-254.

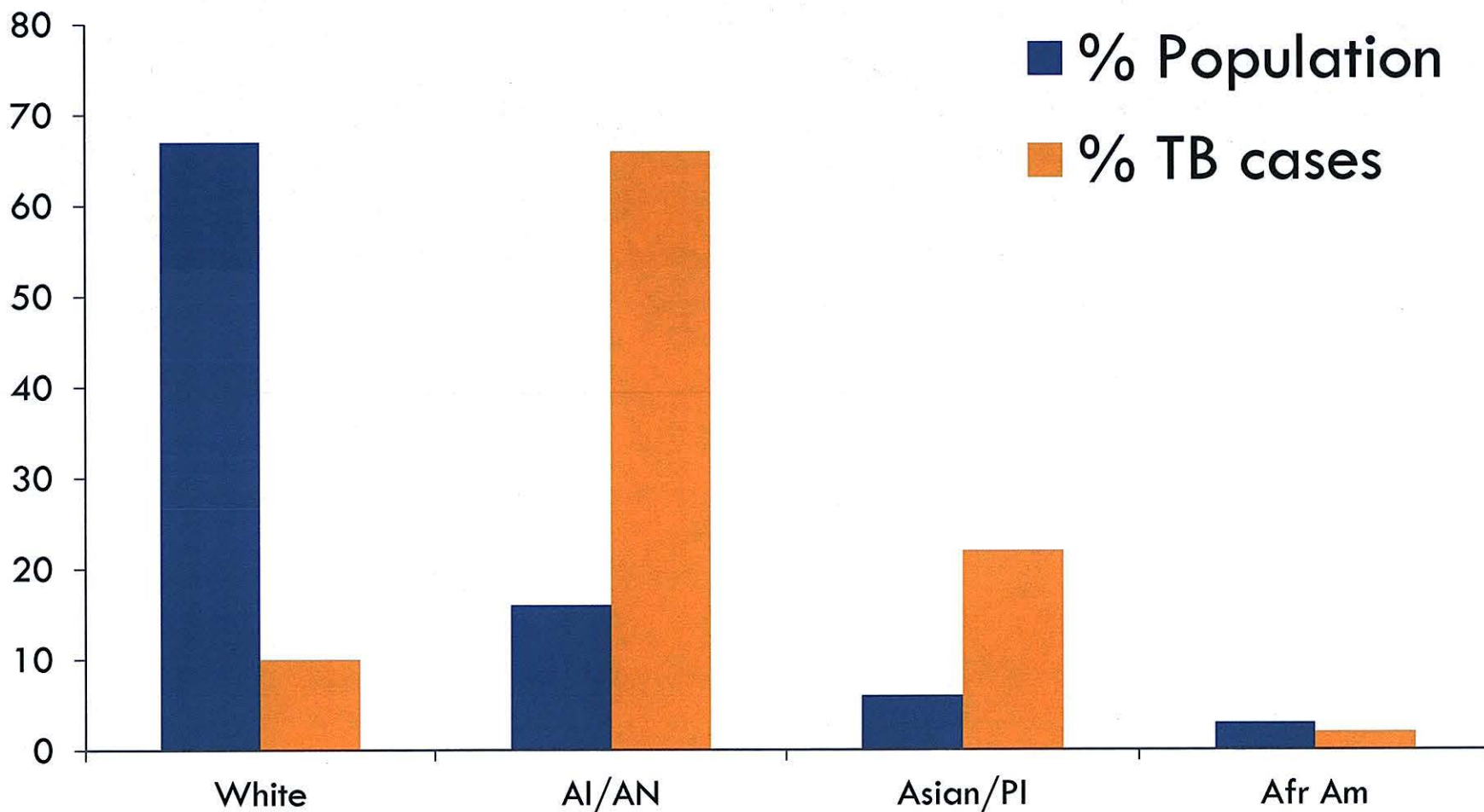


**Figure 4. Cases of active tuberculosis by diagnostic category, all races, Alaska, 1964-69**

# Active TB Rate by year, Alaska, 1992-2013



# AK TB Cases, by Race, 2001-2010



# HIV/STD Program—Direct Patient Services and Linkage-to-Care

- Perform disease investigative follow-up on HIV, syphilis, gonorrhea, and chlamydia cases

Human Immunodeficiency Virus (HIV) Anatomy

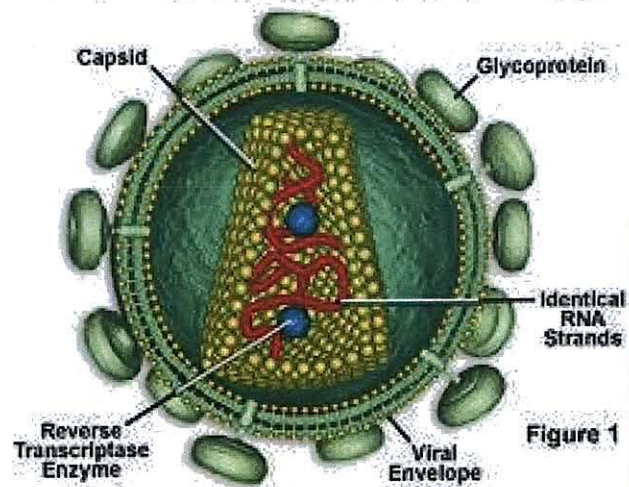
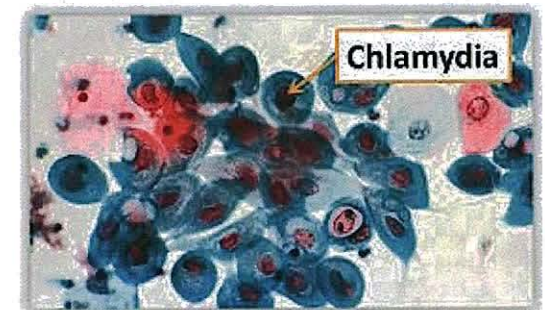
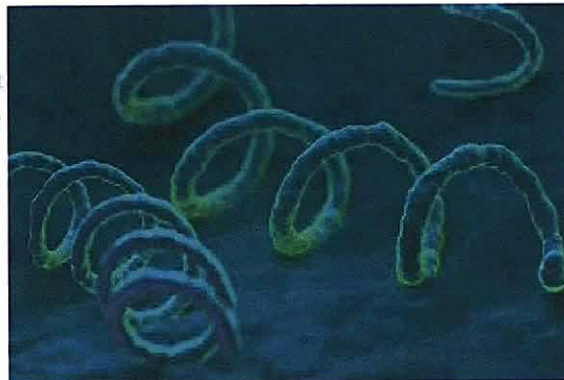
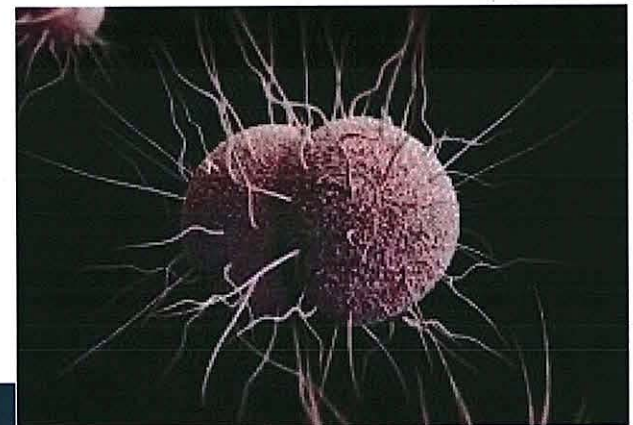
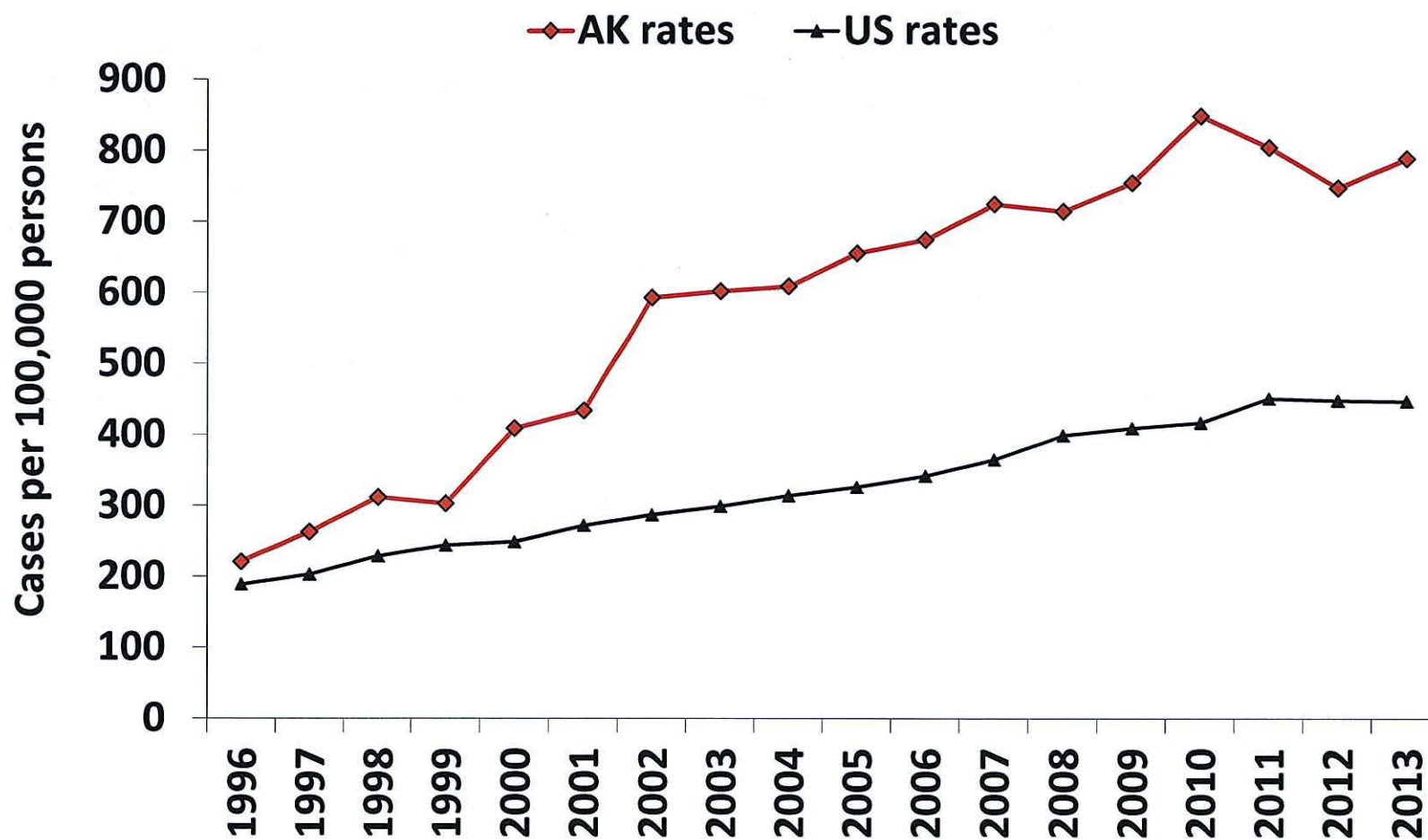


Figure 1



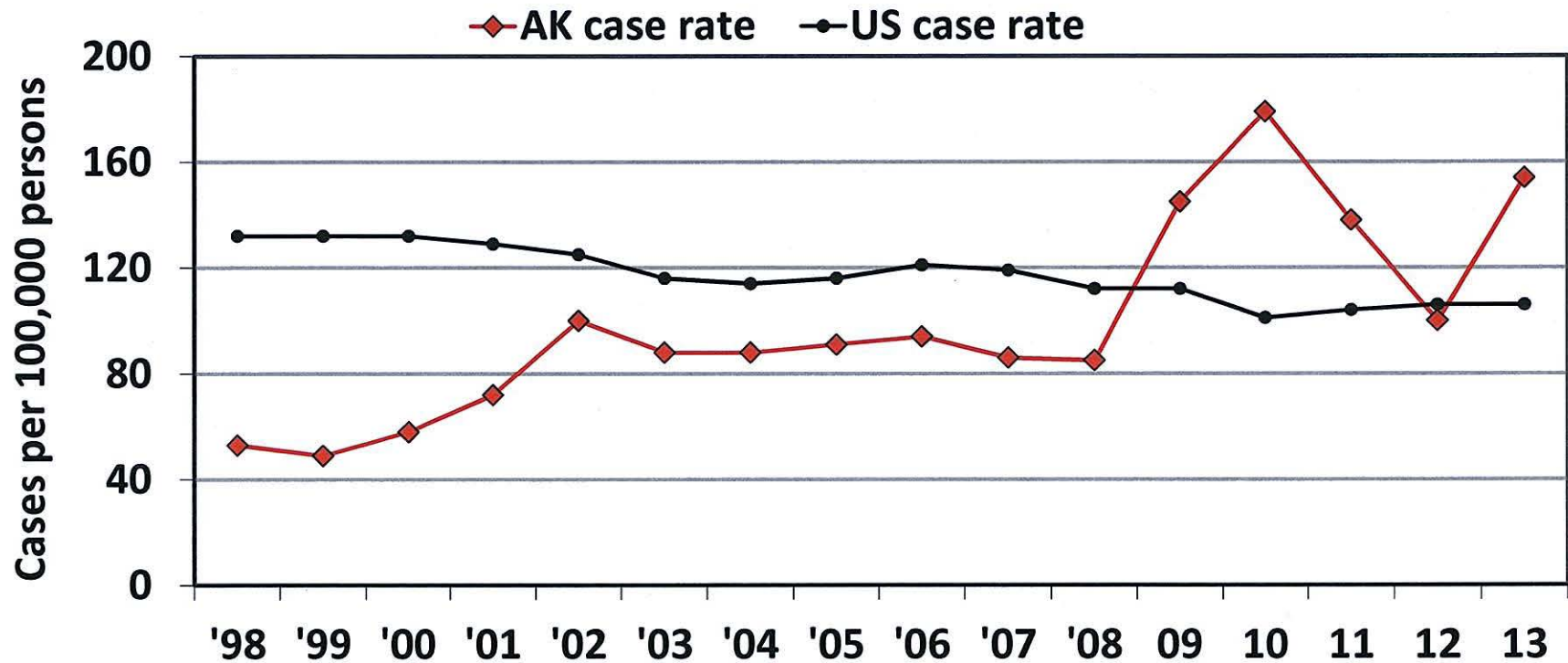
# Chlamydia Infection Rates — Alaska and the United States, 1996–2013

Alaska HIV/STD Program



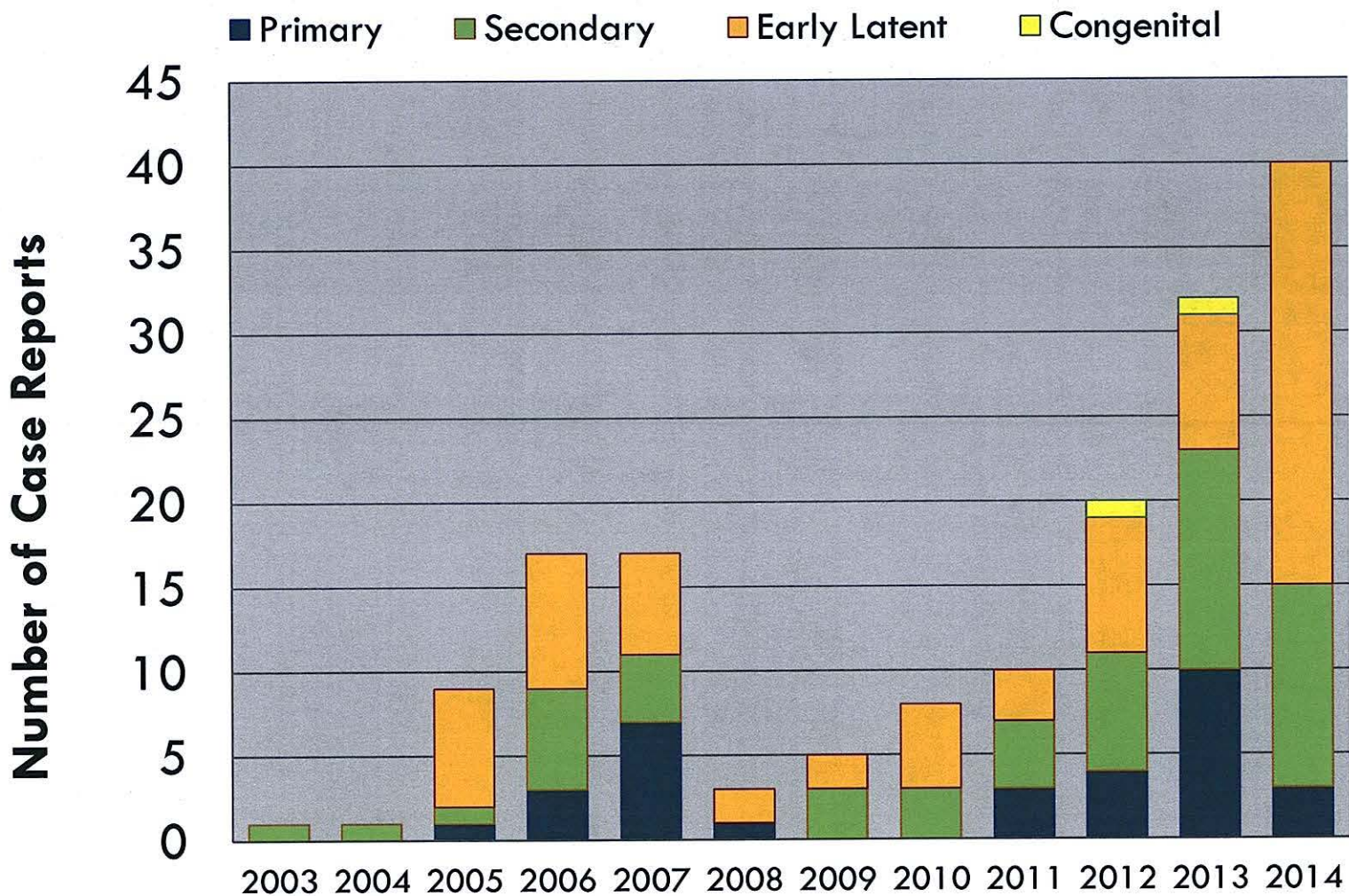
# Gonococcal Infection Rates — Alaska and the United States, 1998–2013

Alaska HIV/STD  
Program

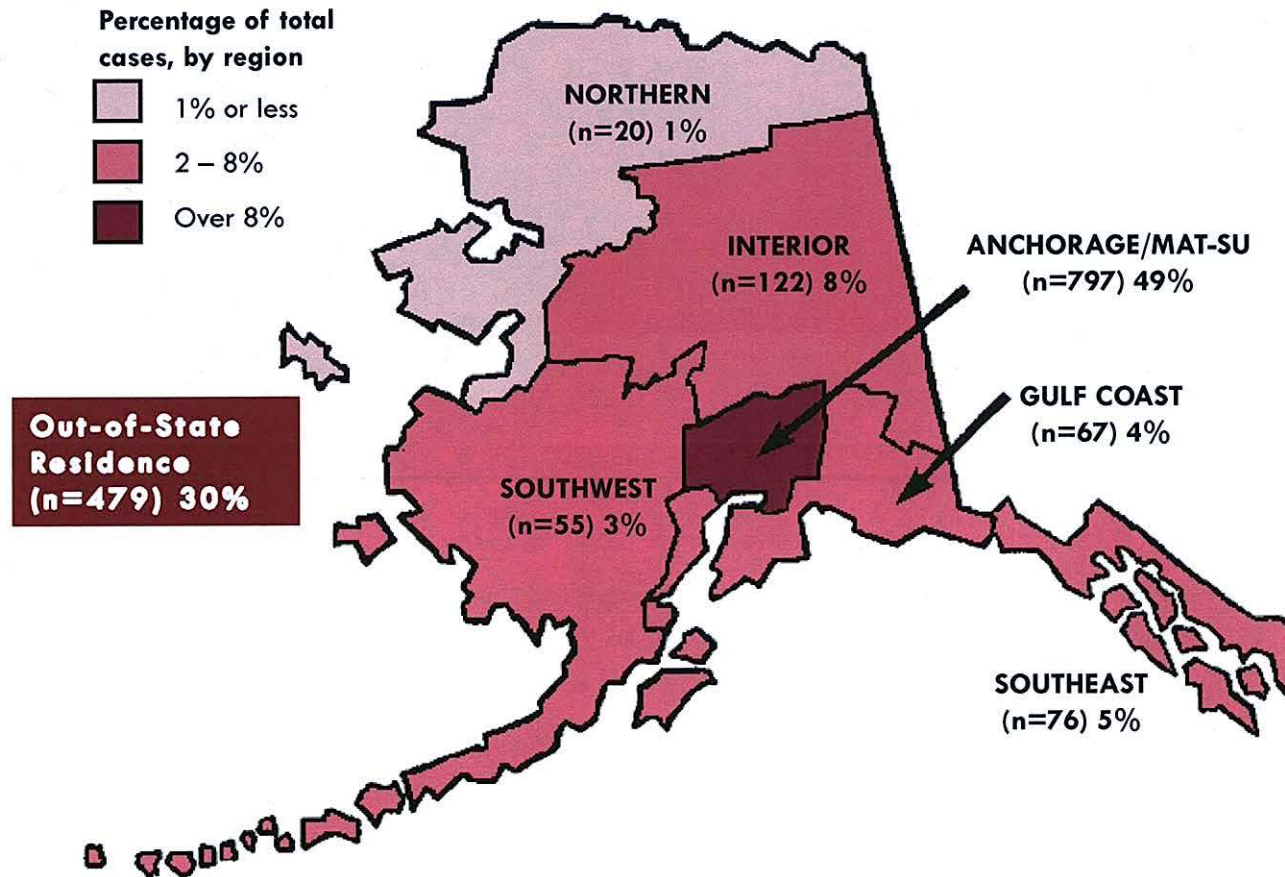


# Primary, Secondary, Early Latent and Congenital Syphilis Cases, Alaska, 2003-2014

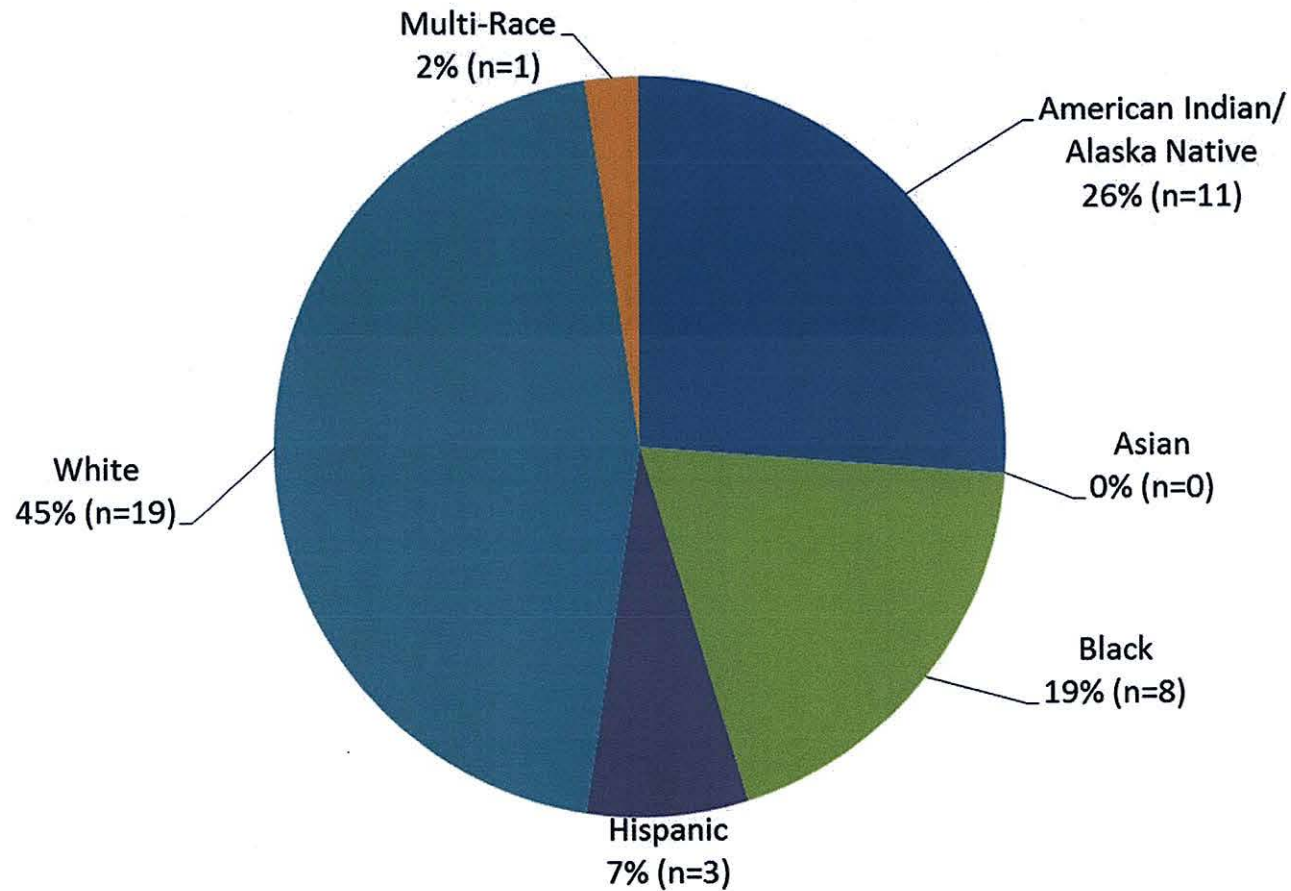
Alaska HIV/STD Program



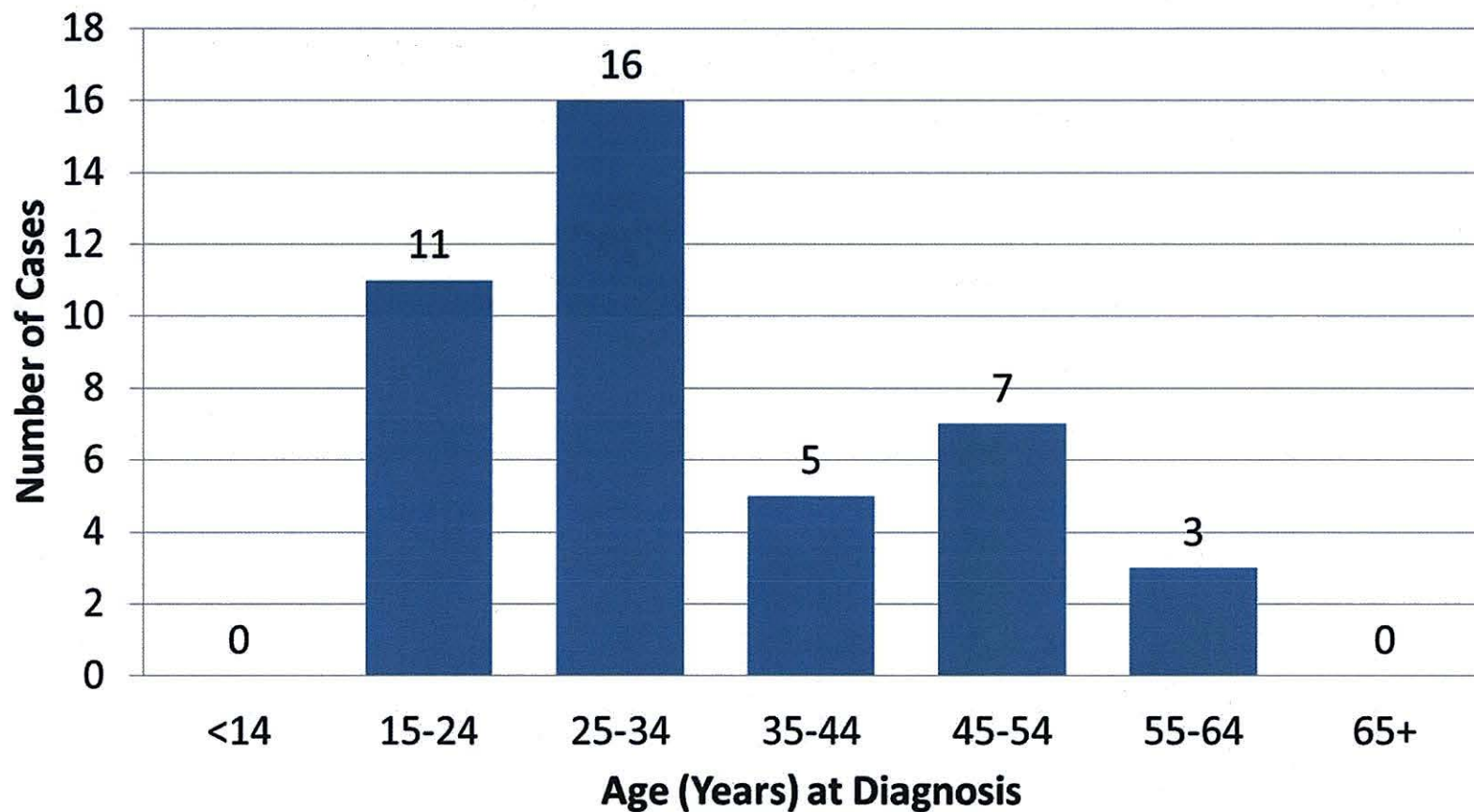
# Percentage of HIV Cases by Region of Diagnosis, 1982-2014 (n=1,616)

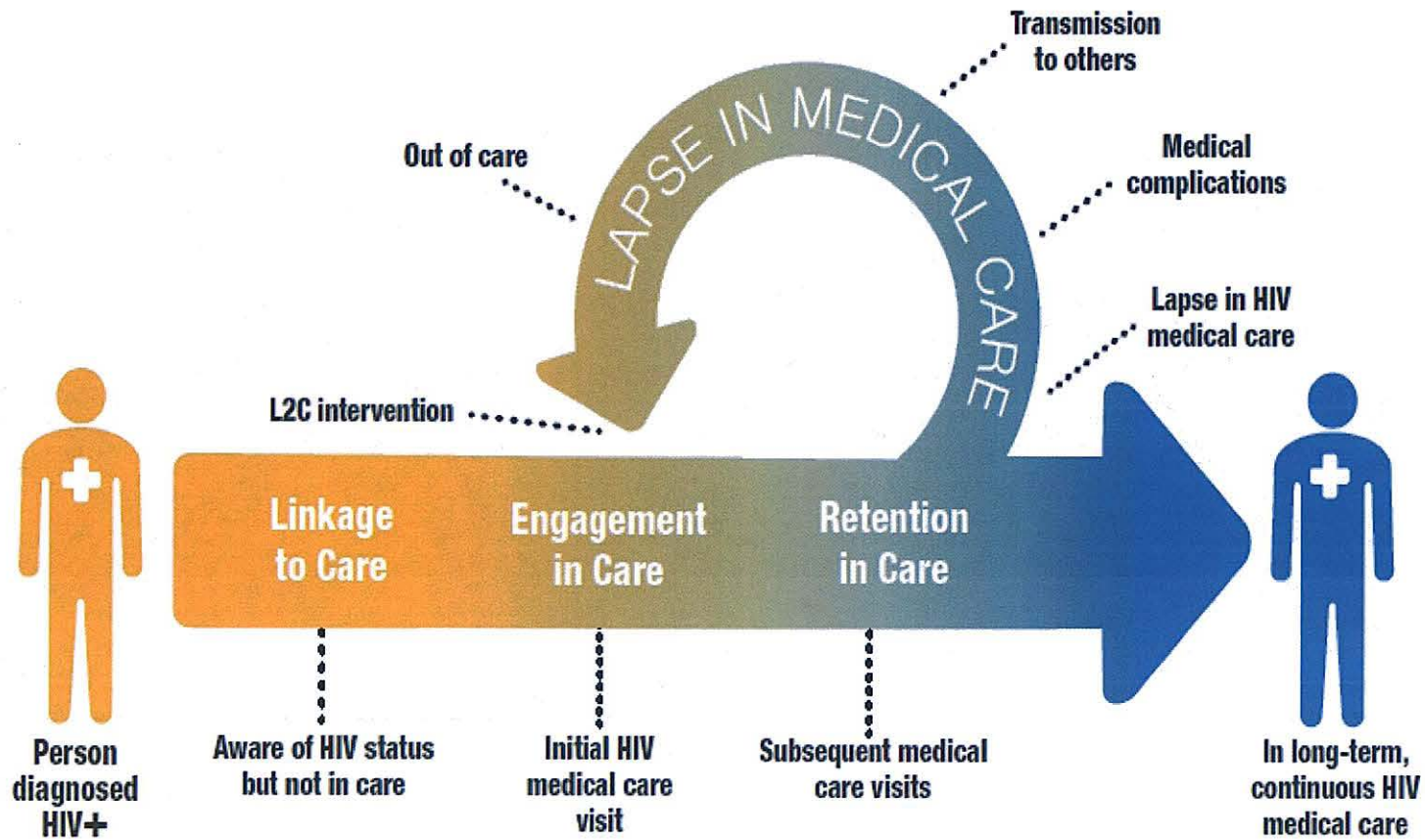


## 2014 Reported Cases of HIV First Diagnosed in Alaska by Race/Ethnicity (n=42)



## 2014 Cases of HIV First Diagnosed in Alaska by Age at Diagnosis (n=42)





## Linkage to Care (L2C) Program

Helps persons with HIV enroll and stay in medical care

# Immunization Program Activities that Improve Access to Care

- Procure and distribute vaccines to health care providers statewide
- VacTrAK
  - ▣ Alaska's immunization registry
- Alaska Vaccine Assessment Program
  - ▣ Enables IZ Program to purchase and distribute state-supplied vaccines to improve access and affordability

VAC TRAK



# THANK YOU!

