



Ho-Chunk Nation
Department of Health

Health Profile Report

Public Health & Environmental Health **2023**

Submitted June 2023

WAŽA HIGIRAWI
(We care)

Ho-Chunk Nation-Chief Headdress

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Ho-Chunk Nation-Female Powwow

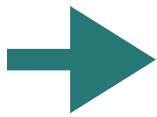


Ho-Chunk Nation-Yarn belts

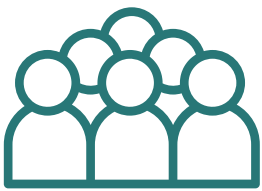
Data details

Where does the data come from?

Multiple data sources are used in this report. This includes:



Internal data: From the Ho-Chunk Nation Department of Health and other Ho-Chunk Departments



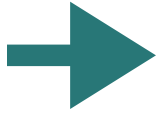
HCN Enrollment



HCN DOH Programs



**NextGen
(HCN DOH Medical Records)**



External data: From places outside the Ho-Chunk Nation, including state and federal sources



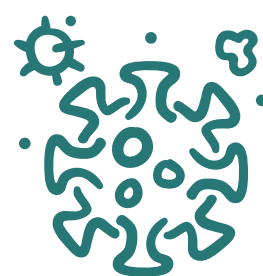
US Census



WI DNR



WI DHS



CDC



WEDSS

When is the data from?

Because data shared with the public can lag, the data represented in this report reflects the latest data that is currently available. For some measures, you may see multiple years and an average of those years presented- this is commonly used in smaller populations or with public sources that use surveys and weigh responses to reflect a larger population like a county, state, or nation.

Other source details:

WI Department of Natural Resources (DNR): <https://dnr.wisconsin.gov/>

WI Department of Health Services (DHS): <https://www.dhs.wisconsin.gov/>

Centers for Disease Control & Prevention (CDC): <https://www.cdc.gov/>

WI Electronic Disease Surveillance System (WEDSS): Internal surveillance site for public health staff, infection control practitioners, clinical laboratories, clinics, & other disease reporters.



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Data details cont.

Who is represented in the data?

Because of how tribal nations and tribal health departments can 1) receive/share information and 2) the differences in reporting requirements based on each funding source, some data sources report on all tribal members and others report on Ho-Chunk tribal members only. In addition, some sources will only report on specific geographic areas, such as the state or specific counties. Be sure to keep this in mind when interpreting results and referencing the data source on each page.



Can I access/get a copy of the original data?

Depends! Anyone can access external public data sources and download data. However, some external sources can only be used by specific organizations and are not available to the public. Some internal Ho-Chunk Nation data may be available to receive in an aggregated report upon request.



How do I use the data in this report?

There are many ways data can be used ranging from individual, community, or organizational use. See the following page (iv) for more ideas on how this information can be applied in different settings.



Other Questions?

Please contact Sarah Reed-Thryselius

Ho-Chunk Nation Epidemiologist
Sarah.Reed@ho-chunk.com



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Data uses

Community Knowledge & Empowerment

A key function of the HCN DOH is to provide information to our communities about their health on community conditions and health outcomes to make informed decisions.

Education & Communication

Providing the most up-to-date health information to our communities, including health education and resources from the Public Health and Environmental Health divisions.

Accreditation

This includes standards such as analyzing data, providing health education, and conducting performance management.

Programming & Service Development

Measures highlight gaps and opportunities for improvement in community conditions and health outcomes. The data pinpoints where programs/services could focus on.

Grant Proposals

Use Ho-Chunk Nation data to support grant proposals and explain your "so what."

Community Health Assessment

Provides additional community data to deepen the understanding of community conditions and outcomes.

Policy Development

Identifies needs and gaps in the community. Data could highlight the need for a policy.

Research

Use data to identify a need or a question.

Media Stories

Support and strengthen stories with data including articles, social media posts, interviews and more.

iv

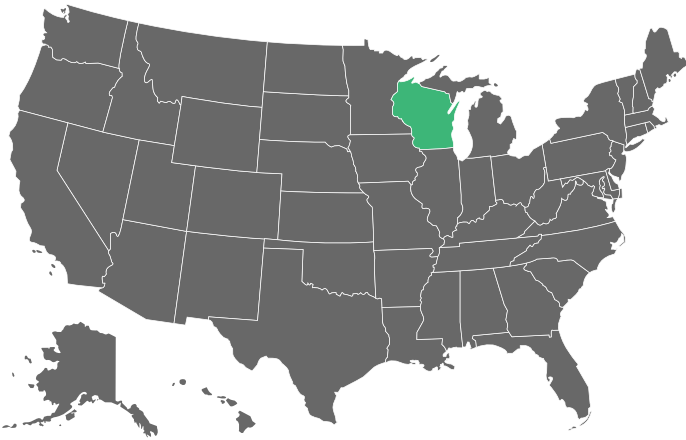


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Ho-Chunk Nation Community Profile

Our Ho-Chunk tribal members live all over the world. Population estimates are helpful to understand age, sex, and geographical location to predict service demand and resource allocation. The numbers below reflect enrolled Ho-Chunk Tribal members in 2021.



7,795
members
nationwide

5,458
members in
Wisconsin

Sex
(nationwide)

51% female
49% male

By age

All HCN Tribal in Wisconsin

0- 4 years	110
5-11 years	537
12-17 years	621
18-24 years	703
25-34 years	968
35-44 years	853
45-59 years	955
60+ years	711

DYK? Ho-Chunk people (*Hocaks/Ho-Chungra*) have traditional lands from Wisconsin, Minnesota, Iowa, Missouri, and Illinois.



Among Wisconsin Ho-Chunk Tribal members, about 36% are considered vulnerable. This includes Elders and youth.

These groups are more susceptible to health conditions & community impacts because of their age. **1**

HCN Community Profile: HCN tribal enrollment, May 2021
Source: HCN Enrollment
Years displayed: 2021

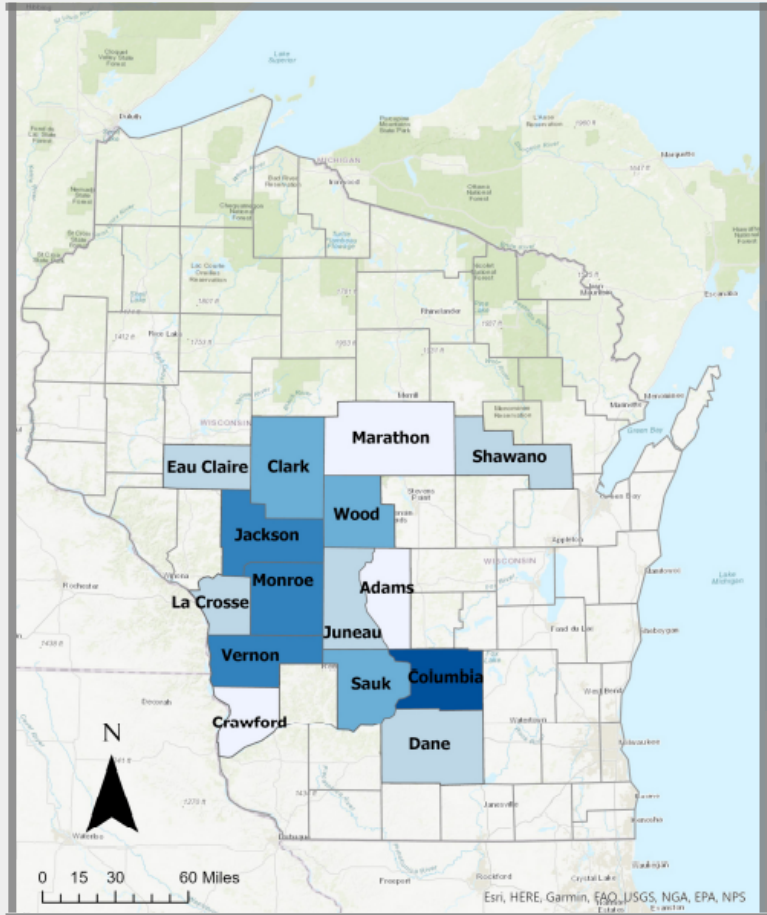


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Purchased Referred Care Delivery Area

In addition to national and state populations, Indian Health Services (IHS) assigns designated **Purchased Referred Care Delivery Areas** (PRCDA) to tribes; these are "counties that include all or part of an American Indian or Alaska Native reservation or have a common boundary with a federally recognized tribal land.... it is a geographic area within which IHS makes purchased/referred care available to members of an identified Indian community who reside in the area....36 states have at least one PRCDA-designated county (CDC, 2022)." The Ho-Chunk Nation Department of Health often reports on national, state, and PRCDA populations due to funding and program requirements.



There are **15 counties in Wisconsin** and **one county in Minnesota** which make up the **HCN DOH PRCDA area**:

- Adams
- Clark
- Columbia
- Crawford
- Dane
- Eau Claire
- Jackson
- Juneau
- La Crosse
- Marathon
- Monroe
- Sauk
- Shawano
- Vernon
- Wood
- Houston



4,268 enrolled members in PRCDA area

78% % of enrolled WI members living in PRCDA area

HCN Community Profile: HCN tribal enrollment, May 2021
Source: HCN Enrollment
Years displayed: 2021

NOTE: Houston County (MN) not pictured

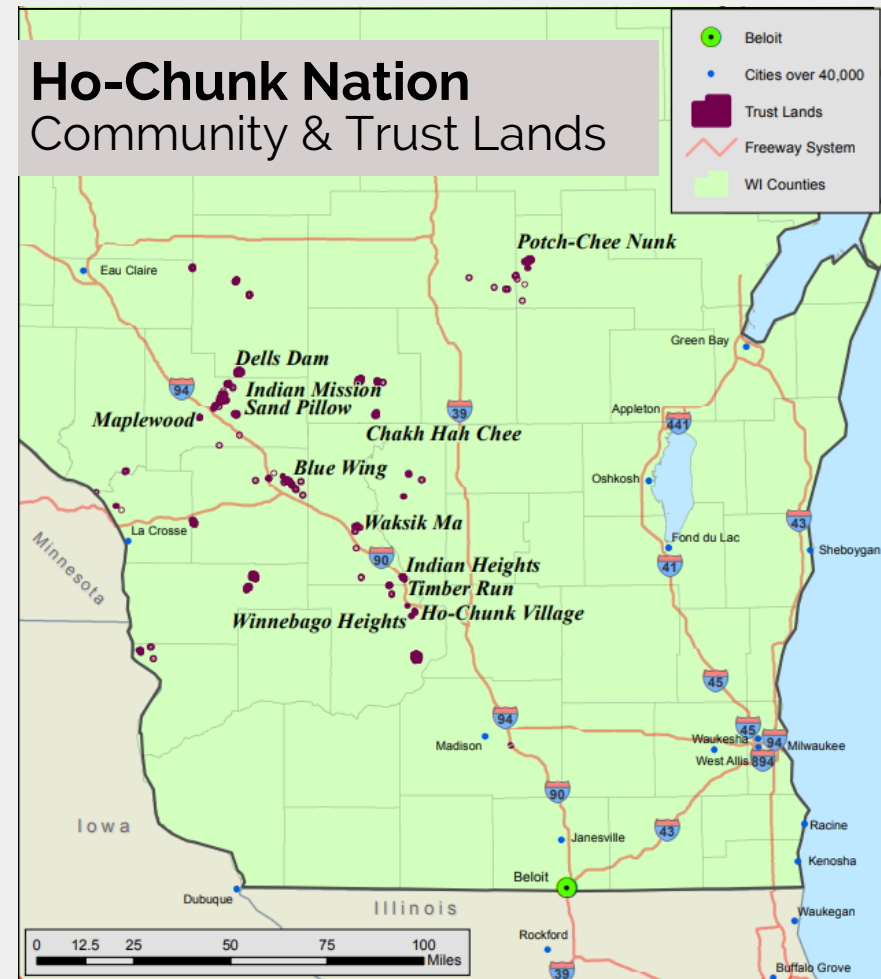


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Ho-Chunk Nation Tribal Communities

Ho-Chunk communities are located on Nation Trust land. Ho-Chunk Tribal members and their families are eligible for housing in these designated places which span seven Wisconsin counties. The Environmental Health (EH) Division oversees certain services in these communities and on other trust land properties including their water systems.



Community locations (by county)

Clark

- Dells Dam

Jackson

- Sand Pillow
- Indian Mission

Juneau

- Waksik Ma
- Indian Heights
- Timber Run

Sauk

- Ho-Chunk Village
- Winnebago Heights

Shawano

- Potch Chee Nunk
- Ho-Chunk Village

Monroe

- Blue Wing

Wood

- Chakh-Hah-Chee

Map: Courtesy of HCN GIS division

DYK? The EH division ensures safe potable water sources for its customers by maintaining compliance with all applicable Federal and State Regulations. These community water systems serve approximately 10,562 people, including residents, employees, and visitors.

The division shares full water quality reports (Consumer Confidence Reports) on their division webpage.



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Community Conditions

All persons
HCN DOH PRCD

Social vulnerability is the potential negative effects and outcomes on communities caused by external stressors or events- these include natural disasters or human-made events. Certain experiences and identities like poverty, transportation barriers, or living with a disability can place communities at a higher vulnerability to such stressors or events (CDC/ATSDR, 2022).

The Social Vulnerability Index (SVI) looks at **16 social factors**, categorized into **four main themes**:



Socioeconomic status



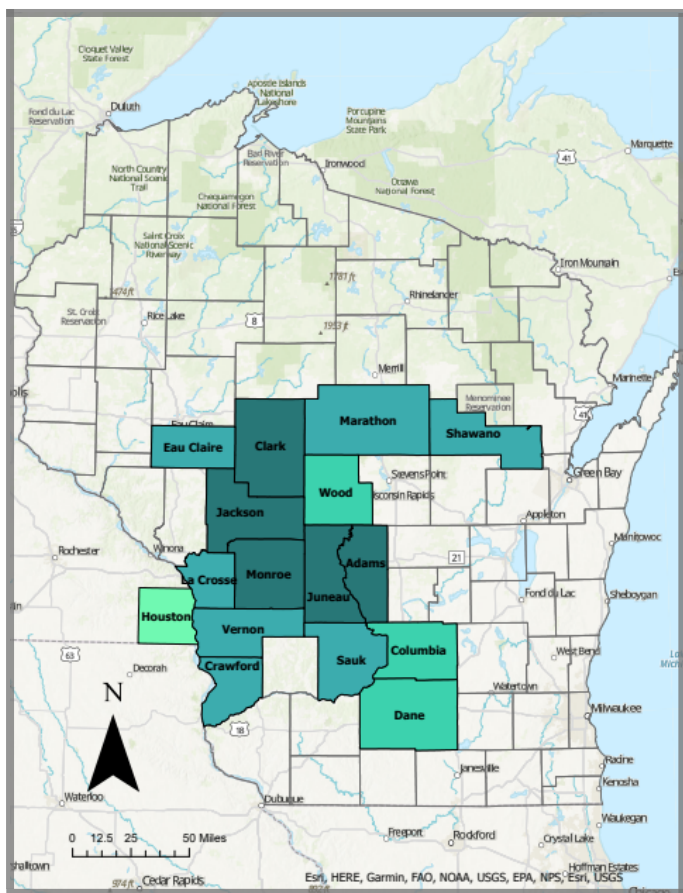
Household characteristics



Racial/Ethnic identity



Housing type/transportation




Social Vulnerability level

All persons (Service area)	Medium-high
All persons (Minnesota)	Medium
All persons (Wisconsin)	Medium

Community conditions: Social Vulnerability Index
Source: CDC/ATSDR SVI
Years displayed: 2020

The **majority of counties** have a **higher social vulnerability rating**. These counties are mostly located in the center of the map.

-   **12 counties** have a **high or medium-high** rating.
-  **3 counties** have a **low-medium** rating.
-  **1 county** has a **low** rating.

4

Higher  Lower



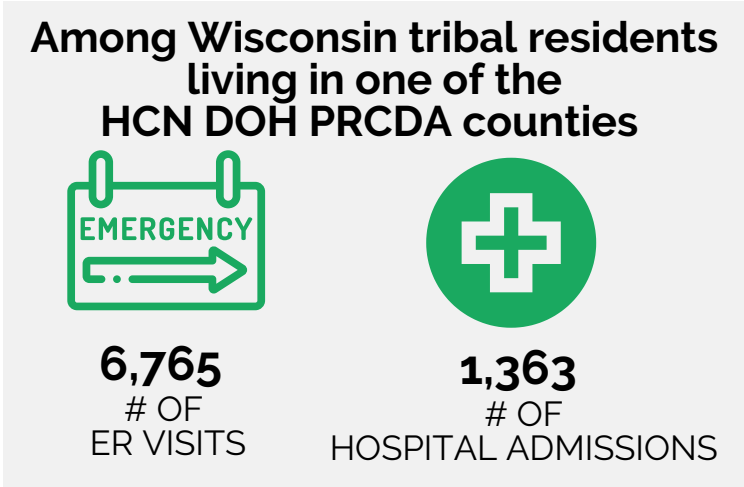
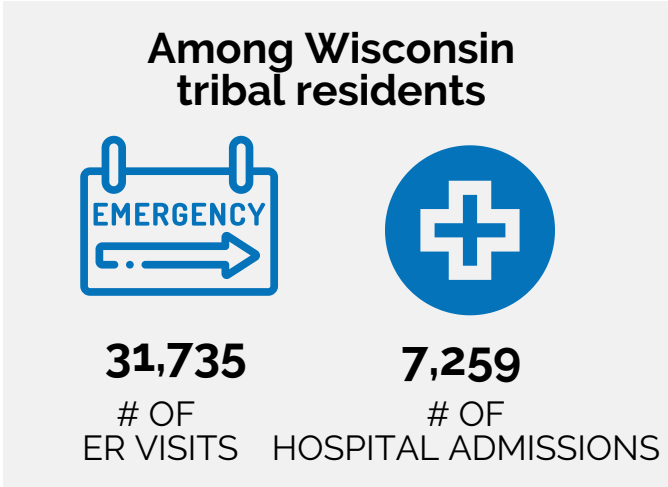
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Hospitalization & ER Visits

Hospitalization and emergency room (ER) visit data is captured for Wisconsin tribal residents who are treated in Wisconsin, Minnesota, and Iowa. The data below reflects the primary cause of admission and number of visits, not patient counts. Because someone may be seen multiple times, each encounter counts as a new visit.

During 2021....

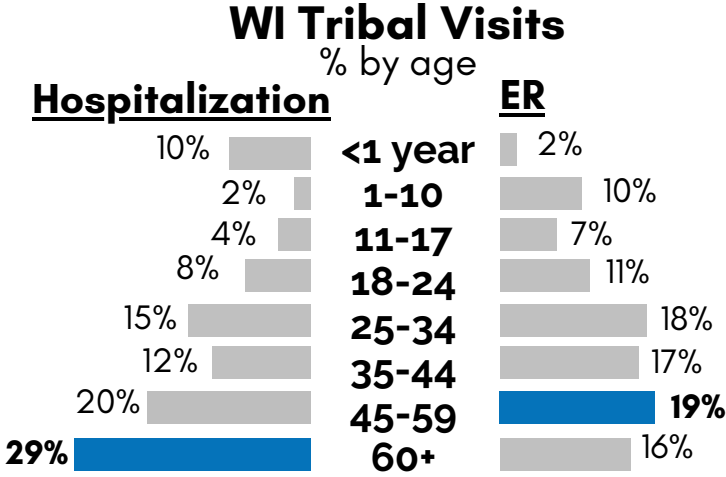


DYK?

Wisconsin tribal ER visits made up about **1.8% of all statewide ER visits** and **1.3% of all hospitalization admissions.**



2020 Census estimates report that about 1.1% of Wisconsin residents are tribal (alone).



Hospitalization & ER Visits: Hospital discharge visits (inpatient and ER) for AI/AN; principal diagnosis
Source: WI DHS Office of Health Informatics
Years displayed: 2021



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Hospitalization & ER Visits cont.

This table reports the **primary cause of ER visit** for **Wisconsin tribal residents who live within the HCN DOH PRCDA during 2021**. It also includes such residents who were treated in Minnesota and Iowa. Because someone may be seen multiple times, each encounter counts as a new visit.


TOTAL ER VISITS	# of visits
Total ER VISITS	6,765
AGE	
Less than 1 year	165
1-10 years	711
11-17 years	550
18-24 years	712
25-34 years	1,112
35-44 years	1,235
45-59 years	1,124
60+ years	1,156
SELECTED PRIMARY CAUSES	
ACCIDENTS/INJURIES (unintentional)	1,256
Broken bones	172
Poisonings (any cause)	84
MENTAL/BEHAVIORAL HEALTH	320
Conditions/disorders	160
Alcohol/drug dependence	84
Suicide (intent and self-harm)	76
COVID-19	222
INFECTIOUS/PARASITIC DISEASES	201
ALCOHOL & DRUG USE	189
DIABETES	75

NOTE: For ICD-10 CM conditions included in each primary health outcome group, please view pages 6-7 and Hospitalization & ER Data Definitions on reference page xiii.

 Means a data value is suppressed. This occurs when there are 5 or less encounters to protect a patient's privacy.

DYK? Unintentional accidents/injuries made up about 19% of all ER visits



PNEUMONIA & INFLUENZA	49
COPD	38
HIGH BLOOD PRESSURE	37
ASTHMA	37
CARDIOVASCULAR DISEASE	30
Coronary heart disease	21
Cerebrovascular disease	9
CANCER (all types)	

Alcohol and drug use: does not include "dependence," includes chronic liver disease/cirrhosis

Infectious/parasitic diseases: including sexually transmitted infections (STIs), other communicable diseases like salmonella, measles, or hepatitis. Does not include COVID-19, pneumonia, or influenza

COPD: Chronic Obstructive Pulmonary Disorder

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Hospitalization & ER Visits: Hospital discharge visits (inpatient and ER) for AI/AN; principal diagnosis
Source: WI DHS Office of Health Informatics
Years displayed: 2021



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Hospitalization & ER Visits cont.

This table reports the **primary cause of hospitalization admission** for **Wisconsin tribal residents who live within the HCN DOH PRCDA during 2021**. It also includes such residents who were treated in Minnesota and Iowa. Because someone may be seen multiple times, each encounter counts as a new admission.

TOTAL HOSPITALIZATIONS # of admissions
 Total hospitalizations **1,363**

AGE	# of admissions
Less than 1 year	103
1-10 years	14
11-17 years	62
18-24 years	86
25-34 years	193
35-44 years	197
45-59 years	265
60+ years	443

NOTE: For ICD-10 CM conditions included in each primary health outcome group, please view pages 6-7 and Hospitalization & ER Data Definitions on reference page xiii.

 Means a data value is suppressed. This occurs when there are 5 or less encounters to protect a patient's privacy.

DYK? Mental/behavioral health outcomes made up about 16% of all inpatient admissions.



SELECTED PRIMARY CAUSES	# of admissions
MENTAL/BEHAVIORAL HEALTH	223
Suicide (intent and self-harm)	134
Alcohol/drug dependence	76
Conditions/disorders	13
INFECTIOUS/PARASITIC DISEASES	102
ACCIDENTS/INJURIES (unintentional)	100
Broken bones	22
Poisoning (any cause)	7
DIABETES	68
COVID-19	63
CARDIOVASCULAR DISEASE	60
Cerebrovascular disease	33
Coronary heart disease	27

ALCOHOL & DRUG USE	55
HIGH BLOOD PRESSURE	36
CANCER (all types)	20
PNEUMONIA & INFLUENZA	19
ASTHMA	11
COPD	7

Continued from page 6:

Cerebrovascular disease: including stroke, brain bleed, or brain aneurysm

Coronary heart disease: including ischemic heart diseases

Asthma: Not related to COPD

Hospitalization & ER Visits: Hospital discharge visits (inpatient and ER) for AI/AN; principal diagnosis
Source: WI DHS Office of Health Informatics
Years displayed: 2021



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Major Causes of Death

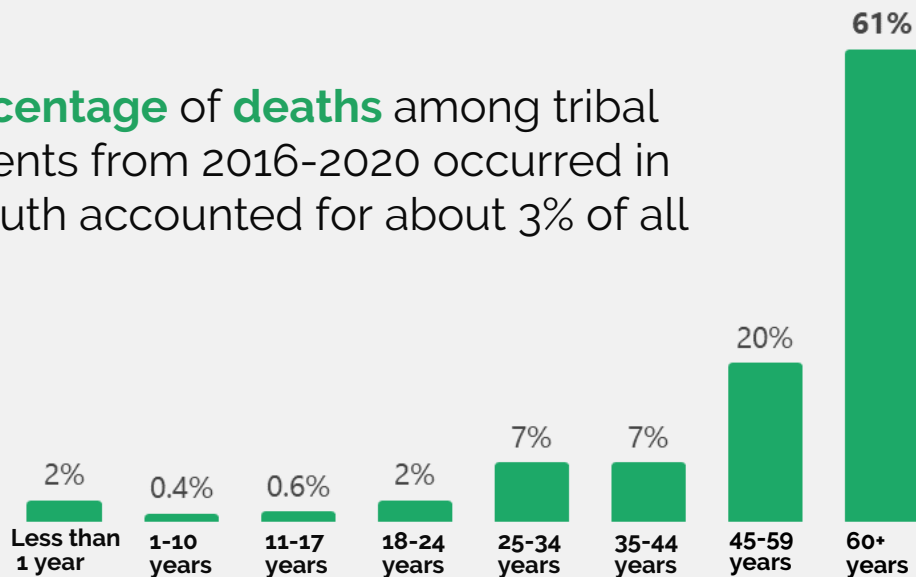
All tribal WI



From 2016-2020, a total of **2,471 deaths** were recorded for tribal Wisconsin residents. The **top five causes of death** were:

- 1 Malignant neoplasms.** This includes all types of cancer.
- 2 Diseases of the heart.** This includes things like coronary artery disease, irregular heartbeats, and heart defects someone is born with (CDC, 2023). It can result in a heart attack, fluttering in your chest, and heart failure among others.
- 3 Accidents.** This includes unintentional injuries like car accidents, drownings, poisonings, falls, and fires.
- 4 Diabetes.** This includes Type 1 (due to genetics) and Type 2 (due to behavioral and lifestyle choices).
- 5 Chronic liver disease and cirrhosis.** This includes long-term liver disease. It can be caused by certain medications, viruses, and alcohol misuse (John Hopkins Medicine, "Chronic Liver Disease/Cirrhosis").

The **largest percentage of deaths** among tribal Wisconsin residents from 2016-2020 occurred in **Elders**. Tribal youth accounted for about 3% of all deaths.



Major causes of death: Underlying cause of death for WI AI/AN, all ages
Source: CDC Wonder
Years displayed: 2016-2020.



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Major Causes of Death cont.

This table reports **Wisconsin Tribal resident cause of death** data during **2016-2020**, regardless of where the death occurred.

TOTAL DEATHS	# of deaths
Total deaths	2,471

AGE	# of deaths
Less than 1 year	37
1-10 years	11
11-17 years	14
18-24 years	47
25-34 years	168
35-44 years	169
45-59 years	506
60+ years	1,519

SELECTED UNDERLYING CAUSES

CANCER (all types)	443
Trachea/Bronchus/Lung	127
Colorectal	46
Breast	24
HEART DISEASE	399
Coronary Artery Disease	286
ACCIDENTS/INJURIES	305
Motor vehicle	65
Falls	35
ALCOHOL AND DRUG ABUSE	288
Alcohol	126
Other drugs	162

Major causes of death: Underlying cause of death for WI AI/AN, all ages

Source: CDC Wonder

Years displayed: 2016-2020.



DYK? The top causes of death for youth include:



Conditions originating in the perinatal period*

**occurring before birth up to 28 days after birth*



Accidents

DIABETES	150
LOWER RESPIRATORY DISEASE	109
CEREBROVASCULAR DISEASE	90
INFECTIOUS/PARASITIC DISEASES	82
COVID-19	75
SUICIDE	66
ALZHEIMERS	42
PNEUMONIA AND INFLUENZA	30

Lower respiratory: including chronic obstructive pulmonary disease (COPD, asthma, bronchitis, or emphysema)

Cerebrovascular disease: including stroke, brain bleed, brain aneurysm, or carotid artery disease

Infectious/parasitic diseases: including sexually transmitted infections (STIs), other communicable diseases like salmonella, measles, or hepatitis

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All Tribal: Socioeconomic Factors

Socioeconomic (SES) status is often measured by education level, income, occupation, or wealth: It is tied to health behaviors, resources, and community conditions. SES status is highly influential on health status because of its ability to impact key resources and types of exposures (Phelan, Link, & Tehranifar, 2010).

Education

 % with a HS degree or lower



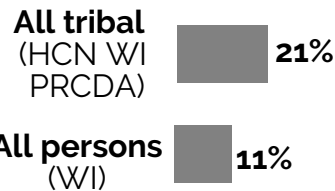
Household income

 Median income past 12 months



Poverty



 % below poverty level



Cost of living

 Median survival budget for family of 4



 Same or better than state value  Worse than state value  Data suppressed or not available



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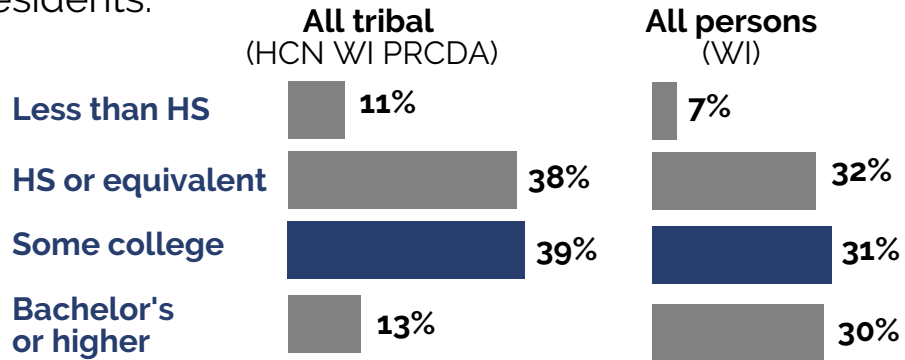
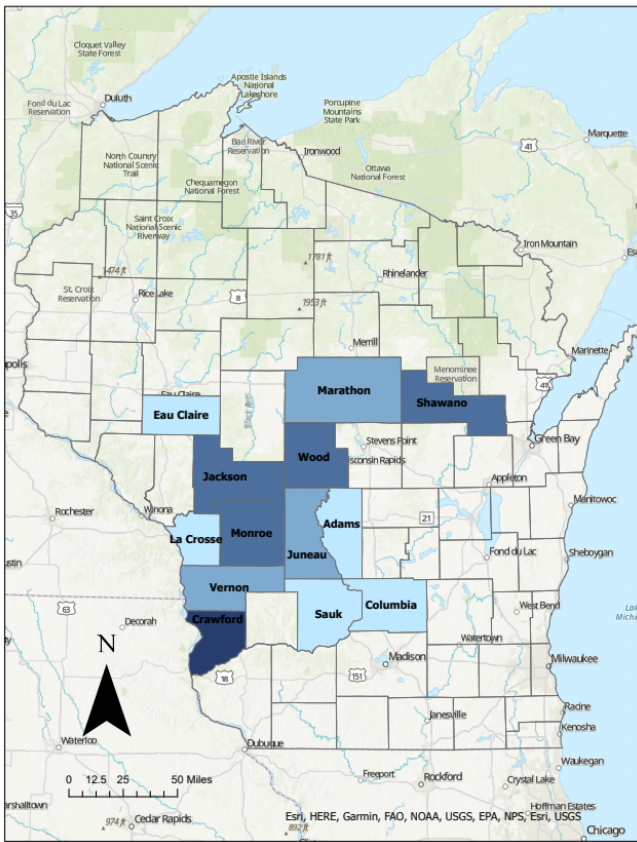


Education

All tribal WI HCN DOH PRCDA*

*excludes Clark County & Dane County due to limited sampling

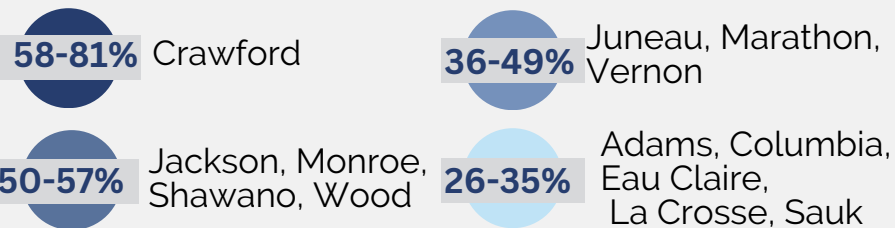
Of those aged 25 years and older, **some college** has the **greatest educational attainment percentage** for both all tribal and all persons groups. About 49% of WI tribal members living in the PRCDA counties have a high school degree or lower in comparison to 39% of all Wisconsin residents.



Education: Educational attainment those 25 years and older
Source: American Community Survey
Years displayed: 2016-2020

About **1/2** of the counties have a **higher percentage** of tribal members with a **high school degree/equivalent or less**.

% of tribal population with a HS degree or less



Higher → Lower

DYK? Of tribal members living in the PRCDA counties, females have higher educational levels when compared to males.



Bachelor's or higher :

Female
18%

Male
12%

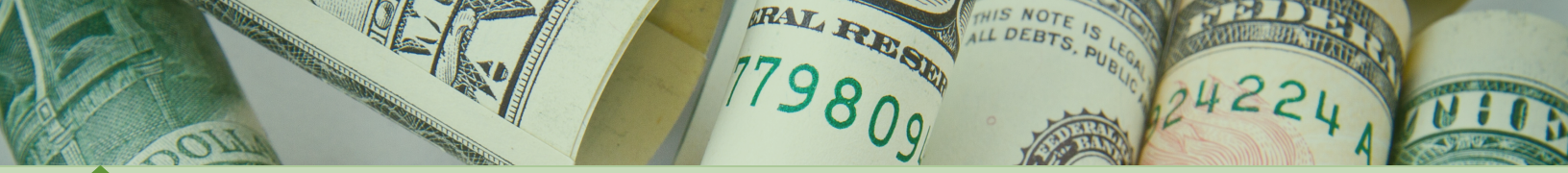


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Household income

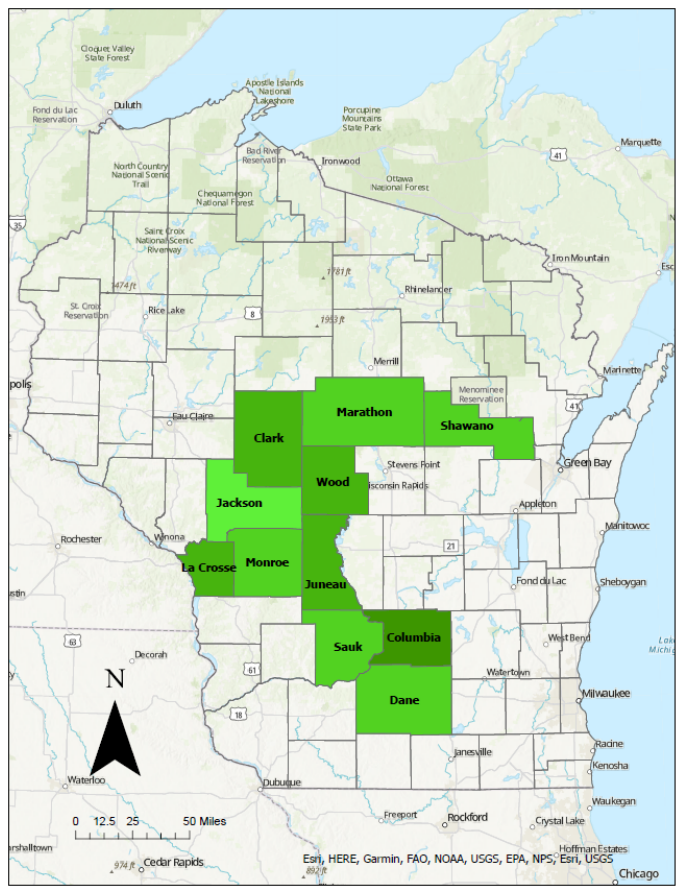
All tribal WI HCN DOH PRCDA*

*excludes Adams, Crawford, Eau Claire, & Vernon County due to limited sampling

Although the median household income among Wisconsin tribal members living in the PRCDA is similar to all persons living within those same counties, tribal PRDA household incomes are \$12,080 higher when compared to tribal members statewide. In addition, **Wisconsin tribal households make \$18,290 less** when compared to all Wisconsin residents.



Household income: Median household income in the past 12 months (in 2020 inflated dollars)
Source: American Community Survey
Years displayed: 2016-2020



Among Wisconsin Tribal Residents:

Lowest household income
 Jackson County: \$36,250

Highest household income
 Columbia County: \$72,212

Greatest difference among tribal and all persons **Tribal: \$47,941**
Dane County: \$27,238 **All persons: \$75,179**

About **80%** of the counties have a **median household income lower** than the **HCN WI PRCDA median household value (\$57,083)**.

Median household income

- \$57,084-\$72,212**
Columbia
- \$36,251-\$48,625**
Dane, Marathon, Monroe, Sauk, Shawano
- \$48,626-\$57,083**
Clark, Juneau, La Crosse, Wood
- \$36,250 or less**
Jackson

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Higher Lower



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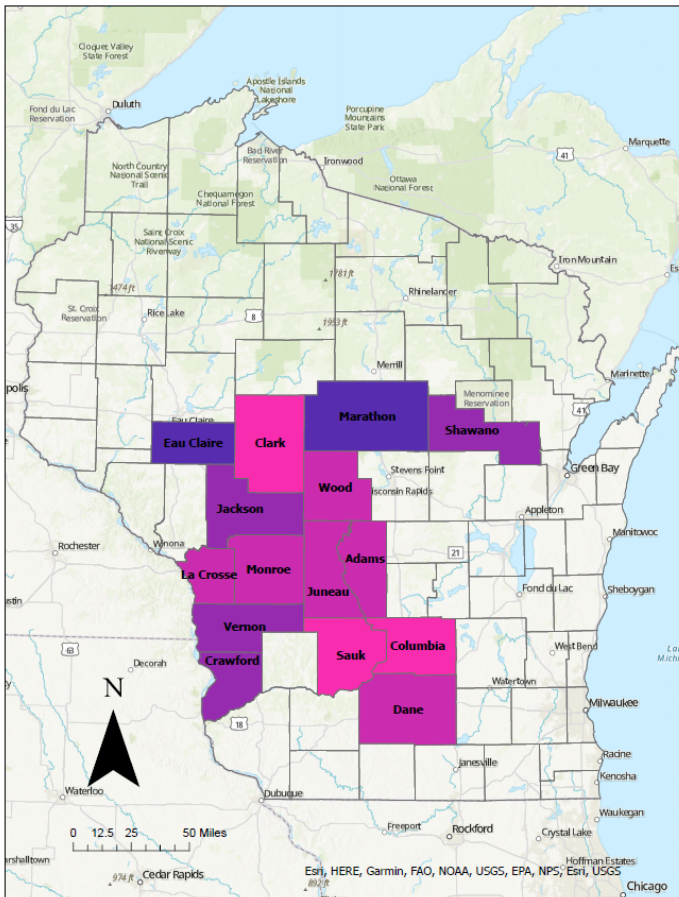
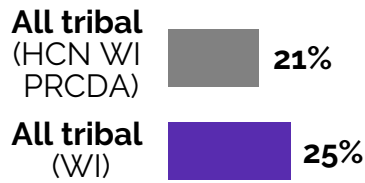




Poverty

All tribal
WI HCN DOH PRCDA

The percentage of Wisconsin tribal members living below the poverty level is slightly higher when compared to tribal members living in the PRCDA counties (4%). However, there are **11% more tribal members** in the PRCDA and **14% more tribal members statewide living in poverty compared to all Wisconsin residents**. The Healthy People 2030 goal is to reduce the percentage of persons living in poverty down to 8%.



Poverty: Poverty status in the past 12 months
Source: American Community Survey
Years displayed: 2016-2020

Among Wisconsin Tribal Residents:

Lowest % below poverty
Clark: 3%

Highest % below poverty
Eau Claire: 45%

Greatest difference among tribal and all persons
Eau Claire: 32%

Tribal: 45%
All persons: 13%

About **40% of the counties** have a **poverty rate above** the HCN WI PRCDA poverty percentage (21%).

% of tribal population below poverty level

29-45% Eau Claire, Marathon

10-20% Adams, Dane, Juneau, La Crosse, Monroe, Wood

21-28% Crawford, Jackson, Shawano, Vernon

3-9% Clark, Columbia, Sauk

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Cost of Living

All persons
HCN DOH PRCDA

Households who meet the definition of ALICE (**Asset Limited, Income Constrained, Employed**) earn too much money to qualify as "poor" (being below the Federal Poverty Level) but are still unable to cover basic household expenses. In 2018, it was estimated **nearly 42% of US households were struggling to afford basic needs**- this includes those below the Federal Poverty Level and those who are ALICE.

Keep in mind, the survival budgets shown below reflect wages for 2018. Since then, cost of living has increased significantly, and the ALICE Survival Budget today is higher than reported. The data below reflects for a family of four.

All persons (WI)		\$68,472	All persons (HCN PRCDA)		\$70,346
All persons (MN)		\$69,160	Cost of living: ALICE (Asset Limited, Income Constrained, Employed) Source: United for ALICE Years displayed: 2018		

Among Wisconsin/Minnesotan Tribal Residents:

Lowest survival budget

WI: Grant: \$64,022
MN: Rock: \$65,437

Highest survival budget

WI: Dane: \$90,896
MN: Washington: \$97,053

About **50% of the counties** have an **ALICE budget higher** than the HCN PRCDA median value (\$70,346).

ALICE budget (for a family of four)



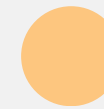
\$76,878-\$90,896
Dane



\$66,561-\$69,972
Adams, Crawford, Monroe, Wood, Vernon

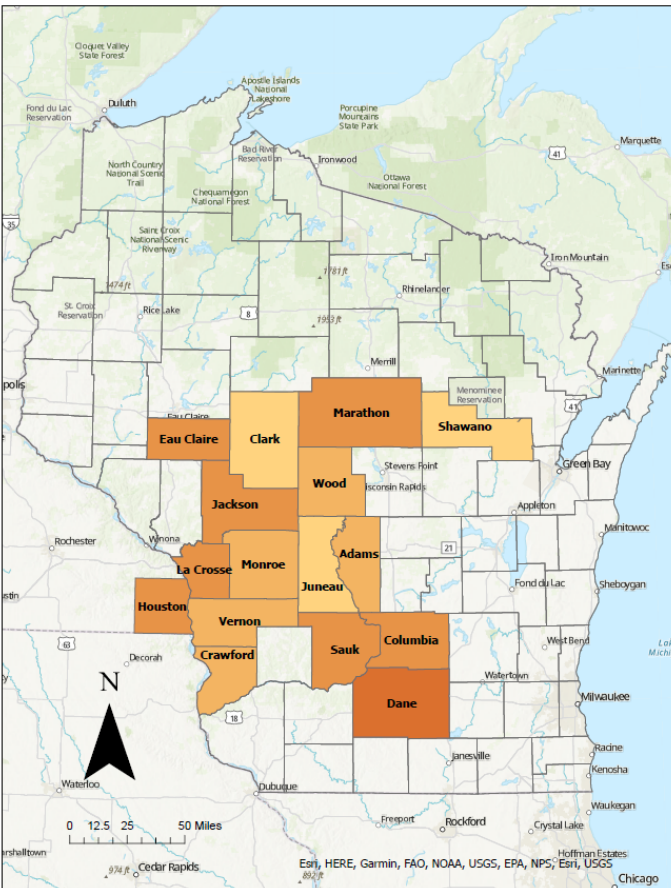


\$69,973-\$76,877
Columbia, Eau Claire, Houston, Jackson, La Crosse, Marathon, Sauk



\$65,811-\$66,560
Clark, Juneau, Shawano

14



Higher  Lower



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Public Health Summary

The Public Health division provides primary, secondary, and tertiary morbidity and mortality prevention. Programs and initiatives are directed towards communicable and noncommunicable disease prevention and monitoring, connecting community members to health resources, providing health education, and Public Health Accreditation.

Available services to community members include:



Family Spirit Program
Home-visiting program from pregnancy-up to three years
Jamie Decorah
715-253-4400 ext. 33142



Communicable Disease Prevention & Follow-up
Home-test reporting, disease monitoring, access to prevention materials
Ronelle McKernan
715-896-2570



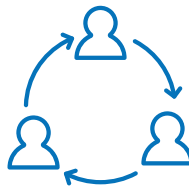
Maternal and Child Health
Care/education to parents and children, Partners in Parenting, Safe Sleep Cribs for Kids, First Breath, community referrals, childhood vaccines
Irina Clendenning
608-355-1240 ext. 35620



Women, Infants, & Children Program
Breastfeeding support, food benefits, nutrition education, and program referrals
Irina Clendenning
608-355-1240 ext. 35620



Child Passenger Safety Technicians
CHRs provide education on proper child passenger safety & car seats
Jamie Decorah
715-253-4400 ext. 33142



Resource, Referral, & Transports
Connection to county and local resources, transport to medical appointments
Jamie Decorah
715-253-4400 ext. 33142



Other Services - available periodically*
Community health fairs, community health assessment, chronic disease prevention
**Service availability may be dependent upon funding*
Kandyce Dunlap
715-284-9851 ext. 35042



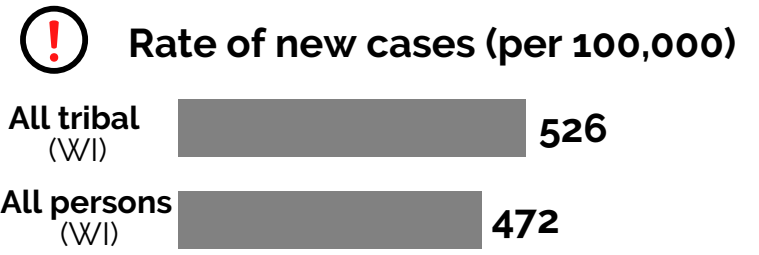
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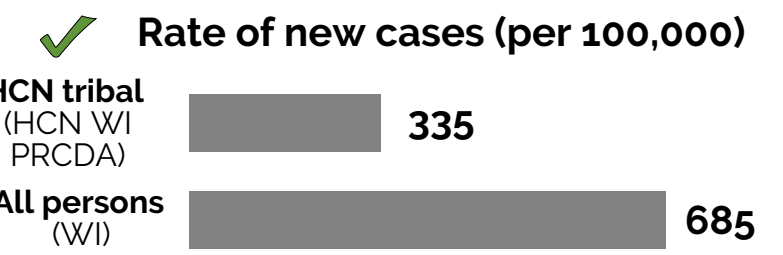
All Tribal: Public Health Outcomes

The following section describes some public health outcomes like cancer, sexually transmitted infections (STIs), and vaccines. Reported STIs include syphilis, chlamydia, and gonorrhea.

Cancer

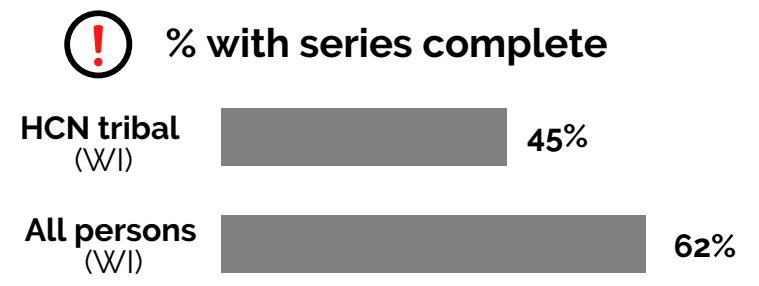


Sexually transmitted infections

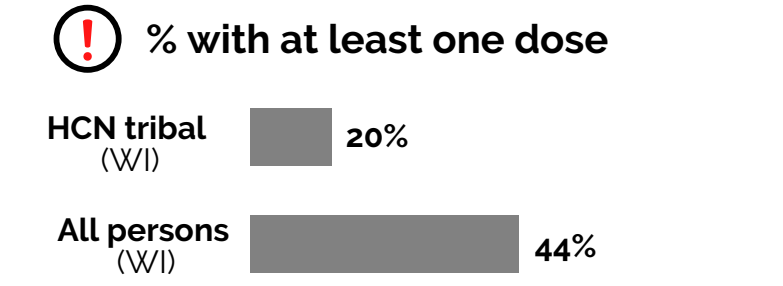



Vaccines


COVID-19




Influenza



 Same or better than state value

 Worse than state value

 Data suppressed or not available



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All Tribal: Public Health Outcomes cont.

The following section describes various pregnancy health measures, including maternal and infant characteristics.



Maternal & Child Health



Prenatal care



% of mothers receiving care in the first trimester



Low birth weight



% of births with low birth weight (<2,500 grams)



Pre-term birth



% of births considered pre-term (<37 weeks)



Maternal smoking



% of mothers who ever smoked during pregnancy



Same or better than state value



Worse than state value



Data suppressed or not available



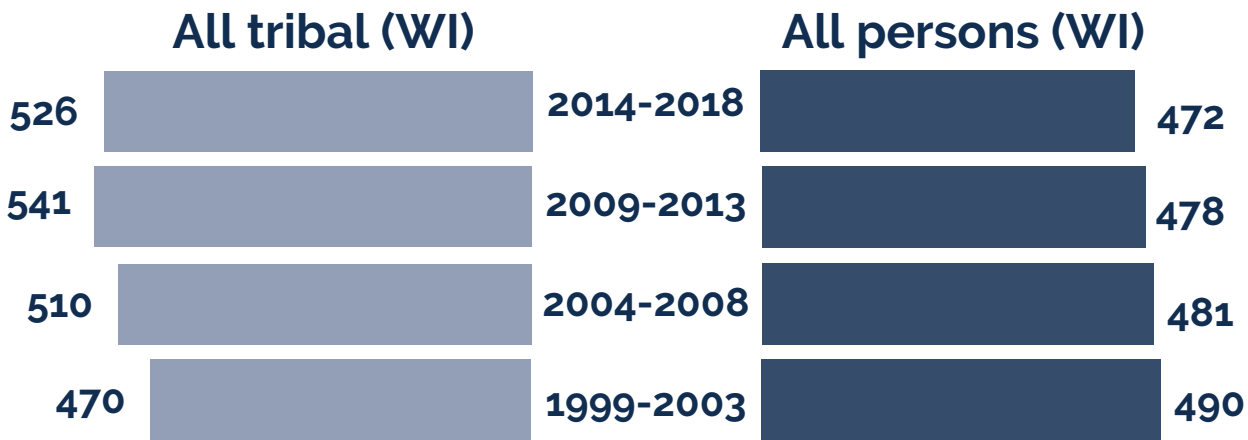


Cancer (new cases)

All tribal
WI

This includes all types of cancers, at any stage, when newly diagnosed by year of diagnosis for Wisconsin residents (incidence). Increases in new cancer cases may be due to increased burden (exposure to risk factors like air or water pollution, smoking/alcohol use, tanning bed use, poor diet/exercise, and more) or better ways to detect cancer like increased screening, improved healthcare access, or technology advancements.

The rates below show age-adjusted rates per 100,000 people. When comparing two or more populations, it is important to age-adjust rates so the calculation accounts for differences in age. Meaning, age has a large influence on the probability of developing cancer so it would make sense a population with a greater proportion of older persons would have a higher cancer rate. By using an age-adjusted rate, it makes the comparison more fair by accounting for age differences.



Top two cancers with the highest incidence rate in Wisconsin in 2014-2018:

All tribal

- 1 Lung and bronchus:**
84 cases per 100,000
- 2 Female breast:**
75 cases per 100,000

All persons

- 1 Female breast:**
69 cases per 100,000
- 2 Lung and bronchus:**
59 cases per 100,000

Cancer (new cases): Cancer incidence age-adjusted rate
Source: WI DHS Wisconsin Interactive Statistics on Health
Years displayed: 1999-2018



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Sexually transmitted infections

HCN tribal
WI HCN DOH PRCDA

Sexually transmitted infections (STIs) are infections spread by vaginal, oral, or anal sex. If left untreated, STIs can increase your risk of getting other STIs (like HIV), infertility, organ damage, and certain types of cancer. Using protection (like condoms) and regular screening are the best ways to prevent and stop the spread of STIs (Mayo Clinic, 2022.) In addition, vaccines are available to prevent Human papillomavirus (HPV), Hepatitis A, and Hepatitis B (CDC, 2023). **The rates below reflect per 100,000 persons. Although there are several STIs, this section focuses on Chlamydia, Gonorrhea, and Syphilis.**

HCN tribal
(HCN WI
PRCDA) **335**

All persons
(WI) **685**

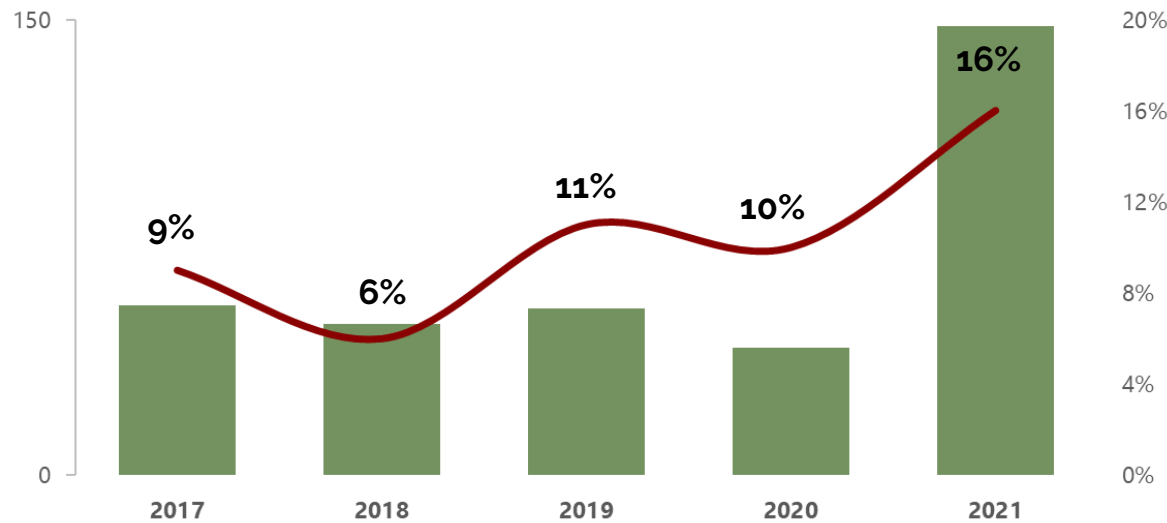
HCN tribal
(WI) **261**

All tribal
(WI) **888**

The data below includes **Ho-Chunk Tribal members living within a HCN DOH PRCDA county** who had received a positive STI result, **administered by the HCN DOH or administered somewhere else, and their lab result information was forwarded to us.**

of encounters

% of positive encounters



The **5-year average** of positive HCN tribal STI patient encounters is **9%**. Meaning, 9% of all HCN patients tested for these selected STIs were positive. The **lowest percentage** was in **2018 (6%)** and the **highest** was in **2021 (16%)**.

Sexually transmitted infections: Chlamydia, Gonorrhea, and Syphilis
Source: HCN DOH NextGen; STIs in WI 2021 Reported Cases
Years displayed: 2017-2021; 2021

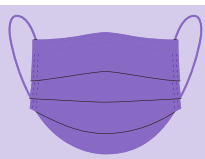


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Vaccines



COVID-19

HCN tribal
WI

COVID-19 is a respiratory illness caused by coronavirus, resulting in moderate to severe illness, including hospitalization or death. Additionally, some may experience long COVID symptoms- this occurs when COVID symptoms continue for at least four weeks after the initial infection. Most recover from post-COVID conditions within a few weeks but some may continue to experience symptoms for weeks or months (WI DHS, 2022). **The data below reflects the series completion of the COVID vaccine.**

HCN tribal
(WI)



45%

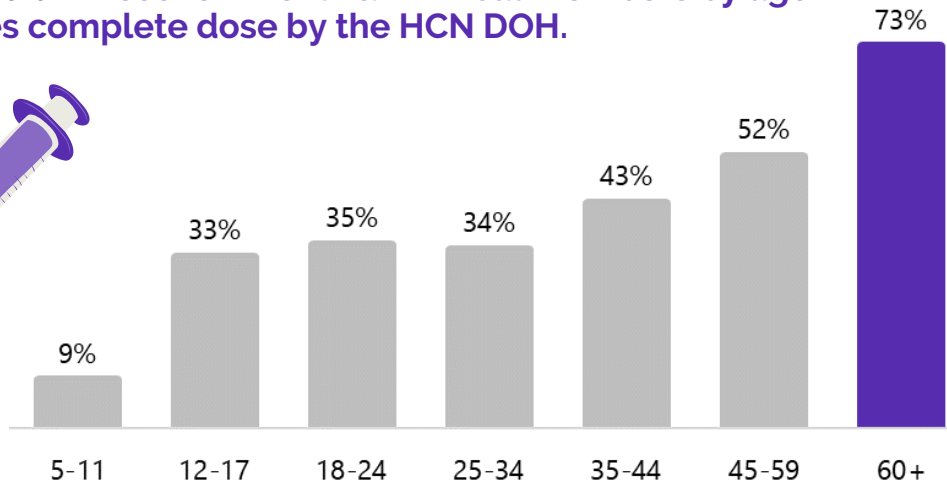
All persons
(WI)



62%

The graph below reflects the percentage of **Wisconsin Ho-Chunk Tribal members by age who had received their COVID-19 series complete dose by the HCN DOH.**

Elders (60+ years) had the **highest percentage** of Ho-Chunk members with a **COVID-19 series complete dose**. Youth (5-11 years) had only become eligible for the COVID-19 vaccine in November 2021.



NOTE: Series complete means someone has received the recommended number of doses- in 2021, this was two doses of Moderna or Pfizer or one dose of Johnson & Johnson. During the time the data displays (2021), COVID-19 vaccines were eligible for those 5+ years and COVID boosters (monovalent formula) had only become available as of October 2021.

COVID-19 (vaccines): SARS COV 2 Vaccine Series Complete
Source: HCN DOH NextGen; HCN DOH COVID-19 Vaccine Report
Years displayed: 2021

20



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Vaccines



Influenza

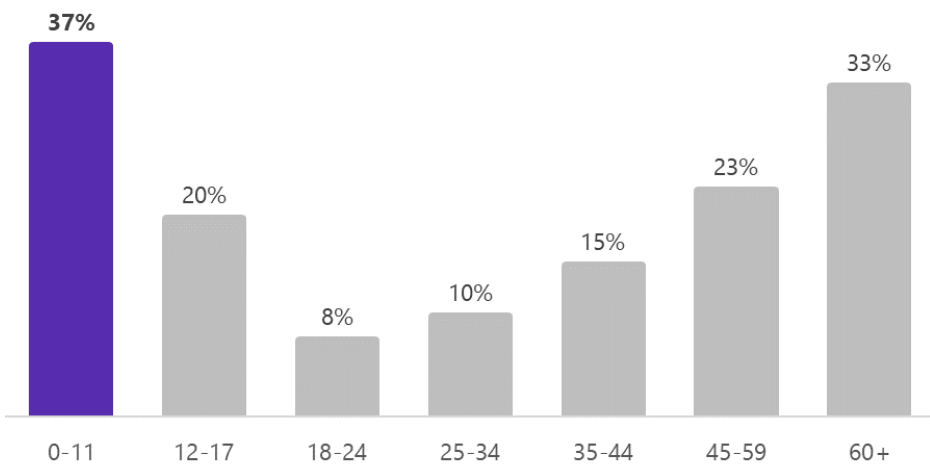
HCN tribal
WI

Influenza (flu) is an illness caused by influenza viruses. The flu is considered a seasonal illness, where it occurs yearly and during similar months each year. The flu can result in mild to severe illness, including hospitalization or death. Elders, those with an underlying health condition, and pregnant women are at an increased risk for severe outcomes (WI DHS, 2023). The best way to prevent flu is to get your yearly flu vaccine.

The data below reflects at least one flu vaccine dose.



The graph below reflects the percentage of **Wisconsin Ho-Chunk Tribal members by age who had received at least one flu vaccine dose during the 2020-2021 flu season by the HCN DOH.**



Youth (0-11 years) had the **highest percentage** of Ho-Chunk members with **at least one flu vaccine dose**. Elders were only four percent lower than youth aged 0-11 years.

NOTE: Those 6+ months are eligible for a flu vaccine. Most individuals only need one dose of flu, but youth aged 6 months-8 years who have had less than two flu vaccines in the past or don't know if have had less than two doses should get two doses during this flu season (WI DHS, 2022).

Influenza (vaccine): Influenza vaccine
Source: HCN DOH NextGen; WI DHS Immunizations: Influenza vaccine data
Years displayed: 2020-2021 flu season



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Maternal & Child Health



Prenatal Care

All tribal
WI HCN DOH PRCDA

A pregnancy includes three trimesters:

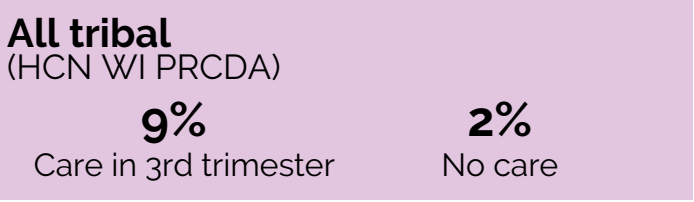
- 1** 0-13 weeks
- 2** 14-26 weeks
- 3** 27-40 weeks

Prenatal care should begin as soon as when someone thinks they're pregnant to protect the health of themselves and the baby. A 2017 study found that the majority of women find out they're pregnant between 5-6 weeks (first trimester). Late pregnancy awareness, or learning someone is pregnant later than average, increased with age and with unintended pregnancies (Branum & Ahrens, 2017).

The percentage of all persons receiving prenatal care in the first trimester in the HCN WI PRCDA counties and statewide is the same (79%). However, **17 percent less** of **all tribal** in the Wisconsin PRCDA counties and statewide **receive care in the first trimester** compared to **all Wisconsin residents**.



Of those receiving prenatal care....



Prenatal care: Trimester prenatal care began
Source: WI DHS Wisconsin Interactive Statistics on Health
Years displayed: 2016-2020



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Maternal & Child Health

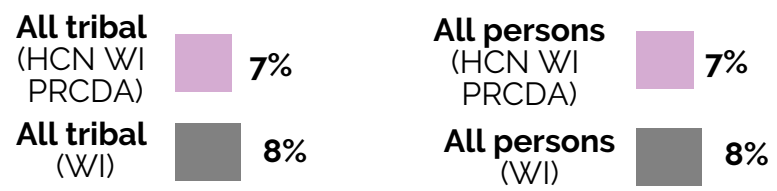


Low birth weight

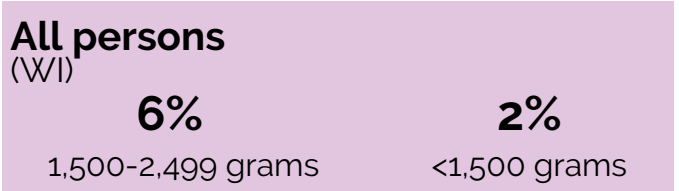
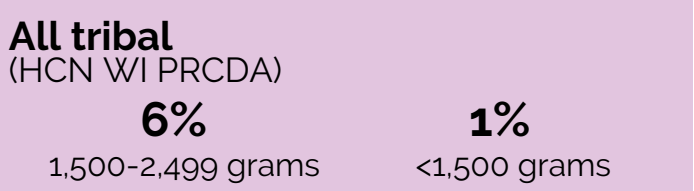
All tribal
WI HCN DOH PRCDA

The average birth weight in the United States is 3,500 grams or 7.5 pounds. **Low birth weight is any baby that weighs less than 2,500 grams or about 5.5 pounds.** A baby with a **low birth weight is often caused by 1) being born too early (pre-term) or 2) growing too slowly in the womb (poor intrauterine growth) or both.** Low birth weight can be influenced by carrying more than one baby (like twins or triplets), smoking or alcohol use, and medical conditions like high blood pressure. Babies with low birth weight may need additional care after birth and/or may have developmental concerns related to their organ systems, immune system, breathing function, and nutrition (Jin, 2015).

The **percentage of babies with low birth weight** is **similar** when comparing **percentages in the PRCDA counties and statewide.** Additionally, there is only a one percent difference of low birth weight babies among all tribal in the PRCDA counties (7%) and all persons statewide (8%).



Of babies with low birth weight....



Low birth weight: Low birth weight module
Source: WI DHS Wisconsin Interactive Statistics on Health
Years displayed: 2016-2020



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Maternal & Child Health

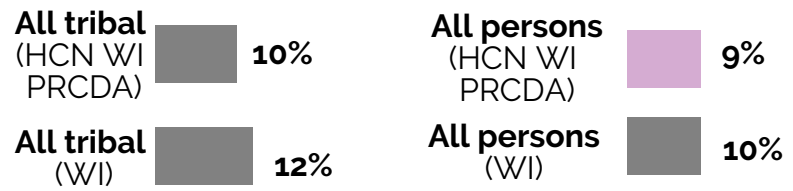


Pre-term birth

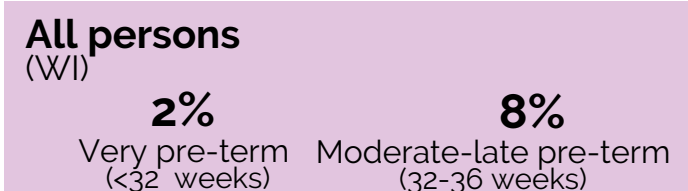
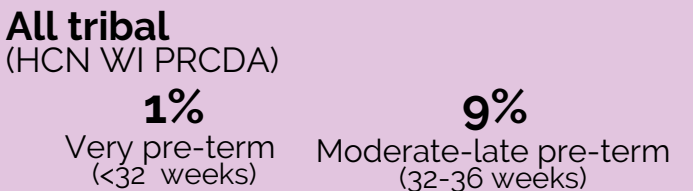
All tribal
WI HCN DOH PRCDA

Pre-term birth is a baby who is delivered before 37 weeks. The earlier a baby is born, the greater the risk of breathing and digestive issues, brain bleeding, and developmental effects later in life. **In the United States, about 10% of all births were pre-term in 2020 (CDC, 2022).** Like low birthweight, pre-term birth can be caused by multiple factors including carrying more than one baby (like twins or triplets), smoking or alcohol use, less than 1.5 years in between pregnancies, having a pre-term baby in the past, and any pregnancy complications where the baby must be delivered early (CDC, 2022).

The **percentage of tribal babies born pre-term is similar** when comparing **percentages in the PRCDA counties, all persons statewide, and national averages.** However, there is a slightly higher percentage of tribal pre-term babies statewide in comparison to those in the PRCDA counties (by 2%). All persons in the PRCDA counties had the lowest percentage of pre-term births.



Of babies born pre-term...



Pre-term birth: Gestational age based on obstetric estimate
Source: WI DHS Wisconsin Interactive Statistics on Health
Years displayed: 2016-2020



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Maternal & Child Health

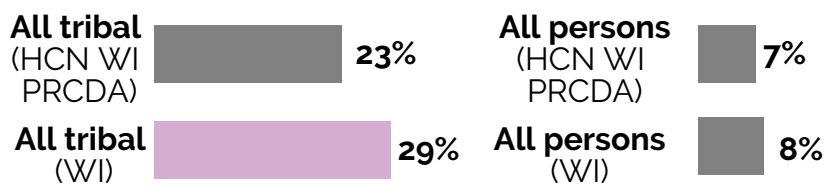


Maternal Smoking

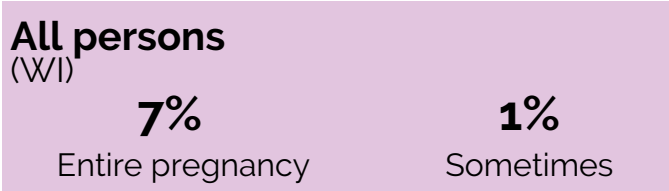
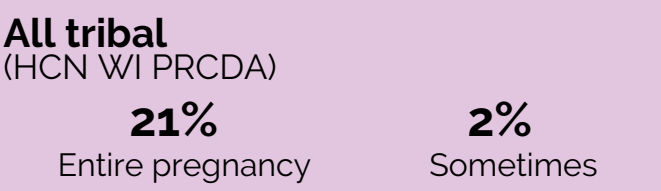
All tribal
WI HCN DOH PRCDA

Babies can be exposed to smoking directly, by the mother (maternal smoking), or indirectly, by others in the household (secondhand smoking). Mothers who smoke during pregnancy put their baby at risk for miscarriage, pre-term birth, low birth weight, and death from sudden infant syndrome (SIDS). These effects can lead to developmental effects, even later in life (CDC, 2020). In addition, smoking mothers may have pregnancy complications and may have more difficulty becoming pregnant (CDC, 2020).

The percentages below describe the percentage of mothers who smoked during their entire pregnancy and those who smoked sometimes. **Compared to all persons, tribal residents in the PRCDA counties and tribal statewide have a significantly higher percentage of mothers smoking during pregnancy.** Tribal mothers statewide have the highest percentage of mothers smoking during pregnancy when compared to all other groups.



Of mothers smoking during pregnancy...



Pre-term birth: Maternal smoking
Source: WI DHS Wisconsin Interactive Statistics on Health
Years displayed: 2016-2020



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Environmental Health Summary

The Environmental Health (EH) division works to prevent, identify, and manage environmental hazards through several programs including those related to air, water, and soil. In addition, the EH division oversees emergency preparedness, injury prevention, institutional environmental health, public works, surface water monitoring, wetlands delineation, and assists in public health accreditation.

Available services to community members include:



Injury prevention

Car seat and bike helmets
Free, call for appointments

Lisa Herritz
715-284-9851 ext. 35022



Water-private wells

Free water testing and free well construction*
Includes bacteria, nitrate, pH, iron, manganese, arsenic
Assistance with emergency situations

Brock Brunstad
715-284-9851 ext. 35063



Water-private septic*

Free septic construction
Assistance with emergency situations

Brock Brunstad
715-284-9851 ext. 35063



Air-environmental assessments

Mold and radon inspections

Matt Malimanek
715-284-9851 ext. 35054



Environmental health reporting

Inspections and testing for complaints
Includes food, lodging, childcare, food or waterborne illness
Environmental hazards reporting

Pam Thunder
715-284-9851 ext. 35011



Environmental clean up

Resources to assist in clean-up for community hazards
Includes dump sites, abandoned homes, hazardous spills, and more

Adam Meinerz
715-284-9851 ext. 35008



Water- public water

Application for use for residential accounts

Kevin Gunderson
715-284-9851 ext. 35060



Other services- available periodically

Clean Sweep Events- hazardous waste
Rabies vaccine events for pets
Notices shared via social media

**Dependent upon available funding; must be a tribal member, be the first well/septic constructed, and installed at primary residence*



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Inspections and Testing

Registered Tribal sanitarians conduct inspections among Ho-Chunk facilities and events to ensure public health safety. Inspections are conducted routinely and when complaints are issued.

Inspections occur at the following types of Ho-Chunk facilities:

Gaming centers

C-stores

Head Start

Daycare

Food warehouse

Pools

Campground

Hotels

Tribal Aging Unit

Food protection inspections and other testing also occur for:

- 1** Mass gatherings
- 2** Foodborne/waterborne illness investigations
- 3** Institutional environmental health



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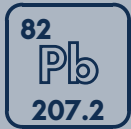


All Tribal: Environmental Health

The following section describes various environmental health measures including public drinking water conditions.



Community drinking water



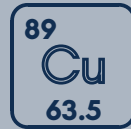
Lead



Average ppb

All persons
(HCN WI
COMMUNITIES) **3.95**

All persons
(WI COUNTIES OF
HCN COMMUNITIES) **1.31**



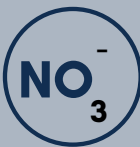
Copper



Average ppb

All persons
(HCN WI
COMMUNITIES) **136.78**

All persons
(WI COUNTIES OF
HCN COMMUNITIES) **195.53**



Nitrate



Average ppm

All persons
(HCN WI
COMMUNITIES) **1.65**

All persons
(WI COUNTIES OF
HCN COMMUNITIES) **1.22**



Within maximum contaminant limit



Above maximum contaminant limit



Data not available or suppressed

28



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All Tribal: Environmental Health cont.

The following section describes various environmental health measures including private drinking water (well) conditions.



Private well water

Primary contaminants



Bacteria



% positive

HCN tribal
(HCN WI
PRCDA)



All persons
(HCN WI
PRCDA)



Nitrate



Average ppm

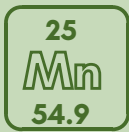
HCN tribal
(HCN WI
PRCDA)



All persons
(HCN WI
PRCDA)



Secondary contaminants



Manganese



Average ppm

HCN tribal
(HCN WI
PRCDA)



All persons
(HCN WI
PRCDA)



pH level



Average level

HCN tribal
(HCN WI
PRCDA)



All persons
(HCN WI
PRCDA)



Within maximum contaminant limit

Above maximum contaminant limit

Data not available or suppressed

29



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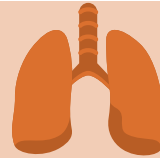
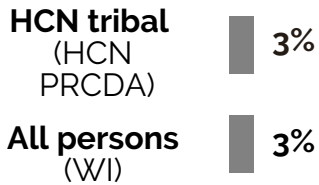
All Tribal: Environmental Health cont.

The following section describes various environmental health measures related to health outcomes associated with lead exposure, air quality, and safety.



Blood lead levels

✓ % of youth (0-6 years) with value $\geq 5 \mu\text{g/dL}$



Asthma



rate ER visits (per 10,000)



Seat belt use

! % adults reported/observed with use



✓ Same or better than state value

! Worse than state value

✶ Data not available or suppressed

30

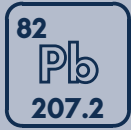


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Community Drinking Water



Lead

All persons
WI HCN tribal communities

Lead gets into the drinking water from corrosive plumbing materials. This occurs when metal wears away due to a chemical reaction in the water; this can be caused by the temperature in the water, existing minerals, or the acidity/alkalinity of the water. The Lead and Copper Rule issued by the Environmental Protection Agency (EPA) states that water treatment facilities must take action to make "drinking water less corrosive to the materials it comes into contact with on its way to consumers' taps." It is estimated lead exposure through water makes up a minimum of 20% of total lead exposure.

Lead exposure can be potentially harmful for all persons but especially for children and pregnant women. In children, the effects of lead include behavioral and developmental issues. Similarly, pregnant women with lead exposure can result in pre-term birth or reduced growth of the fetus (EPA, 2023).

Lead summary	Maximum contaminant level (MCL): Highest level allowed in drinking water; Requires action if 10% or more samples exceed value	15 ppb
	Maximum contaminant level goal (MCLG): Level for at which there is no known or expected risk for health	0 ppb

During 2019-2021 in the HCN community water system, lead reads included Sauk County and Jackson County. The Wisconsin counties for all residents reflects these same counties and their reads during this period.

	All persons (HCN WI COMMUNITIES)	All persons (WI COUNTIES OF HCN COMMUNITIES)
% water reads over lead MCL:	0%	2%
Range of lead reads:	0.43-4.9 ppb	0.08-41.2 ppb

Public drinking water: Water Quality Report; Drinking Water System Portal
Source: HCN DOH EH Division; WI Department of Natural Resources
Years displayed: 2019-2021



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Community Drinking Water



Copper

All persons
WI HCN tribal communities

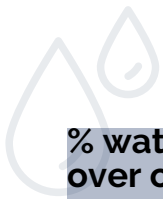
Copper is naturally found in water but it can also come from corroded household plumbing sources. Using hot water or water that has not been used can increase the risk of copper exposure. The Lead and Copper Rule issued by the Environmental Protection Agency (EPA) states that water treatment facilities must take action to make "drinking water less corrosive to the materials it comes into contact with on its way to consumers' taps" (2023).

Usually, copper does not cause health effects in healthy individuals. However, exposure to high levels can cause headaches, gastrointestinal issues, liver damage, and kidney disease. Babies (< 1 year) are at an increased risk for copper exposure because their bodies cannot get rid of it easily (MN Department of Health, 2023).

Copper summary

Maximum contaminant level (MCL): Highest level allowed in drinking water; Requires action if 10% or more samples exceed value		1,300 ppb
Maximum contaminant level goal (MCLG): Level for at which there is no known or expected risk for health		1,300 ppb

During 2019-2021 in the HCN community water system, copper reads included Jackson, Sauk, and Wood counties. The Wisconsin counties for all residents reflects these same counties and their reads during this period.



	All persons (HCN WI COMMUNITIES)	All persons (WI COUNTIES OF HCN COMMUNITIES)
% water reads over copper MCL:	0%	0.2%
Range of copper reads:	3.9-426.5 ppb	1.4-1,310 ppb

Public drinking water: Water Quality Report; Drinking Water System Portal
Source: HCN DOH EH Division; WI Department of Natural Resources
Years displayed: 2019-2021



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Community Drinking Water



Nitrate

All persons
WI HCN tribal communities

Nitrate is naturally found in plants and animals. However, excess nitrate gets in the water from fertilizers and animal/human waste.

High levels of nitrate increase your risk for colon cancer and thyroid disease. Babies and pregnant women are at an increased risk for nitrate effects. In babies, nitrate increases their risk of blue baby syndrome (methemoglobinemia) where their skin turns a blue/gray color. This color change occurs because nitrate affects how blood carries oxygen; reduced blood oxygen levels can also result in fatigue, dizziness, and a higher heart rate. In pregnant women, excess nitrate exposure can cause birth effects, like neural tube defects (this includes birth defects of the brain, spine, and spinal cord) (WI DHS, 2023).

Nitrate summary

Maximum contaminant level (MCL):

Highest level allowed in drinking water; Requires action if 10% or more samples exceed value



10 ppm

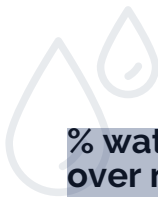
Maximum contaminant level goal (MCLG):

Level for at which there is no known or expected risk for health



10 ppm

During 2019-2021 in the HCN community water system, nitrate reads included Jackson, Sauk, and Wood counties. The Wisconsin counties for all residents reflects these same counties and their reads during this period.



All persons
(HCN WI
COMMUNITIES)

All persons
(WI COUNTIES OF
HCN COMMUNITIES)

% water reads
over nitrate MCL:

0%

0%

Range of
nitrate reads:

0.24-3.8 ppm

0-6.1 ppm

33

Public drinking water: Water Quality Report; Drinking Water System Portal
Source: HCN DOH EH Division; WI Department of Natural Resources
Years displayed: 2019-2021



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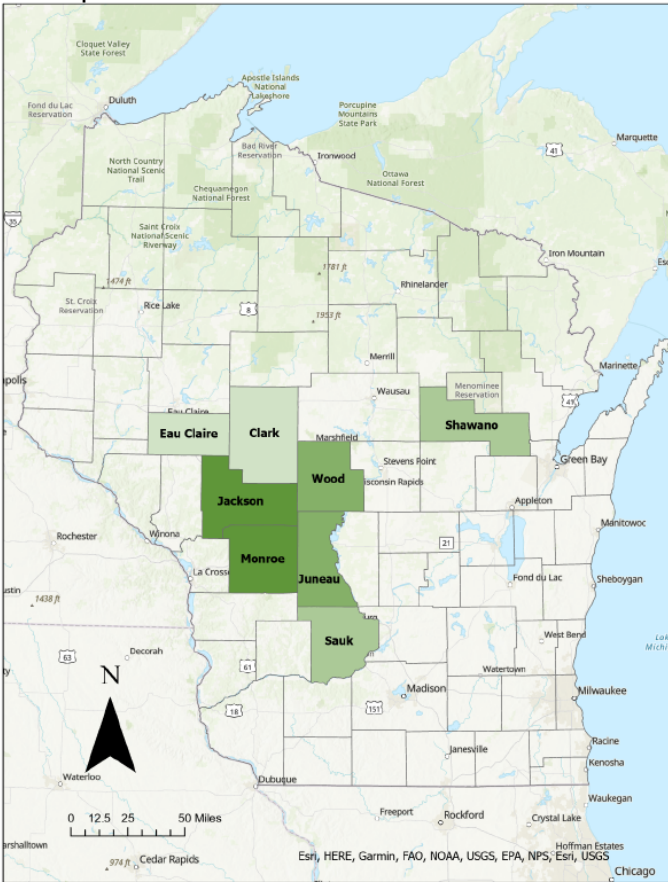
Private well water



Bacteria

All persons
WI HCN tribal communities

Bacterial tests in well water check if there are bacterial coliforms present. When coliforms are present, it means the water has been contaminated by soil or feces (poop); this contamination often occurs due to well/septic systems that are not maintained or due to the transport of human/animal feces through groundwater or runoff (WI DHS, 2018). Some coliforms can cause symptoms like diarrhea, vomiting, cramps, nausea, headaches, fever, and fatigue (MN Department of Health, 2018).



The data reflects households who have had their well water tested by the EH division. The map reports the number of samples that had a bacteria well test, positive or negative. There were too few positive samples to display them geographically.

of bacteria well tests



If a positive bacterial coliform is found, a follow-up sample is taken. If the second sample is positive, the well is disinfected by the EH Division.

% of wells with positive bacteria



NOTE: No bacteria well samples have been taken in Adams, Columbia, Crawford, Dane, La Crosse, Marathon, or Vernon County during 2019-2021.

34

Higher → Lower

Private well water: Water sampling data; WI Well Water Quality Viewer

Source: HCN DOH EH Division; UW Stevens Point

Years displayed: 2019-2021; 1988-2021

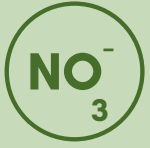


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Private well water



Nitrate

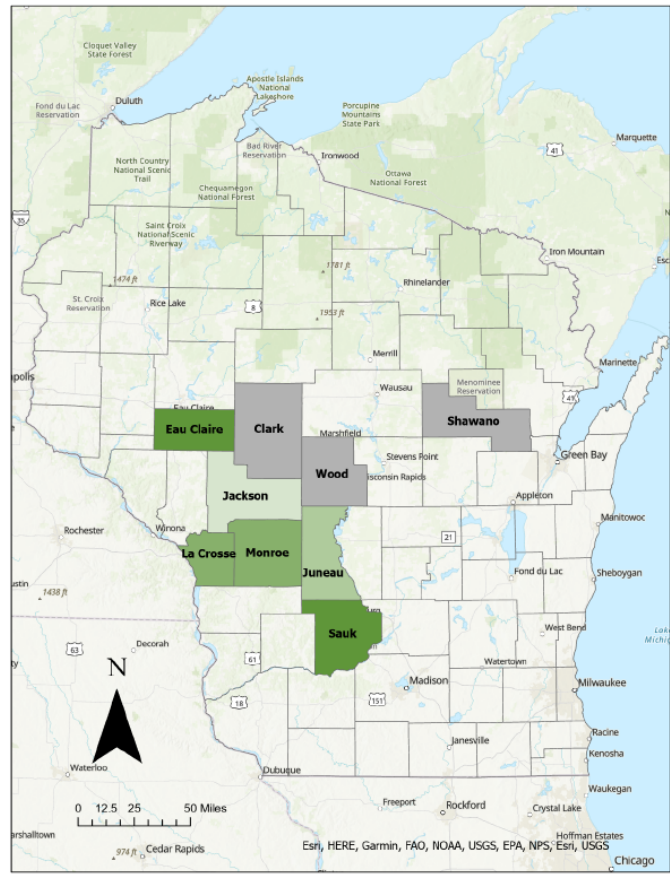
**All persons
WI HCN tribal communities**

** A grayed out county in the map means there were not enough tests to display the average (< 2 tests)*

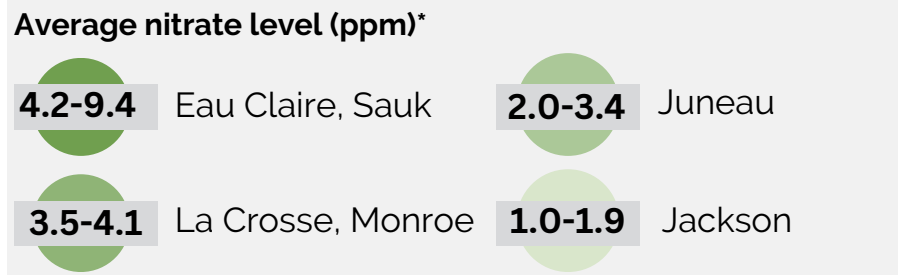
Nitrate is naturally found in plants and animals. However, excess nitrate gets in the water from fertilizers and animal/human waste. In wells, excess nitrate moves through the groundwater and runoff (WI DHS, 2023). High levels of nitrate increase your risk for colon cancer and thyroid disease.

**HCN tribal
(HCN WI
PRCDA)** **3.53**

**All persons
(HCN WI
PRCDA)** **4.17**

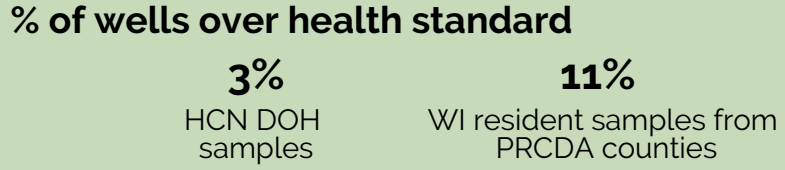


The data reflects households who have had their well water tested by the EH division. The map reports the average nitrate level (by ppm).



Health standard- 10 ppm
Level of nitrate should not exceed this level to avoid human health hazards.

If a nitrate value exceeds the health standard, the EH division will provide treatment in the form of reverse osmosis.



NOTE: No nitrate well samples have been taken in Adams, Columbia, Crawford, Dane, Marathon, or Vernon County during 2019-2021.

35

Higher → **Lower**

Private well water: Water sampling data; WI Well Water Quality Viewer
Source: HCN DOH EH Division; UW Stevens Point
Years displayed: 2019-2021; 1988-2021



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Private well water

25 Mn
54.9

Manganese

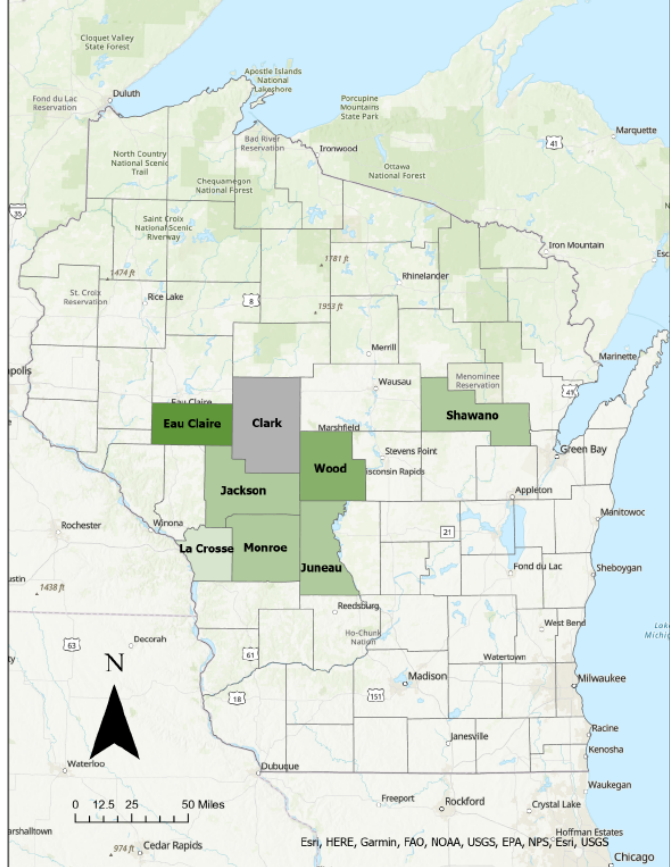
All persons
WI HCN tribal communities

*A grayed out county in the map means there were not enough tests to display the average (< 2 tests)

Manganese naturally occurs in rocks, soil, groundwater, and surface water. At manganese levels of 0.05 ppm, you may notice a brownish-red stain on plumbing fixtures, and an off-taste or odor. Excess manganese may cause health effects such as neurological effects or developmental effects in babies (CT Department of Health, nd).

HCN tribal
(HCN WI
PRCDA) | **0.08**

All persons
(HCN WI
PRCDA) | **0.05**



The data reflects households who have had their well water tested by the EH division. The map reports the average manganese level (by ppm).

Average manganese level (ppm)*	
0.23-0.34	Eau Claire
0.01-0.06	Jackson, Juneau, Monroe, Shawano
0.07-0.22	Wood
< 0.01	La Crosse

Health standard- 0.3 ppm
Level of manganese should not exceed this level to avoid human health hazards.

If a manganese value exceeds the health standard, the EH division will provide education on manganese removal.

% of wells over health standard	
7%	HCN DOH samples
5%	WI resident samples from PRCDA counties

NOTE: No manganese well samples have been taken in Adams, Columbia, Crawford, Dane, Marathon, or Sauk, Vernon County during 2019-2021.

36

Higher → Lower
Private well water: Water sampling data; WI Well Water Quality Viewer
Source: HCN DOH EH Division; UW Stevens Point
Years displayed: 2019-2021; 1988-2021



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Private well water



ph level

All persons
WI HCN tribal communities

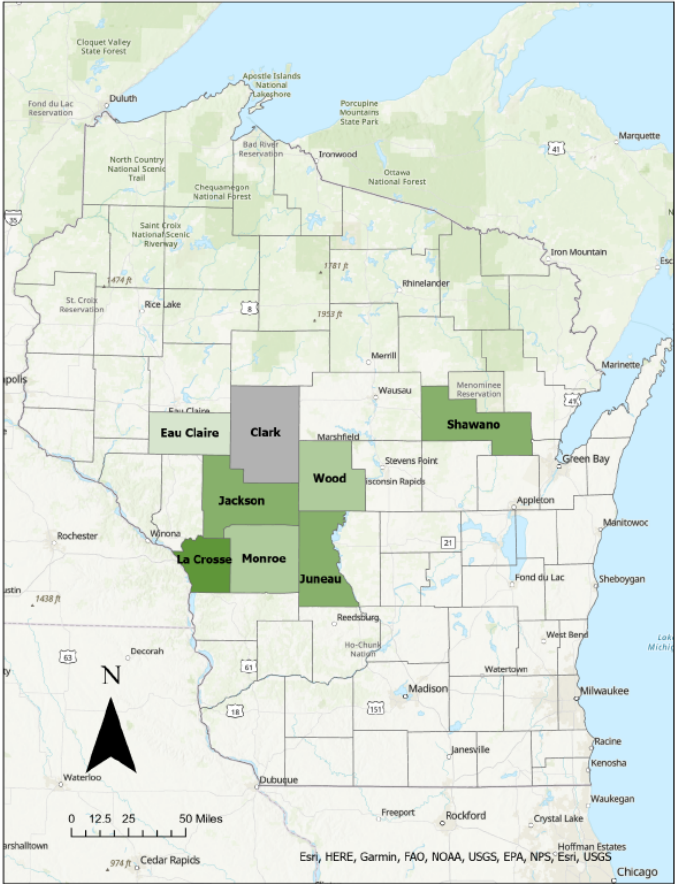
*A grayed out county in the map means there were not enough tests to display the average (< 2 tests)

The pH of water measures how acidic or how basic it is, ranging from 0-14 (7 is neutral, less than 7 is more acidic, and greater than 7 is more basic). Although the pH of water is not necessarily a health concern, it remains an important measure of water quality. Water that is too acidic can result in corrosive plumbing materials, which can result in lead or copper entering your water. The desirable level of pH is in the range of 6.5-8.5 (WHO, 2007).

HCN tribal
(HCN WI
PRCDA) **6.8**

All persons
(HCN WI
PRCDA) **7.5**

The data reflects households who have had their well water tested by the EH division. The map reports the average pH level.



Average pH level

- 7.6-7.9** La Crosse
- 6.2-6.8** Monroe, Wood
- 6.9-7.5** Jackson, Juneau, Shawano
- <6.2** Eau Claire

Desirable range-6.5-8.5

Level of pH should not be below or above this range
If a pH value exceeds the health standard, the EH division will conduct additional water testing.

% of wells outside range

25% HCN DOH samples	N/A WI resident samples from PRCDA counties
----------------------------------	--

NOTE: No pH well samples have been taken in Adams, Columbia, Crawford, Dane, Marathon, or Sauk, Vernon County during 2019-2021.

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Higher → Lower

Private well water: Water sampling data; WI Well Water Quality Viewer
Source: HCN DOH EH Division; UW Stevens Point
Years displayed: 2019-2021; 1988-2021



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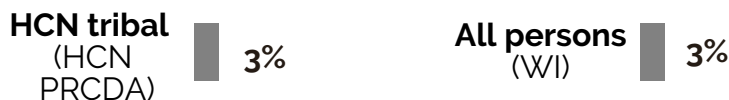


Blood lead levels

HCN Tribal
HCN DOH PRCDA

Lead poisoning happens when lead builds up in the body. To check for this, blood lead level tests are used. Lead exposure occurs through dust from paint containing lead (inhalation or hands to mouths), drinking water from corroded plumbing fixtures, touching soil with leaded gasoline, and through other products like toys, jewelry or others. Lead poisoning can result in developmental delays, learning disabilities, and kidney or nervous system damage (WI DHS, 2023). **Children (less than 6 years) and pregnant women are most at-risk for harmful lead effects.** Lead exposure in pregnant women can result in pre-term births, development effects, and miscarriage (CDC, 2022).

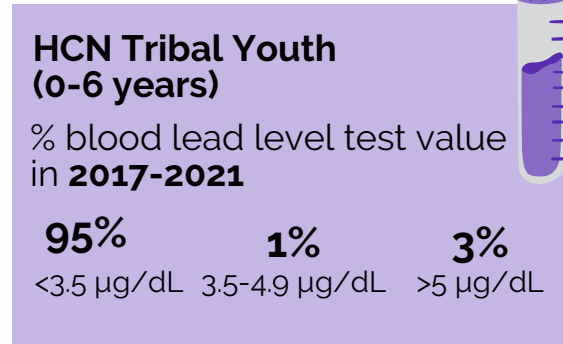
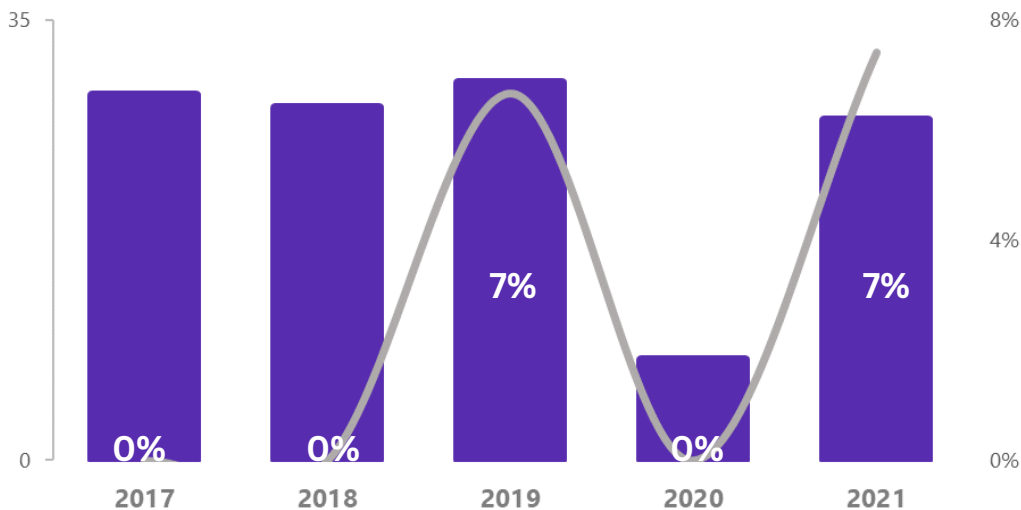
The value below reflects the percentage of blood lead tests exceeding the health standard of 5 µg/dL.



The data below reflects **Ho-Chunk Tribal youth (6 years or less) who have received a blood lead level test at any of the HCN DOH clinics or other HCN DOH services.**

of blood tests

%with a value of >5 µg/dL



NOTE: Previously, lead poisoning was defined as a blood lead level of 5 µg/dL. Later in 2021, the Centers for Disease Control & Prevention (CDC) updated this value to 3.5 µg/dL. However, no amount of lead exposure is safe. **This reporting year uses the old value as the action level (5 µg/dL).**

Blood lead levels: Blood lead level tests & results; Childhood lead poisoning
Source: HCN DOH NextGen; WI Environmental Health Tracking Program
Years displayed: 2017-2021; 2021

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Asthma

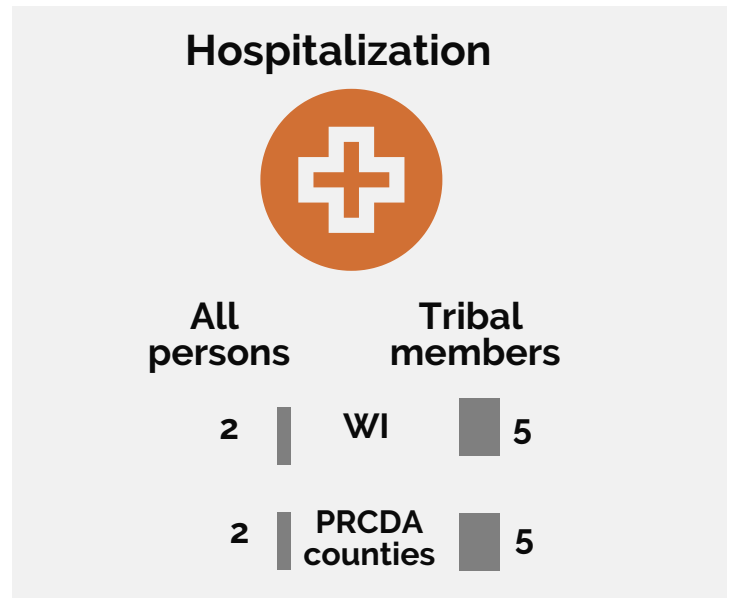
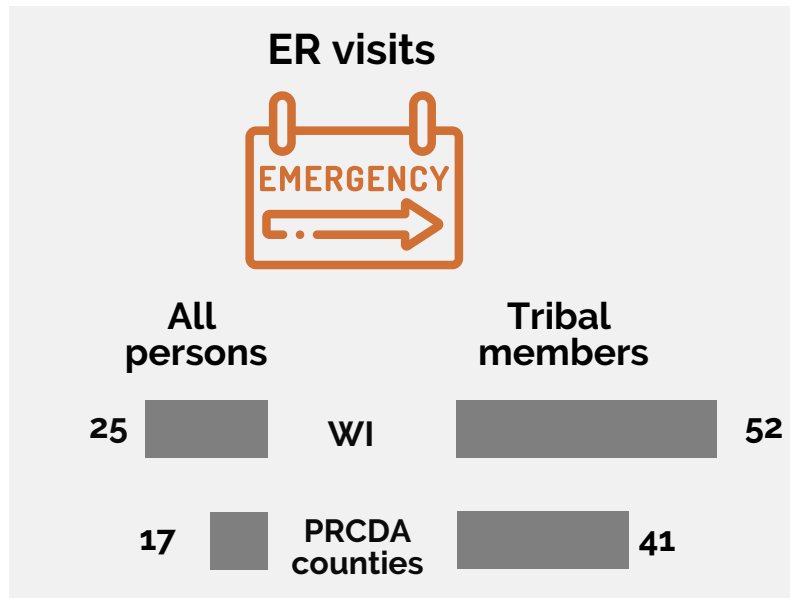
All Tribal
WI HCN DOH PRCDA

Asthma is a health condition that affects your lungs. It can be caused by environmental factors, such as smoking, mold, other allergens, air pollution, and by things like lung infection or family history. Asthma can cause coughing, wheezing, chest tightness, and breathlessness. When something significantly triggers your asthma, you can have an asthma attack- asthma attacks happen when your lungs swell, the airways shrink, and mucus clogs the airways. **ER visits and hospitalizations for asthma often occur due to asthma attacks** (CDC, 2021).

It is estimated that **10% of all Wisconsites** (CDC, 2022) and **19% of Ho-Chunk Tribal members** (Suryanarayanan, 2019) **have asthma**.

The numbers below describe the **rate** (per every 10,000 people) of Wisconsin persons either **hospitalized or seen in the ER for asthma** in Wisconsin, Minnesota, or Iowa.

During 2021...



Asthma Primary cause of admission- ER and hospitalization; Asthma
Source: WI DHS Office of Health Informatics; WI Environmental Tracking Program
Years displayed: 2021

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Seat belt use

All persons
WI HCN DOH PRCDA
COMMUNITIES

Seat belt use remains an important safety practice to avoid serious injury- they protect you from airbags, keep you from being ejected from the vehicle, and keep your body within your seat in the result of an accident. During 2020 in the United States, 43% of passenger vehicle occupants killed in daytime accidents were not wearing seat belts (NHTSA, 2023). The numbers below report the percentage of adults reported/observed with seat belt use.

All persons
(HCN WI
COMMUNITIES)



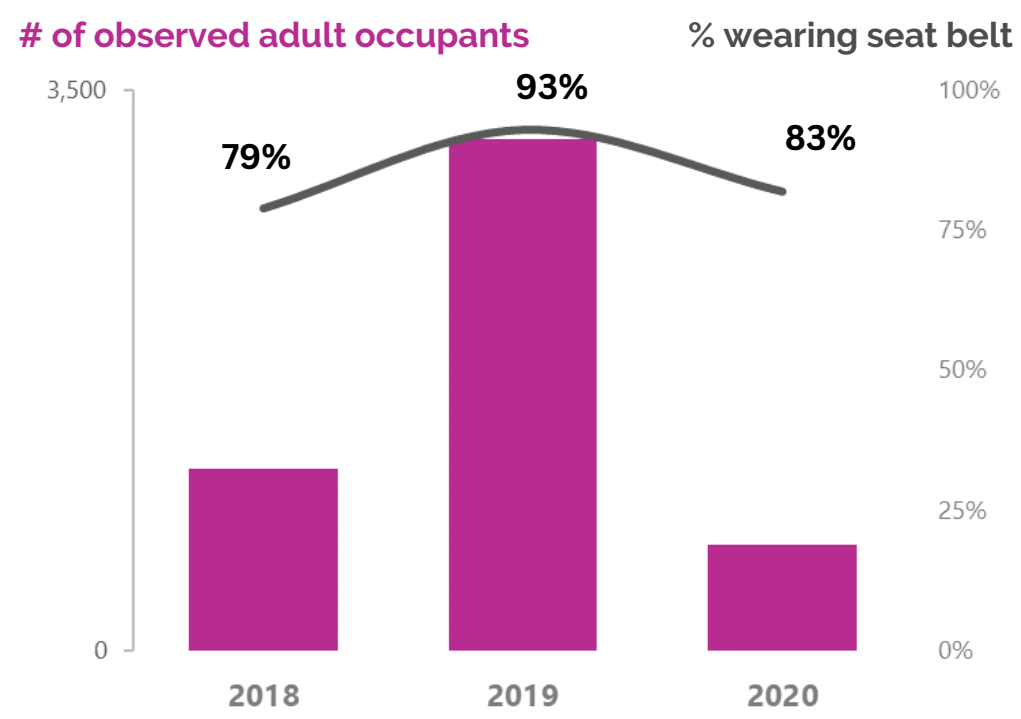
83%

All persons
(WI)



93%

The graph below describes the **percentage of adult vehicle occupants driving in Ho-Chunk communities observed wearing their seat belts**. From 2018-2020, there were ten different random observations conducted by the Environmental Health division.



The **3-year average** of seat belt use among adult occupants in Ho-Chunk Communities is **89%**. On average, observed **youth occupants** were restrained (car seat) 7% less than adults (wearing seat belt). **Note:** Youth data is not reflected in the graph.



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Seat-belt use: Observed individuals restrained; Always or nearly wear a seat belt
Source: Environmental Health Division; BRFSS 2020
Years displayed: 2018-2020; 2020



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Ho-Chunk Nation Enrollment. (June 2021). *Ho-Chunk Nation tribal enrollment-May 2021* [Report].

Purchased Referred Care Delivery Area

About PRCDA:

Centers for Disease Control and Prevention, Division of Cancer Control and Prevention (2022, October 26). *Interpreting race and ethnicity in cancer data*.

https://www.cdc.gov/cancer/uscs/technical_notes/interpreting/race.htm

Ho-Chunk Nation Population Statistics: See Ho-Chunk Nation Community Profile citation

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Social Vulnerability Index

About SVI Index:

Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry (2022, October 26). *CDC/ATSDR SVI fact sheet*.

https://www.atsdr.cdc.gov/placeandhealth/svi/fact_sheet/fact_sheet.html

SVI levels by county data summary.

Center for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry (2022, December 1). *CDC/ATSDR Social Vulnerability Index (SVI) overall SVI by county 2020*[map].

https://www.atsdr.cdc.gov/placeandhealth/svi/interactive_map.html

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V

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Cause of death data summary:

Centers for Disease Control and Prevention WONDER (2023, January 11). 1990-2020: *Underlying cause of death by bridged-race categories (Wisconsin American Indian/Alaska Native)*. <https://wonder.cdc.gov/ucd-icd10.html>

About heart disease:

Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. (2023, March 21). *About heart disease*. <https://www.cdc.gov/heartdisease/about.htm>

About chronic liver disease/cirrhosis:

John Hopkins Medicine (n.d.). *Chronic Liver Disease/Cirrhosis*. <https://www.hopkinsmedicine.org/health/conditions-and-diseases/chronic-liver-disease-cirrhosis>

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About socioeconomic status:

Phelan, J.C., Link, B.G., & Tehranifar, P. (2010). Social conditions as fundamental causes of health inequalities: Theory, evidence, and policy implications. *Journal of Health and Social Behavior*, 51(S), S28-S40.

Educational attainment:

United States Census Bureau American Community Survey (ACS). (2022, September 27). *Sex by educational attainment for the population 25+ years for American Indian/Alaskan Native alone in selected Wisconsin counties from 2016-2020* [table]. <https://www.census.gov/programs-surveys/acs/data.html>

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Tribal populations:

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All persons:

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Poverty:

Tribal populations

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All persons

United States Census Bureau American Community Survey (ACS). (2022, September 27). *Poverty status in the past 12 months in Wisconsin for all races from 2016-2020* [table]. <https://www.census.gov/programs-surveys/acs/data.html>

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Wisconsin, family of 4

United for ALICE. (n.d.). *Wage tool ALICE household survival budget for Wisconsin family of 4 households "all" hourly wage in 2018* [map]. <https://www.unitedforalice.org/wage-tool>

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United for ALICE. (n.d.). *Wage tool ALICE household survival budget for Minnesota 4 adult households "all" hourly wage in 2018* [map]. <https://www.unitedforalice.org/wage-tool>

All tribal: Public Health Outcomes

Cancer:

Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics, Wisconsin Cancer Reporting System. (2021, August). *Wisconsin Interactive Statistics on Health (WISH) data query system, cancer module, cancer incidence*. <https://wish.wisconsin.gov/cancer/incidence.htm>

Sexually transmitted infections:

About prevention

Mayo Clinic. (2022, May 5). *Sexually transmitted disease (STD) symptoms*.

<https://www.mayoclinic.org/diseases-conditions/sexually-transmitted-diseases-stds/in-depth/std-symptoms/art-20047081>

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Centers for Disease Control and Prevention, Division of STD Prevention, National Center for HIV, Viral Hepatitis, STD, and TB, Prevention. (2023, February 22). *How you can prevent sexually transmitted diseases*. <https://www.cdc.gov/std/prevention/default.htm>

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COVID-19 vaccine

About COVID

Wisconsin Department of Health Services. (2022, July 26). *COVID-19: Post-COVID Conditions*.

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Ho-Chunk Nation Department of Health NextGen. (2022, January). *COVID-19 vaccine CPT code, 2021* [report].

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About flu

Wisconsin Department of Health Services. (2023, March 7). *About Influenza (Flu)*.

<https://www.dhs.wisconsin.gov/influenza/about.htm>

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Flu vaccine data summary- Wisconsin, all residents

Wisconsin Department of Health Services (2022, December 20). *Immunizations: Influenza vaccine data, 2021-2022 season*. <https://www.dhs.wisconsin.gov/immunization/influenza.htm>

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About pregnancy awareness

Branum, A.M. & Ahrens, K.A. (2017). Trends in timing of pregnancy awareness among US women. *Maternal and Child Health Journal*, 21, 715-26.

Prenatal care data summary- Tribal and all Wisconsin residents

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Low birth weight

Low birth weight effects

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Low birthweight data summary-Tribal and all Wisconsin residents

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Pre-term birth causes

Centers for Disease Control and Prevention, Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion. (2022, November 1). *Premature birth*.

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[birth/index.html#:~:text=Some%20risk%20factors%20for%20preterm,has%20to%20be%20delivered%20early.](https://www.cdc.gov/reproductivehealth/features/premature-birth/index.html#:~:text=Some%20risk%20factors%20for%20preterm,has%20to%20be%20delivered%20early.)

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Community water- Lead

Lead summary

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Lead data summary-Ho-Chunk Nation

Ho-Chunk Nation Department of Health, Environmental Health Division (n.d.). *Water quality report, consumer confidence report by Ho-Chunk community, 2019-2021* [report].

Lead data summary-Wisconsin residents

Wisconsin Department of Natural Resources (n.d.). *Drinking Water System Portal, Find contaminants in public water supplies, lead, active municipal community, 2019-2021 in select counties*.

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Community water- Copper

Copper sources

See lead summary source above

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Copper effects

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Copper data summary-Ho-Chunk Nation

See lead data summary Ho-Chunk Nation above

Copper data summary- Wisconsin residents

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Community water-Nitrate

Nitrate effects

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Nitrate data summary- Wisconsin residents

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Private wells-Bacteria

Bacteria sources

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Private wells-Nitrate

Nitrate effects

See *nitrate effects (community water-nitrate above)*

Nitrate data summary- Ho-Chunk Nation

See *bacteria data summary- Ho-Chunk Nation above*

Nitrate data summary- Wisconsin residents

See *bacteria data summary-Wisconsin residents above*

Private wells-Manganese

Manganese effects

Connecticut Department of Health (n.d.). *What you need to know about manganese in private well water* [fact sheet].https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/environmental_health/eoha/Toxicology_Risk_Assessment/Manganese_FINAL.pdf

Manganese data summary- Ho-Chunk Nation

See *bacteria data summary- Ho-Chunk Nation above*

Manganese data summary- Wisconsin residents

See *bacteria data summary- Wisconsin residents above*

Private wells- pH

pH effects

World Health Organization (2007). *pH in drinking water* [report].

https://cdn.who.int/media/docs/default-source/wash-documents/wash-chemicals/ph.pdf?sfvrsn=16b10656_4

pH data summary- Ho-Chunk Nation

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pH data summary- Wisconsin residents

See *bacteria data summary- Wisconsin residents above*

Blood lead levels

Blood lead level sources

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Asthma

About asthma

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See hospitalization and ER visits above

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Seat belt use

About seat belts

United States Department of Transportation, National Highway Traffic Safety Administration (2023, January). *Seat belt use in 2022-overall rates, national seat belt use rate and daytime percentage of unrestrained passenger vehicle occupant fatalities* [report]. <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813407>

Seat belt use data summary-Ho-Chunk Nation

Ho-Chunk Nation Department of Health, Environmental Health Division (n.d.). *Restrained occupants observed, 2018-2020* [report].

Seat belt use data summary- Wisconsin residents

Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. *BRFSS prevalence and trends data, seat belt use in Wisconsin*. <https://www.cdc.gov/brfss/brfssprevalence/>

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Hospitalization & ER Visit Data Definitions

Data included in the hospitalization and ER visit summaries are separated by different health categories. Each health category is created by including specific health outcomes. **Each health outcome is labeled by a specific ICD-10 CM diagnosis code by primary diagnosis.** ICD-10 is the most current diagnosis code set used today- this change was implemented by the Centers for Medicare and Medicaid Services in 2015.

NOTE: Health categories were used by following the same set of ICD-10 CM codes listed by the references down below unless otherwise noted. Since the latest WI DHS Public Health Profile (2017) used ICD-9 CM codes that are no longer in use, a converter was used. Please note, some of the older codes do not create a perfect conversion, some codes are a close conversion. This process is also further explained in the WI DHS Public Health Profile appendices.

ICD-10 CM Health Categories Sources (Code Groupings)

Wisconsin Department of Health Services: *Wisconsin Public Health Profile (2017).*

<https://www.dhs.wisconsin.gov/publications/p4/p45358-2017.pdf>

Michigan Department of Health Services: *Ambulatory Care Sensitive (ACS) Conditions ICD-9-CM and ICD-10-CM Groupings.*

<https://www.mdch.state.mi.us/OSR/CHI/HOSP/ICD9CM1.HTM>

American Academy of Professional Coders: *Convert ICD-9 to ICD-10.*

<https://www.aapc.com/icd-10/codes/>

Additional Coding/Conversion Notes

Accidents/injuries

- Poisonings: Only when specified as "unintentional"
- Broken bones: Only when "fractured" or "fract" is used

Mental/Behavioral Health

- Suicide: Includes ideation and "intentional" or "self-harm" poisonings
- Conditions/disorders: Includes all other mental/behavioral health outcomes excluding suicide. Codes used include F01-F99.

Alcohol & Drug use

- Includes "use" and "abuse," does not include "dependence"

COVID-19

- Includes infection of, exposure to, and exposure to general communicable disease when COVID is specified. Codes used include B34.2, U071, Z20822

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