

"So That The People May Live"



"Hecel Oyate Kin Nipi Kte"

# Please Stand By

You will hear silence until the  
presentation begins



"So That The People May Live"



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The HIV/STD/TB/Hepatitis Program, Division of Disease Control, conducts Lunch and Learn Webinars for health care professionals in North Dakota.

Each month a new topic will be held from 12:00 p.m. to 1:00 p.m. CST on the **fourth Wednesday of the month.**

Next month's L&L : March 23, 2016

Register: <http://www.ndhealth.gov/HIV/events.htm>

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Please complete the post-test to receive CEU's for this presentation. You must score at least 70% to receive credit.

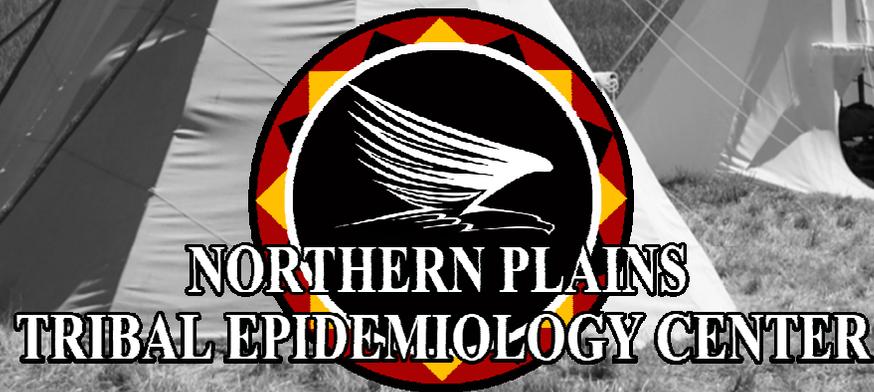
This presentation will be archived and available at:  
[www.ndhealth.gov/HIV/Resources/resources.htm](http://www.ndhealth.gov/HIV/Resources/resources.htm)

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# Infectious Disease Disparities Among Tribes in North Dakota

... and How We Can Respond

PJ Beaudry, MPH, CPH – NPTEC Director



Great Plains Tribal  
Chairmen's Health Board





# Objectives

1. To introduce the Tribal Epidemiology Centers (TECs) generally and NPTEC in particular
2. To briefly summarize public health surveillance and underscore the clinical relevance of infectious disease morbidity
3. To describe the epidemiology of infectious disease among American Indians in North Dakota
4. To recognize the limitations of Northern Plains American Indian infectious disease data
5. To illuminate resources and responses available to us that seek to combat these trends

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Courtesy of the Albuquerque Area Southwest Tribal Epidemiology Center





# TECs: Seven Core Functions

- Collect data
- Evaluate data and programs
- Identify health priorities with Tribes
- Make recommendations for health service needs
- Make recommendations for improving health care delivery systems
- Provide epidemiological technical assistance to Tribes and Tribal organizations
- Provide disease surveillance data to Tribes

*"Functions ofTECs: in consultation with and on the request of Indian tribes, tribal organizations, and urban Indian organizations, each Service area epidemiology center established under this section shall, with respect to the applicable service area..."*

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# Who We Are:

## Northern Plains Tribal Epidemiology Center

### Mission

To provide leadership, technical assistance, support, and advocacy to Northern Plains Tribal nations and communities in order to eliminate the disparities in health that currently exist for Tribal people of the area.

### Role

- To provide technical assistance with and/or coordinate public health surveillance activities and program evaluation.
- To house and manage Tribal data, disseminating timely, accurate, and useful reports on a variety of topics and consulting with Tribal programs and GPTCHB staff regarding data management.
- To conduct or assist with projects related to particular emergent public health priorities or issues of interest to our partner Tribes.



# The 2010 Affordable Care Act...

## ... and its effect on Tribal Epidemiology Centers (including NPTEC).

- Permanently reauthorized the Indian Health Care Improvement Act
- TECs vested with “*public health authority*” status for the purposes of HIPAA

*“[a]n epidemiology center... shall be treated as a public health authority.”*

- [25 U.S.C.A § 1621m\(e\)\(1\)](#)

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## Public health surveillance is...

... the ongoing, systematic collection, analysis, and interpretation of health data, essential to the planning, implementation, and evaluation of public health practice, closely integrated with the dissemination of these data to those who need to know and linked to prevention and control.

(Hall et al., 2012)



# Worldview of Public Health Surveillance



## Actions

- Communicate to partners
- (Re)set priorities
- Establish programs
- Develop policies
- Formulate new hypotheses



Data



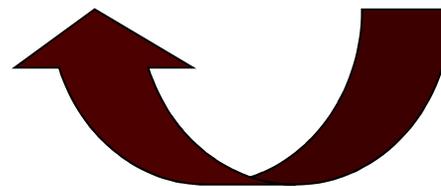
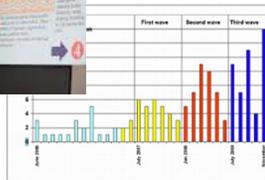
## Analysis

- Assess data quality
- Summarize records
- Investigate trends and relationships
- Disseminate results

Surveillance

Knowledge

Information



## Interpretation

- Draw conclusions
- Make decisions



Case#	Initial	Date of Onset	Date of Illness	Physician Diagnosis	Signs and Symptoms							Lab			
					N	V	A	F	DU	J	HAight	Other	Age	Sex	
1	JD	10/12	10/16	Step A	+	+	+	+	+	+	+	+	SOG1	37	M
2	BC	10/12	10/15	Step A	+	+	+	+	+	+	+	+	AK+	42	F
3	MP	10/13	10/14	Step A	+	+	+	+	+	+	+	+	SOG1	30	F
4	MC	10/15	10/16	Step A	+	+	+	+	+	+	+	+	WSP	37	F
5	NG	10/15	10/15	NA	+	+	+	+	+	+	+	+	NA	32	F
6	RD	10/15	10/18	Step A	+	+	+	+	+	+	+	+	SOG1	38	M
7	KS	10/16	10/13	Step A	+	+	+	+	+	+	+	+	SOG1	43	M

N: Vomiting; A: Anorexia; F: Fever; DU: Dark urine; J: Jaundice; HA: Headache; SOG1: Stool occult blood test





## Clinical Relevance

- Alert practitioners to outbreaks in their patient populations.
- Improve screening and diagnosis of patients at increased risk of chronic disease and co-infection.
- Initiate treatment protocols for existing cases.
- Implement patient education strategies to prevent occurrence of future cases.



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# THE DATA





# Analysis

1. Received compiled number of cases for each year (2011-2015), Race category (AI/AN alone and/or in combination, White, All Races), sex, and age group for six infectious diseases:
  - Chlamydia;
  - Gonorrhea;
  - Hepatitis C;
  - HIV;
  - Syphilis; and,
  - Active TB.

2. Calculate annual Incidence Rate (IR) estimates for each race category, sex, and/or age group.

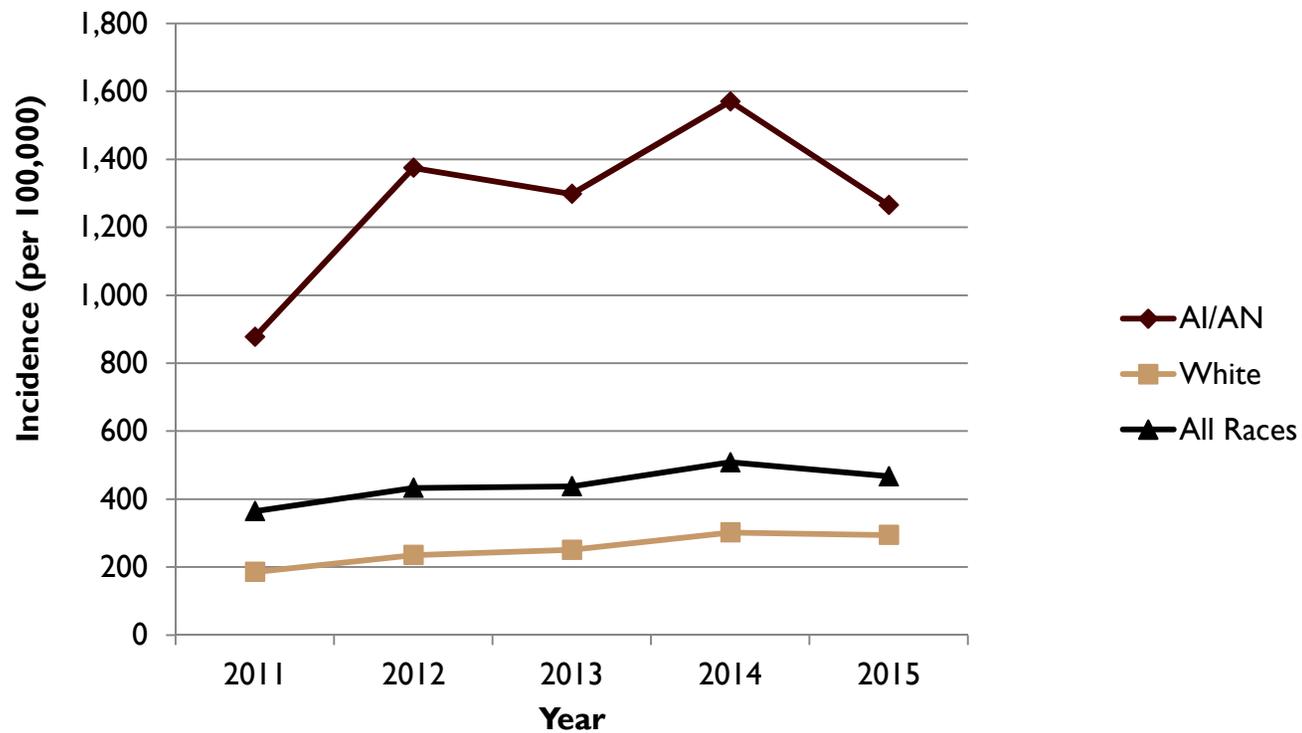
$$\text{Annual IR (per 100,000)} = \frac{\text{Number of reported cases (statewide)}}{2010 \text{ US Census population}} * 100,000$$

3. Graph and compare longitudinal disease patterns by race, sex, and/or age group.





# Annual Incidence of Chlamydia by Year and Race, North Dakota, 2011-2015

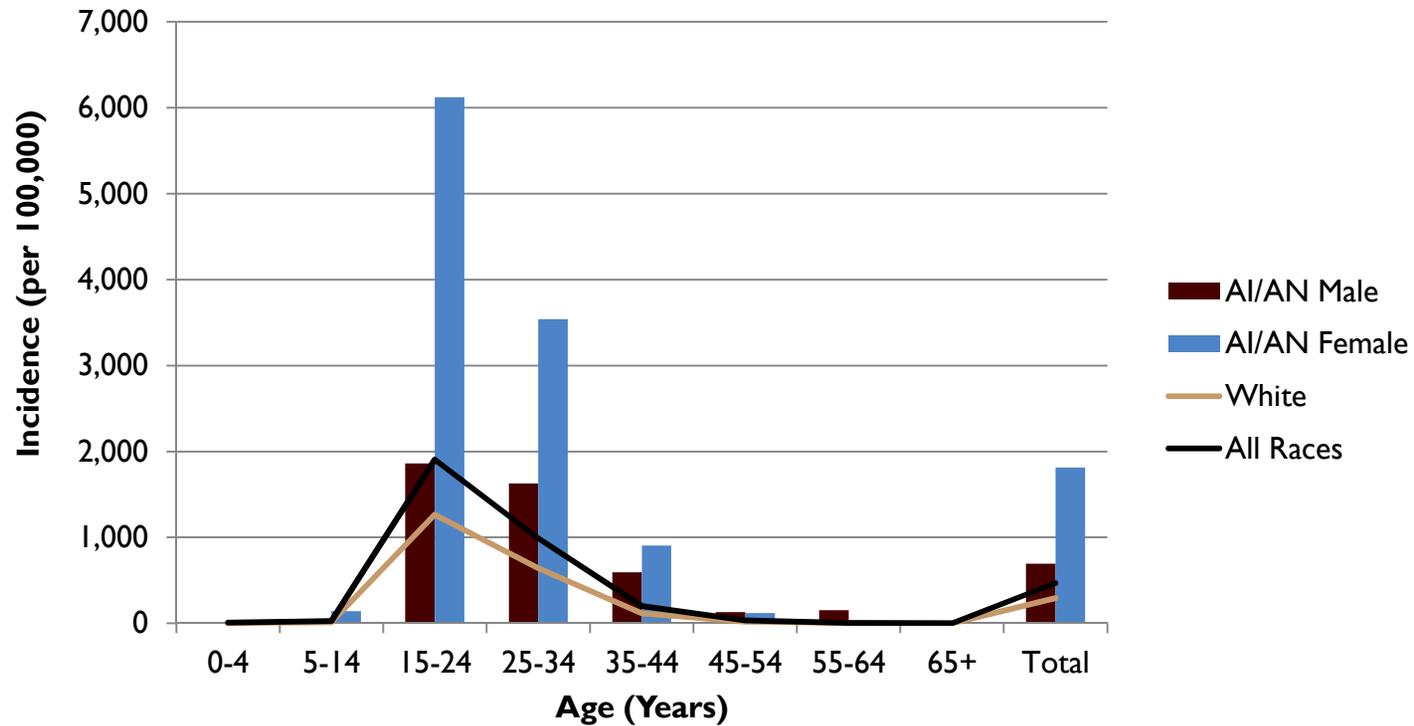


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## Annual Incidence of Chlamydia by Age and Race, North Dakota, 2015

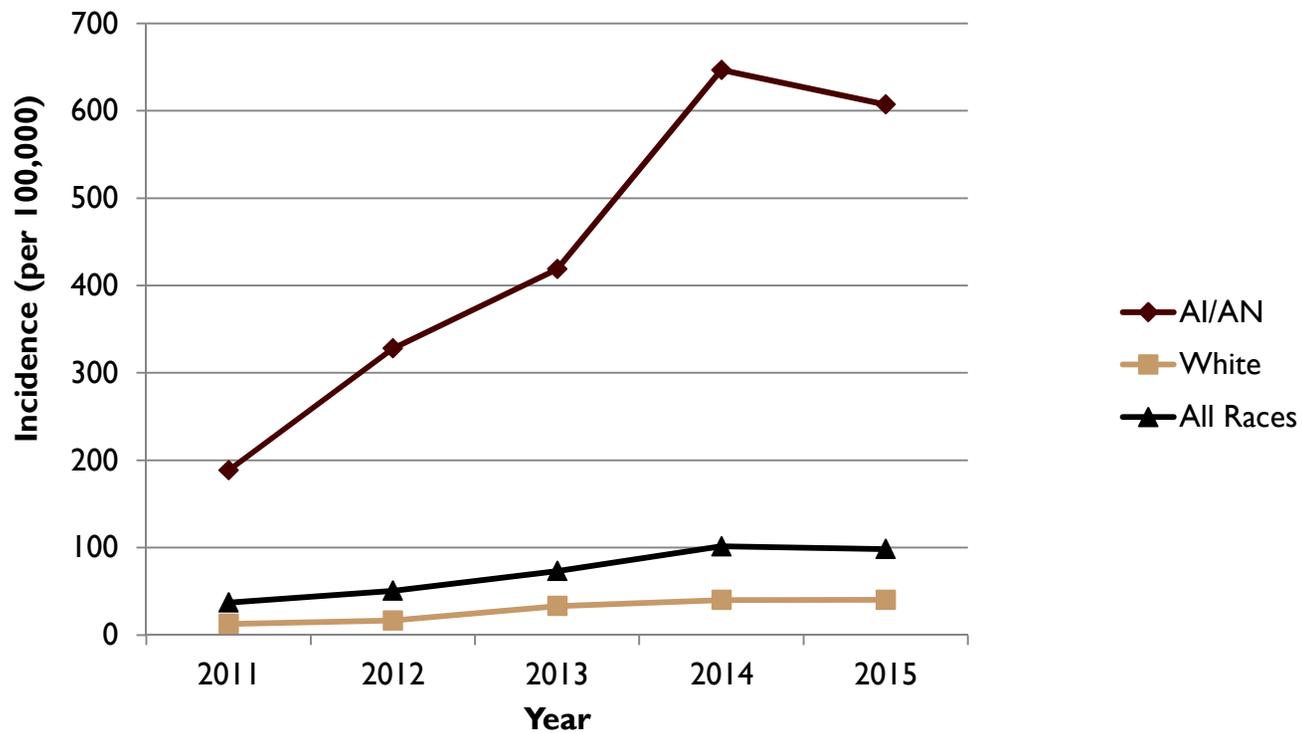


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## Annual Incidence of Gonorrhea by Year and Race, North Dakota, 2011-2015

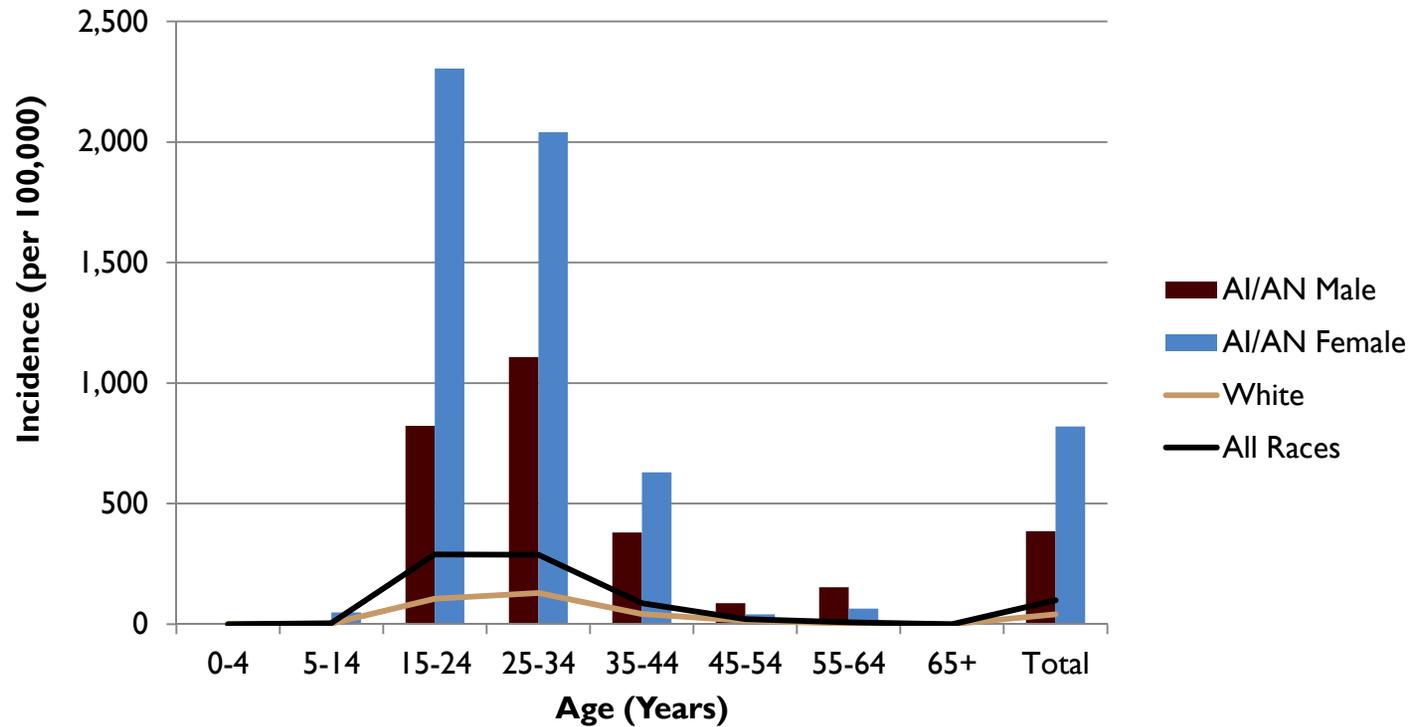


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# Annual Incidence of Gonorrhea by Age and Race, North Dakota, 2015

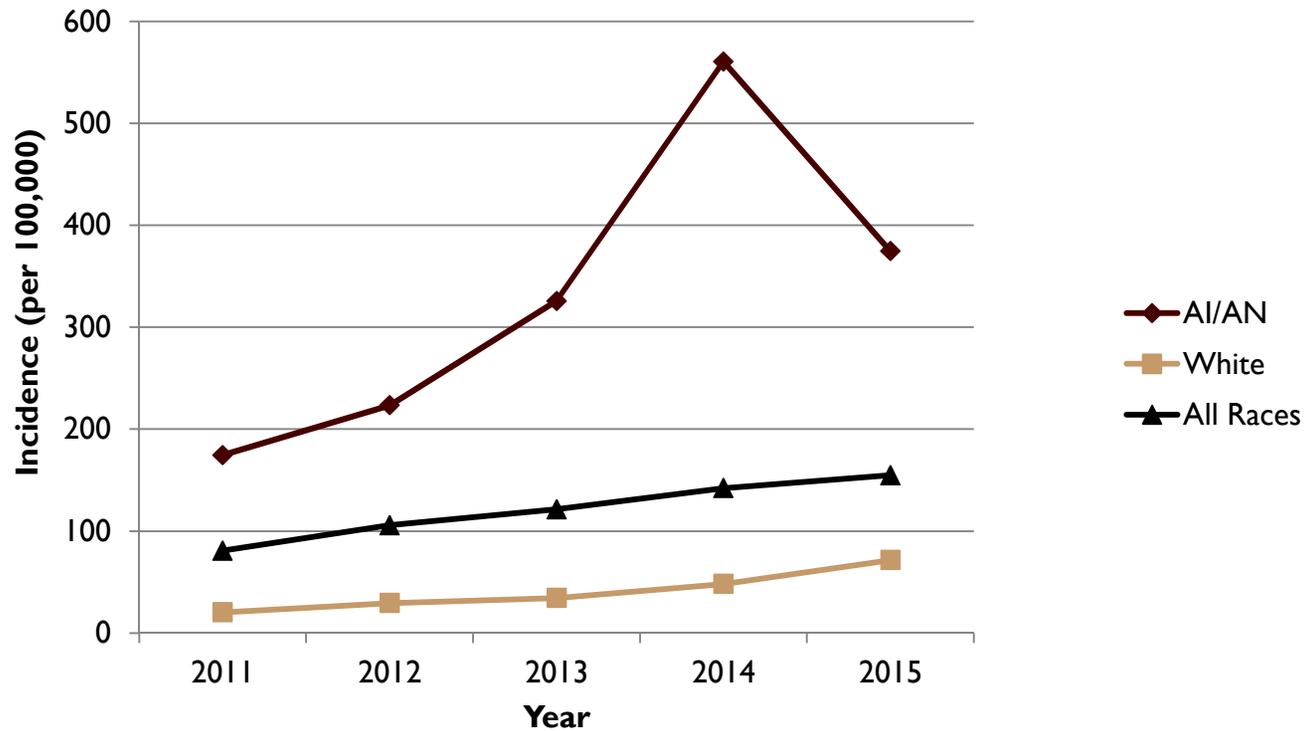


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## Annual Incidence of Hepatitis C by Year and Race, North Dakota, 2011-2015

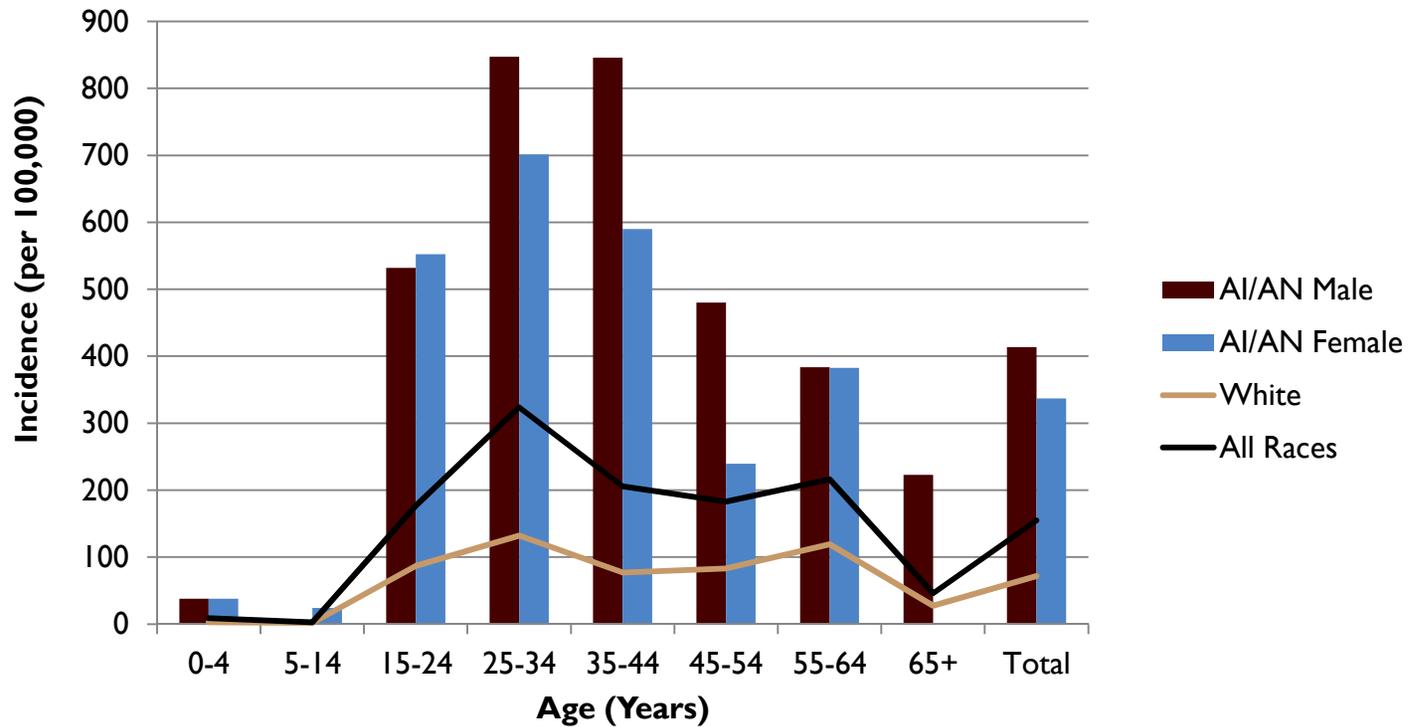


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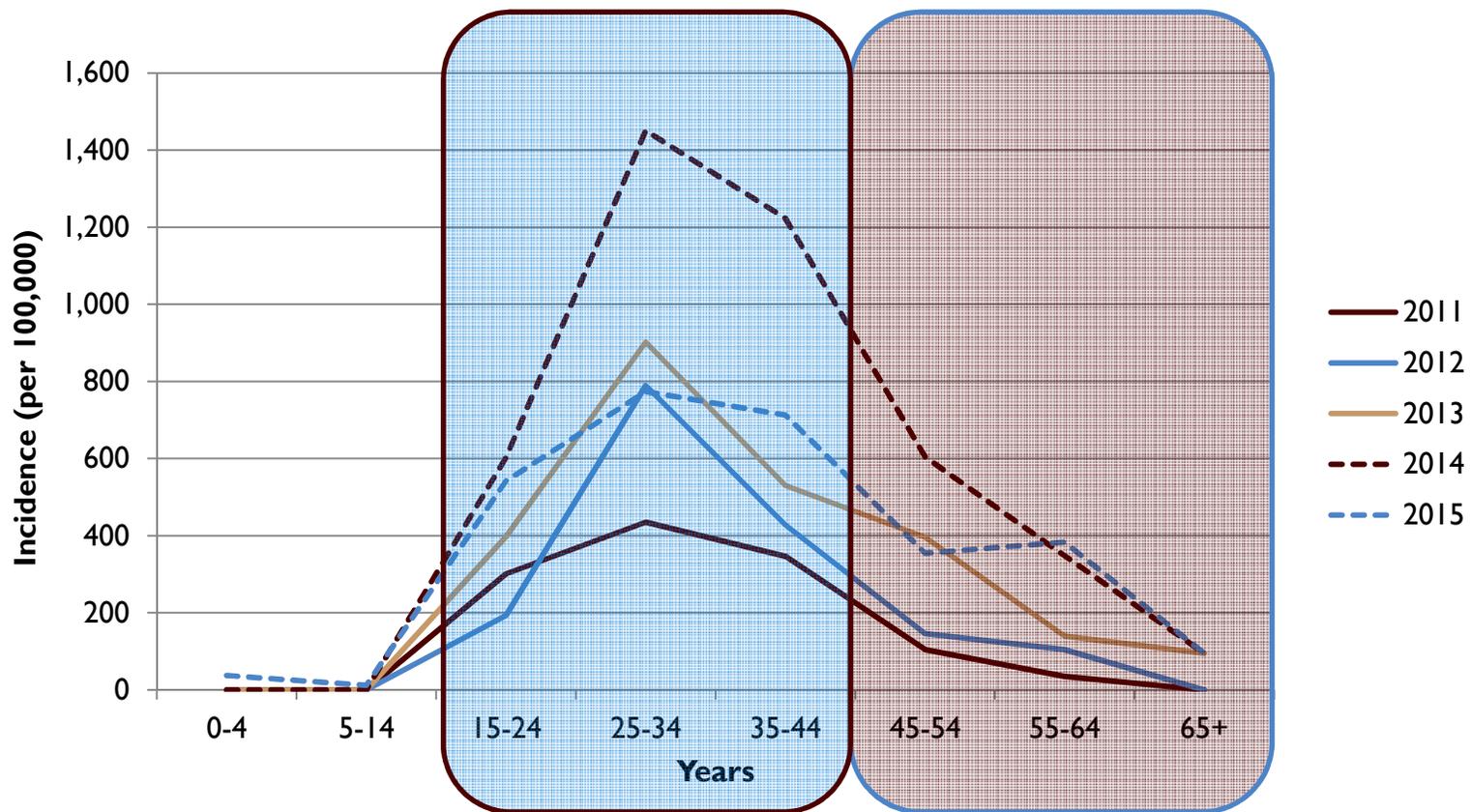
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# Annual Incidence of Hepatitis C by Age and Race, North Dakota, 2015



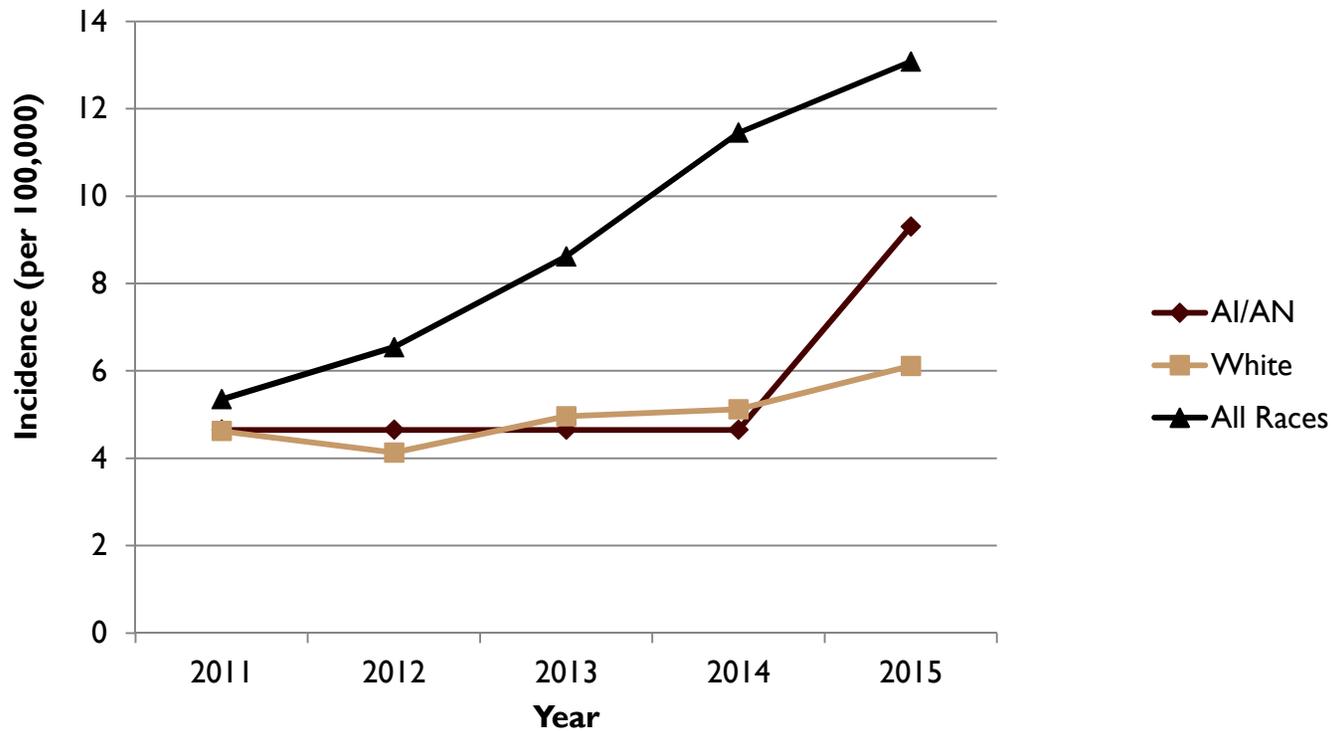


# Annual Incidence of Hepatitis C by Year and Age, AI/ANs, North Dakota, 2011-2015





## Annual Incidence of HIV by Year and Race, North Dakota, 2011-2015

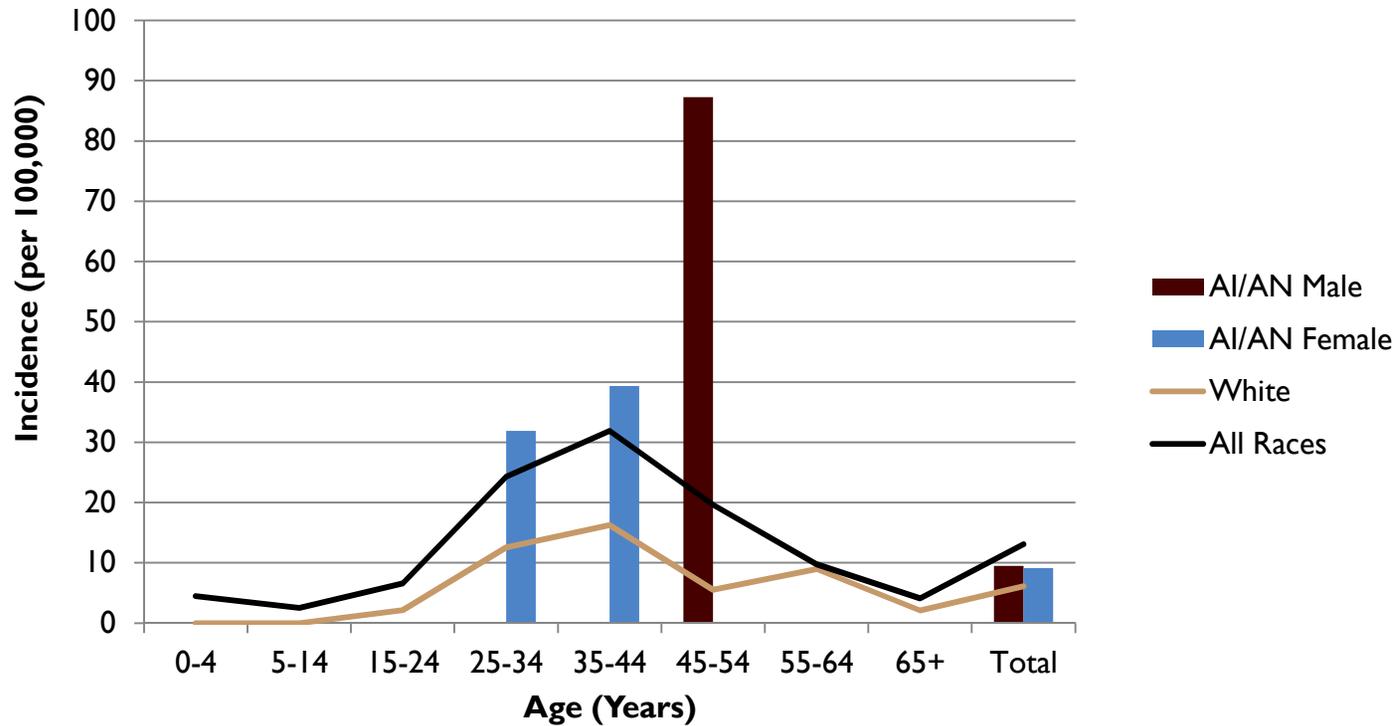


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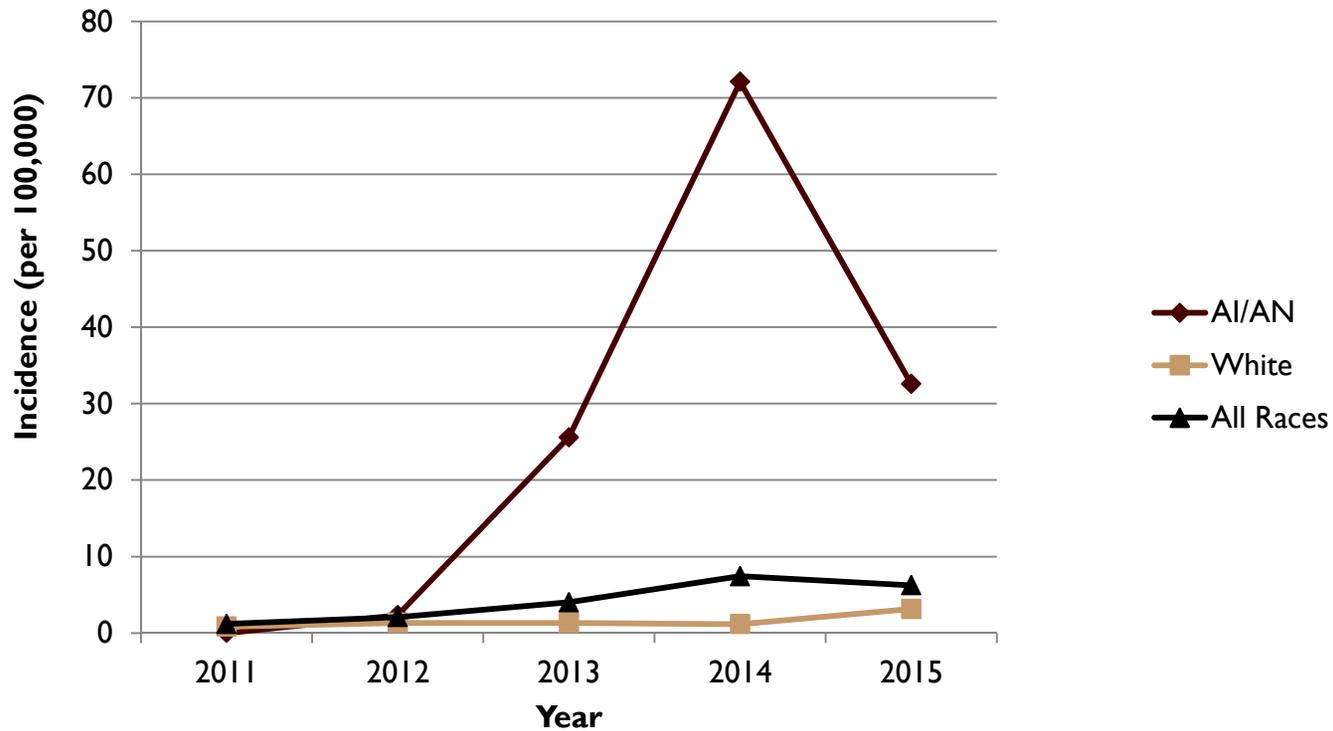
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## Annual Incidence of HIV by Age and Race, North Dakota, 2015





## Annual Incidence of Syphilis by Year and Race, North Dakota, 2011-2015

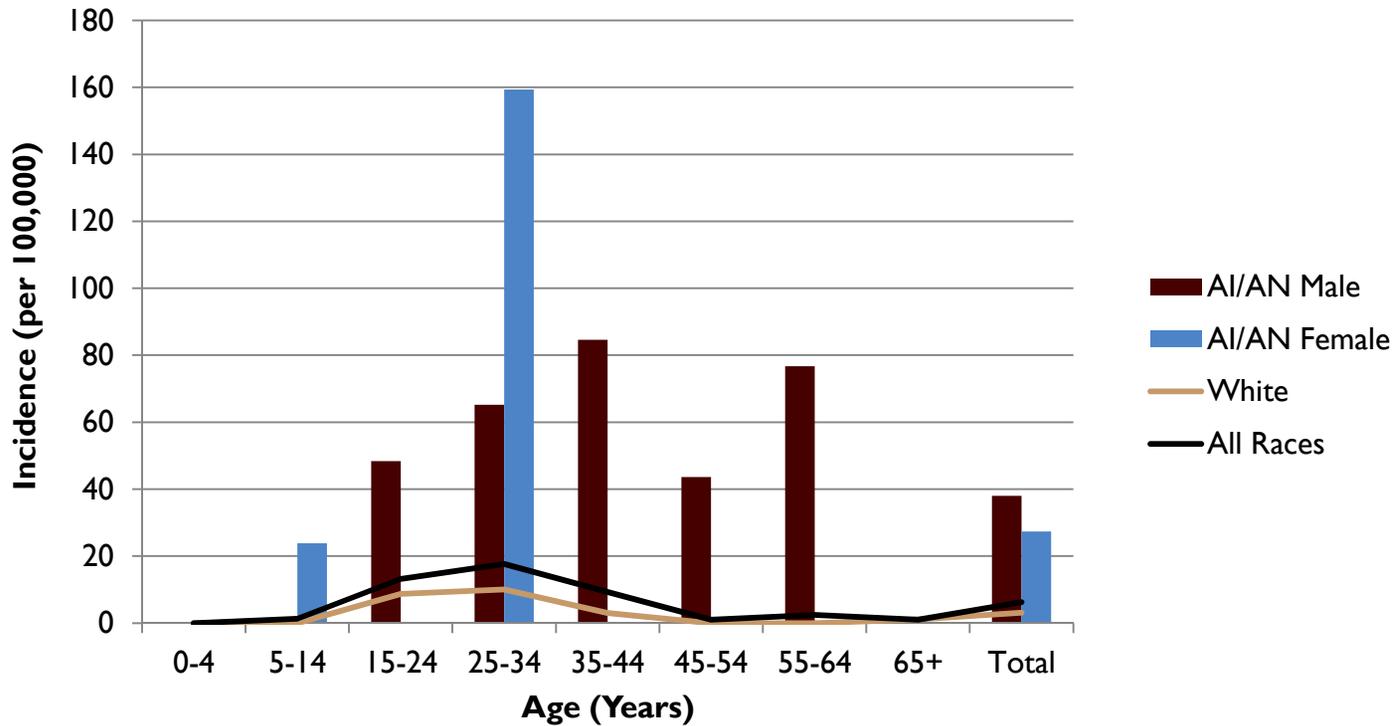


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## Annual Incidence of Syphilis by Age and Race, North Dakota, 2015

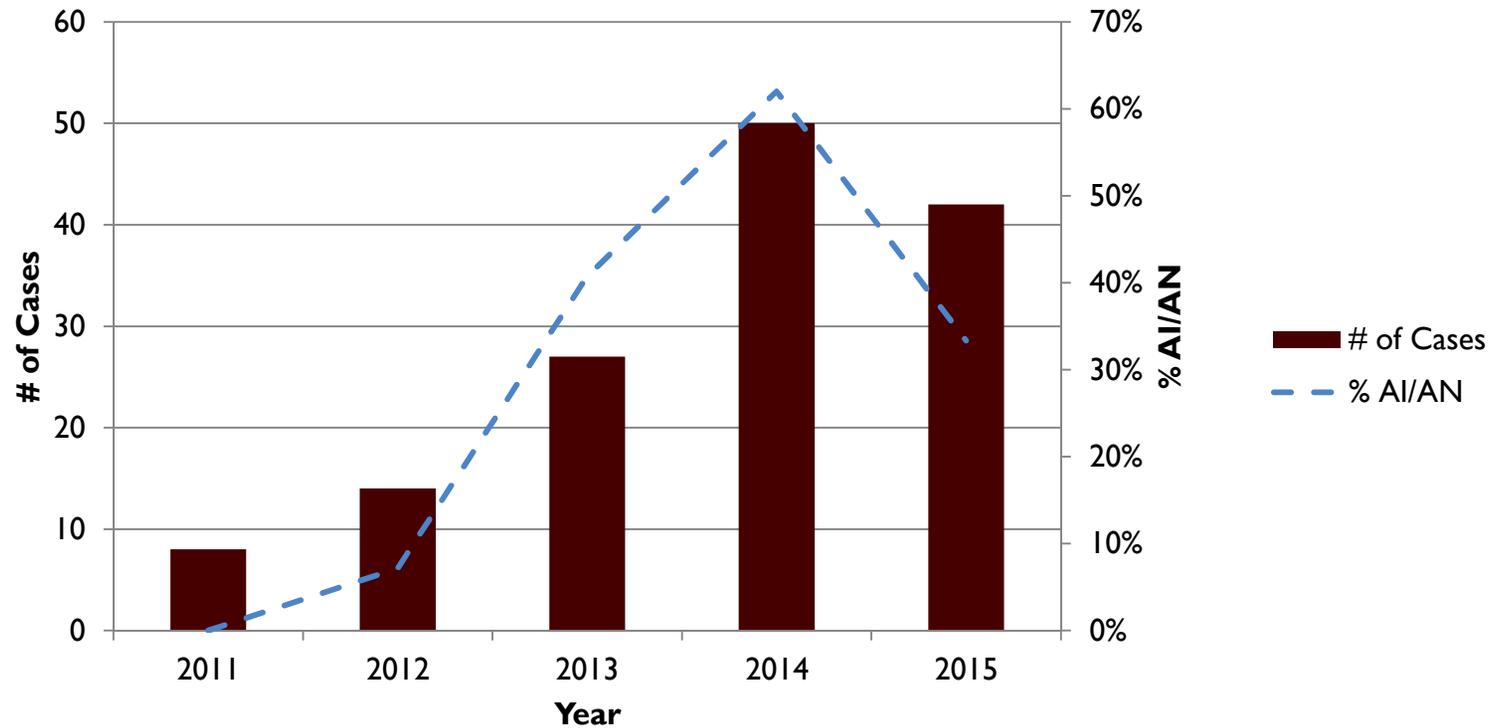


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## Syphilis Cases and Percent Occurring Among American Indians, North Dakota, 2011-2015

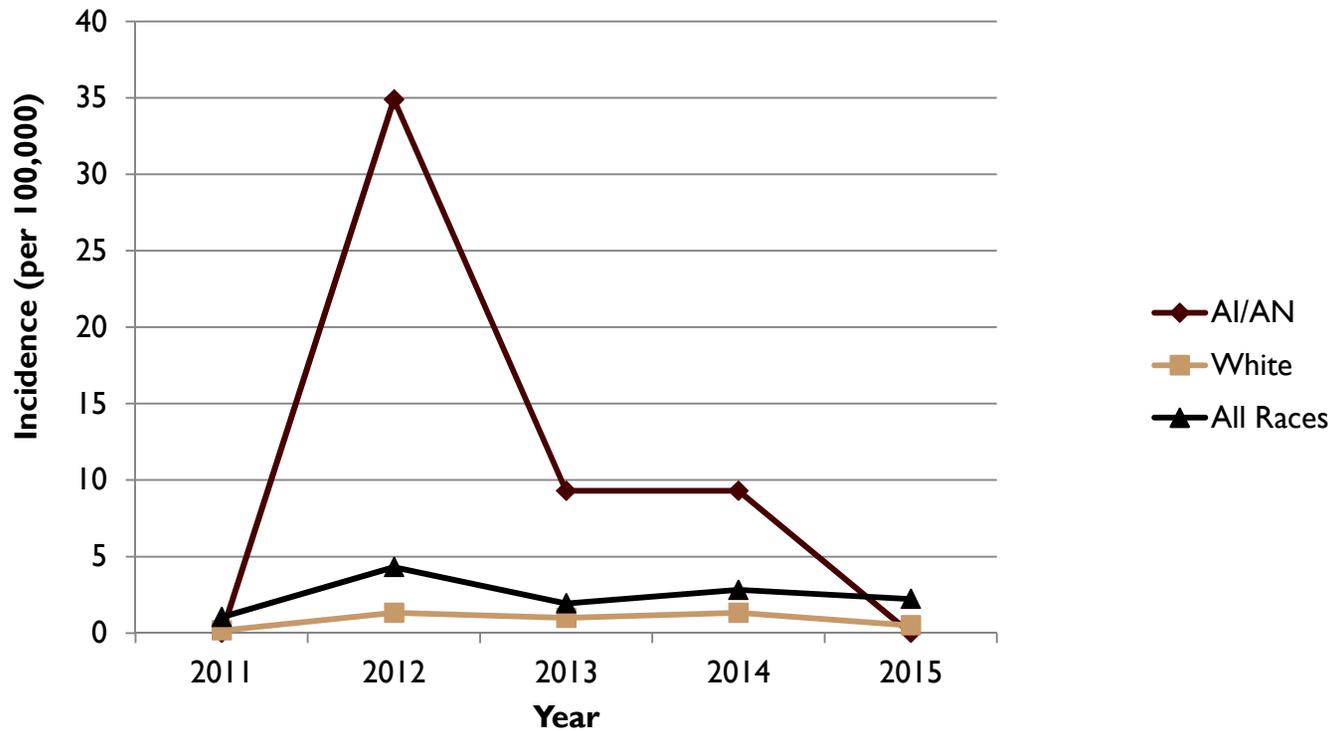


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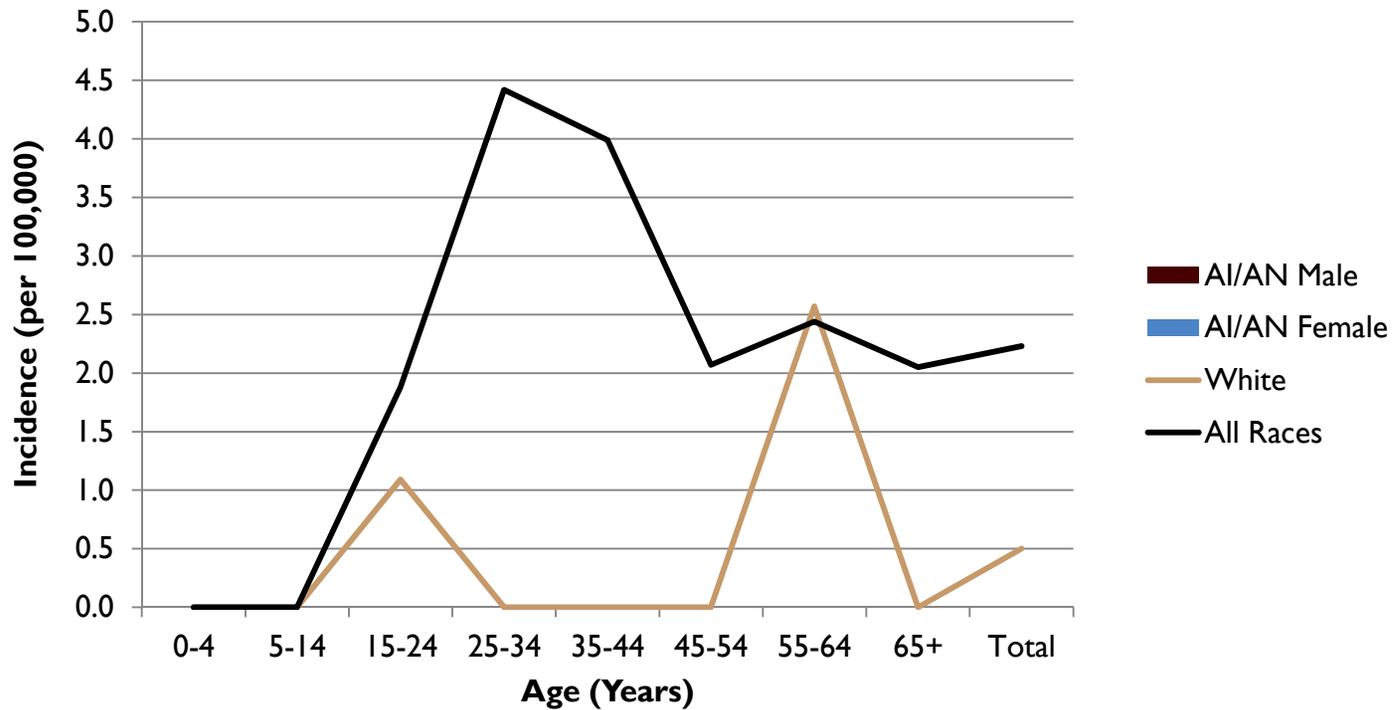
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## Annual Incidence of Active TB by Year and Race, North Dakota, 2011-2015





# Annual Incidence of Active TB by Age and Race, North Dakota, 2015





## Limitations

- Incomplete case ascertainment due to suboptimal screening practices of at-risk populations
- Analysis of rates of co-infection not practically possible
- Accuracy of racial comparisons within states can be compromised by invalid or missing race data
- Comparisons of risk status by subgroup (i.e. age) may be unreliable due to small numbers

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# RESPONDING



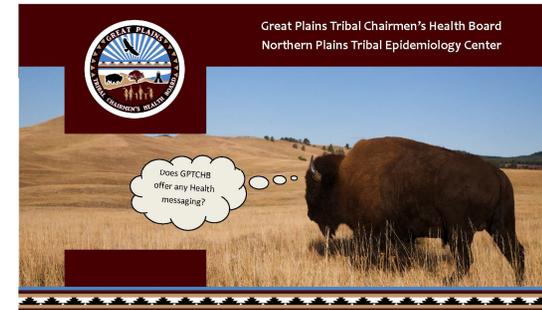
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# Resources At Hand

- An extensive body of prevention and educational resources (available to order from the DOH)
  - Also a wide variety of free resources available online from national partners
- Extremely knowledgeable and dedicated DOH staff, including Field Epidemiologists
  - Collaborate with a larger network of public health practitioners in the Great Plains area
  - Work with NPTEC to generate CDC EPI-AIDs and other projects
- An extensive network of CTR (counseling, testing, and referral) sites
- HIV/AIDS treatment and case management funding through Ryan White/ND CARES



Yes! Please visit our Website to access a variety of Public Service Announcements that promote Tribal Health

[www.gptchb.org/psa](http://www.gptchb.org/psa)

"Public service announcements are a vital tool in generating awareness for critical issues while dispensing important information..." (Lang & Goodwill)

The Great Plains Tribal Chairmen's Health Board provides key advocacy for its constituents in order for them to have access to the highest quality, most comprehensive and up-to-date health resources available in the area of research, education, assistance, prevention and outreach.

10 Essentials  
of Public Health  
Informational Video

Spots for  
Good Health TV:  
HIV, STIs

Radio PSAs:  
Flu Vaccination, HIV,  
Gonorrhea & Chlamydia

1770 Rand Road, Rapid City, SD 57702—(P) 605.721.1922—(F) 605.721.1932—www.gptchb.org

Check out "Resources"  
on the NPTEC website!  
([nptec.gptchb.org](http://nptec.gptchb.org))



# HIV Resource Guide

## What is Included

- Contact and other information for state partners, Tribal health boards, Tribal health clinics, and others
- Sample prevention language and educational and training resources (both state and regional)
- Information regarding counseling, testing, and/or referral sites
- Information regarding Ryan White case management and physicians that offer HIV services
- Other related resources and service sites

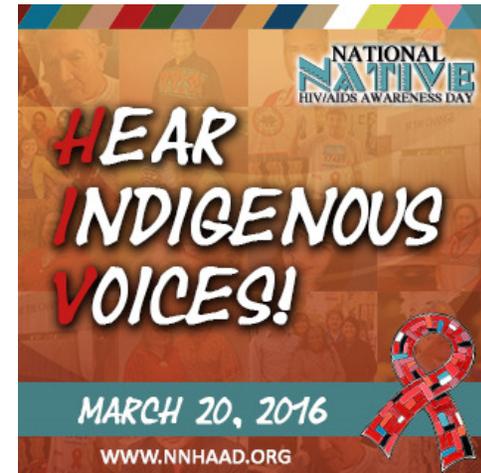
We need your help to keep it up-to-date!!!



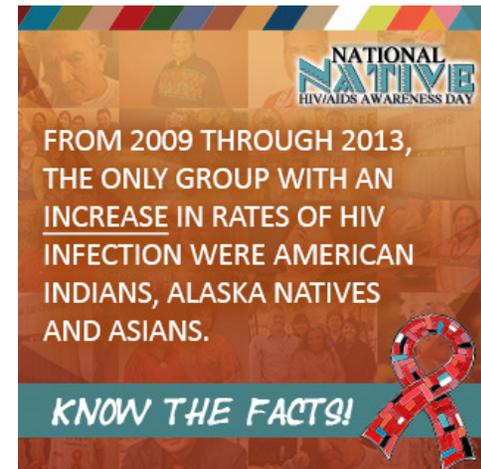


## Local Steps

- Contact local prevention partners and do your part to promote education and outreach
- Find out about and support screening events (or hold one yourself!)
- Participate in and contribute to area-wide infectious disease calls organized through the Great Plains IHS and NPTEC
- Work to connect clinically-identified cases with DOH Field Epidemiologists, who can in turn connect them with treatment and case management programs
- Help to fill in the blanks – populate race data!



[facebook.com/NNHAAD1](https://facebook.com/NNHAAD1)



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# Acknowledgements

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**Corey Smith, PhD** – Director of Science and Applied Informatics, NPTEC





# Thank you

**GREAT PLAINS TRIBAL CHAIRMEN'S HEALTH BOARD (GPTCHB)  
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