

MARATHON COUNTY BOARD OF HEALTH AMENDED AGENDA

Date & Time of Meeting: Tuesday, October 10, at 8 a.m.

Meeting Location: Courthouse Assembly Room, B-105, 500 Forest Street, Wausau WI

Committees Members: Michelle Van Krey-Chair, Tara Draeger-Vice Chair, Helen Luce, Katie Dively,

Stacey Morache, Jennifer Aarrestad, Yee Leng Xiong, Ann Lemmer

Marathon County Mission Statement: Marathon County Government serves people by leading, coordinating, and providing county, regional, and statewide initiatives. It directly or in cooperation with other public and private partners provides services and creates opportunities that make Marathon County and the surrounding area a preferred place to live, work, visit, and do business. (Last updated: 12-20-05)

Persons wishing to attend the meeting by phone may call into the **telephone conference beginning five (5) minutes prior to the start time indicated above using the following number:**

When you enter the telephone conference, PLEASE PUT YOUR PHONE ON MUTE!

- 1. Call Meeting to Order
- 2. Pledge of Allegiance
- 3. Public Comment (15 Minutes) (Any person who wishes to address the County Board, or one of its committees, during the "Public Comment" portion of meetings, must provide his or her name, address, and the topic he or she wishes to present to the Marathon County Clerk, or chair of the committee, no later than five minutes before the start of the meeting.)
- 4. Approval of the August 8, 2023, Board of Health Meeting Minutes
- 5. Policy Issues for Discussion and Possible Action
 - A. Discussion on Board of Health Response Regarding COVID-19 Resolution
- 6. Operational Functions Required by Statute, Ordinance, or Resolution
 - A. None
- 7. Educational Presentations and Committee Discussion
 - A. Review of Marijuana Legislation and Health Information
 - **B.** Tuberculosis Incidence and Response
- 8. Next Meeting Date & Time, Location, Announcements and Future Agenda Items:
 - **A.** Committee members are asked to bring ideas for future discussion.
 - B. Next Board of Health Meeting: Tuesday, Dec. 12 at 8 am
- 9. Adjournment

*Any person planning to attend this meeting who needs some type of special accommodation in order to participate should call the County Clerk's Office at 261-1500 or e-mail countyclerk@co.marathon.wi.us one business day before the meeting

| | | SIGNED: | | |
|-------------|---|------------|-------------------------------|--|
| | | | Presiding Officer or Designee | |
| EMAILED TO: | Wausau Daily Herald, City Pages, and other Media Groups | <u>N</u> | OTICE POSTED AT COURTHOUSE | |
| MAILED BY: | | BY: | | |
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BOARD OF HEALTH MEETING AGENDA WITH MINUTES

Date & Time of Meeting: Tuesday, August 8, at 8 a.m.

Meeting Location: WebEx/ Courthouse Assembly Room (B105), 500 Forest Street, Wausau, WI 54403

Committee Members:

| Michelle Van Krey | Absent |
|--------------------|--------|
| Tara Draeger | X |
| Helen Luce | X |
| Jennifer Aarrestad | X |
| Yee Leng Xiong | Absent |
| Ann Lemmer | X |
| Stacey Morache | X |
| Katie Dively | X |

MCHD Staff Present: Laura Scudiere, Kerry Thieme, Kang Chu Yang, Amanda Ostrowski, Jessa

Bokhoven, Jenna Flynn, Mai Choua Lee, Meranda Eggebrecht, Kate Florek,

Others via WebEx: Dale Grosskurth, Hannah Schommer

Others In Person: Jessica Blahnik, Robin Baker

1. Call to Order- Co-Chair Tara Draeger called the meeting to order at 8:00 AM.

2. Pledge of the allegiance.

3. Public Comment Period

A. Name: Robin Baker voiced concerns regarding safety and efficacy of COVID vaccination.

4. Approval of the June 20, 2023, Board of Health Meeting Minutes

Motion to approve the minutes of the June 20th, 2023. Board of Health meeting made by Jennifer Aarrestad. Second by Stacey Morache. Motion approved.

5. Policy Discussion and Possible Action – None.

6. Operational Functions Required by Statute, Ordinance, or Resolution

A. DHS 140 Review—Angela Nimsgern, MPH, CPH, Director of Northern Region Office of Policy and Practice Alignment, Wisconsin Department of Health Services.
Draeger introduced Angela Nimsgern. Nimsgern provided details of her professional career and expressed gratitude to the Marathon County Health Department for ensuring the safety of the county's residents. Nimsgern outlined the key points of the DHS 140 Review and congratulated the Marathon County Health Department for achieving a level 3 status.

7. Educational Presentations and Committee Discussion

A. Licensing Fee Evaluation Process and Update Scudiere introduced the licensing fee evaluation process. Kate Florek, Director of Environmental Health and Safety provided an overview of the licensing fee proposal and highlighted its alignment with regulatory guidelines. Details of the proposal were discussed, and questions asked were answered.

Nimsgern presented a plaque with certification status to the Board of Health.

B. Suicide Review and Fatal Overdose Review Teams Review
Amanda Ostrowski, Community Health Improvement Director introduced Community
Health Improvement team members Kerry Thieme, Jenna Flynn, Jessa Bokhoven along with
Jessica Blahnik from the Marathon County Medical Examiner's Office, all of whom are
integral members of the Death Review Teams. The team members presented an overview of
their mission and the methods they use to identify opportunities for intervention to prevent
future fatalities. They shared statistics regarding overdoses and suicides, the structure of
their meetings, outlined their approach to examining death cases, discussed grant



BOARD OF HEALTH MEETING AGENDA WITH MINUTES

requirements, and explained ways in which others can engage to mitigate future fatalities. Questions were asked and answered.

C. Introduction and Welcome of New Family Health and Communicable Disease Director Meranda Eggebrecht

Scudiere introduced Family Health and Communicable Disease Director, Meranda Eggebrecht. Scudiere shared an overview of Eggebrecht's professional career.

8. Next Meeting Date & Time, Location, Announcements and Future Agenda Items:

- A. Committee members are asked to bring ideas for future discussion.

 The board asked to discuss the Impact of marijuana legalization on the health of a community.
- B. Next Board of Health Meeting: Tuesday, October 10th, at 8 am.

9. Adjournment

Motion to adjourn made by Stacey Morache second by Ann Lemmer. Motion approved. Meeting was adjourned at 9:07 AM.

Minutes prepared by Mai Choua Lee, Marathon County Health Department Senior Administrative Specialist.

Review of Marijuana Legislation & Health Information

Aaron Ruff, BS, CHES

Public Health Educator

Marathon County Health Department



Outline

- Terminology
- Current State of Legalization
- Marijuana Products
- Health & Societal Impacts
- Summary



Terminology

- The word "cannabis" refers to all products derived from the plant *Cannabis sativa*.
- The cannabis plant contains about 540 chemical substances.
- Cannabinoids are a group of substances found in the cannabis plant.
 - The main cannabinoids are tetrahydrocannabinol (THC) and cannabidiol (CBD).

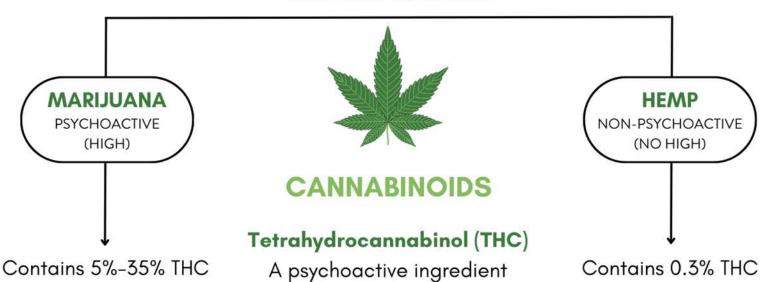
Source: National Center for Complementary and Integrative Health: https://www.nccih.nih.gov/health/cannabis-marijuana-and-cannabinoids-what-you-need-to-know

Terminology

- The word "marijuana" refers to parts of or products from the plant Cannabis sativa that contain substantial amounts of tetrahydrocannabinol (THC).
- THC is the substance that's primarily responsible for the effects of marijuana on a person's mental state.
- Some cannabis plants contain very little THC. Under U.S. law, these plants are considered "industrial hemp" rather than marijuana.

Source: National Center for Complementary and Integrative Health: https://www.nccih.nih.gov/health/cannabis-marijuana-and-cannabinoids-what-you-need-to-knowc

CANNABIS



Has lower percentage of CBD

Cannabidiol (CBD)

Not impairing

Does not cause a "high"

Has higher CBD content

Source: National Center for Complementary and Integrative Health: https://www.nccih.nih.gov/health/cannabis-marijuana-and-cannabinoids-what-you-need-to-know

Current State of Legalization - Hemp

The Agriculture Improvement Act of 2018 (2018 Farm Bill) authorized the production of hemp and removed hemp and hemp seeds from the Drug Enforcement Administration's (DEA) schedule of Controlled Substances.

• The 2018 Farm Bill made it legal to grow hemp, or cannabis containing less than 0.3 percent THC, throughout the United States. It also made hemp-derived CBD products federally legal.

Source: United States Drug Enforcement Administration (DEA): https://www.dea.gov/drug-information/drug-scheduling



Current State of Legalization - Marijuana

Marijuana, or cannabis containing more than 0.3 percent THC, isn't federally legal.

In the United States, the use and possession of marijuana is illegal under federal law for any purpose by way of the Controlled Substances Act of 1970 (CSA). Under the CSA, cannabis is classified as a **Schedule I substance**, determined to have a high potential for abuse and no accepted medical use.

Source: United States Drug Enforcement Administration (DEA): https://www.dea.gov/drug-information/drug-scheduling



Marijuana Products

Flower or bud

- Smokeable part of the cannabis plant
- 0.3% 30% THC

Concentrates

- Extracted THC products from the marijuana plant
- Also known as oil, shatter, dab, resin, wax
- 40% 99% THC

Edibles

- Food products infused with marijuana.
- 2.5 200mg THC



Higher Love Grease Monkey Buds THC - 24.28%



Cannabee x MiLoud Guava Juice Cured Resin THC – 72.89%



The OG Brownie High Dose THC – 200mg



Higher Love Vanilla Cookies Buds THC – 23.1%



Cannalicious God's Gift Distillate THC - 84.3%

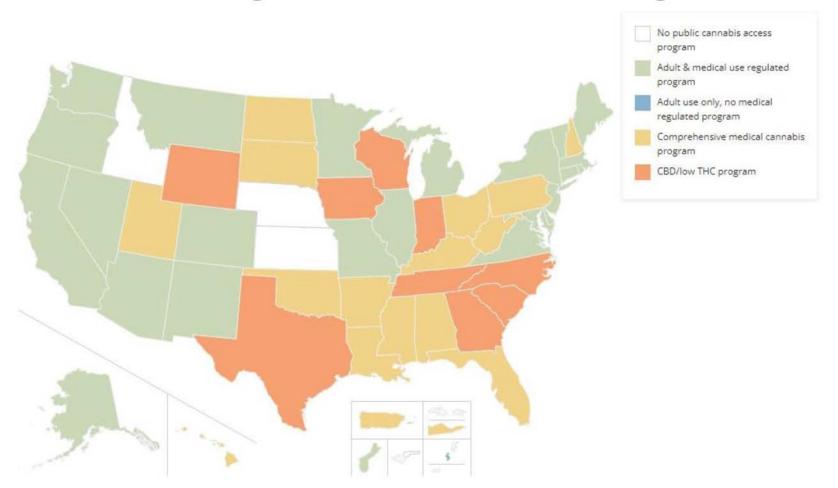


Berry Blaze Gummies THC – 200mg

All images sourced from Higher Love Recreational Cannabis Store (Michigan): https://findhigherlove.com/



State Regulated Cannabis Programs



Source: National Conference of State Legislatures: https://www.ncsl.org/health/state-medical-cannabis-laws#undefined



Health Impacts

Marijuana, or cannabis, is the most commonly used illicit drug in the United States. It acts by binding to cannabinoid receptors in the brain to produce a variety of effects, including euphoria, intoxication, and memory and motor impairments. These same cannabinoid receptors are also critical for brain development.

They are part of the endocannabinoid system, which impacts the formation of brain circuits important for decision making, mood and responding to stress.

Source: U.S. Surgeon General's Advisory: Marijuana Use and the Developing Brain: https://www.hhs.gov/surgeongeneral/reports-and-publications/addiction-and-substance-misuse/advisory-on-marijuana-use-and-developing-brain/index.html

Health Impacts

Pleasant experiences with marijuana are by no means universal. Instead of relaxation and euphoria, some people experience anxiety, fear, distrust, or panic. These effects are more common when a person takes too much, the marijuana has an unexpectedly high potency, or the person is inexperienced.

People who have taken large doses of marijuana may experience an acute psychosis, which includes hallucinations, delusions, and a loss of the sense of personal identity.

Source: Cannabis (Marijuana) Research Report, National Institu<u>t</u>e on Drug Abuse: https://nida.nih.gov/publications/research-reports/marijuana/what-are-marijuana-effects

Health Impacts

Marijuana is most commonly smoked using pipes, bongs, paper-wrapped joints, blunts and other devices including those that heat or vaporize marijuana.

Smoke is harmful to lung health. Whether from burning wood, tobacco or marijuana, toxins and carcinogens are released from the combustion of materials. Smoke from marijuana combustion has been shown to contain many of the same toxins, irritants and carcinogens as tobacco smoke.

Beyond just what's in the smoke alone, marijuana is typically smoked differently than tobacco. Marijuana smokers tend to inhale more deeply and hold their breath longer than cigarette smokers, which leads to a greater exposure per breath to tar.

Source: American Lung Association: <a href="https://www.lung.org/quit-smoking/smoking-facts/health-effects/marijuana-and-lung-health-effects/m



Canada's Lower-Risk Cannabis Use Guidelines (LRCUG):

General Precaution A: People who use cannabis need to know that there is no universal safe level of cannabis use; thus the only reliable way to avoid any risk for harm from using cannabis is to abstain from use.

Recommendation #1: The initiation of cannabis use should be delayed until after late adolescence, or the completion of puberty, to reduce development-related vulnerabilities for harm.

Recommendation #2: People who use cannabis should use 'low potency' cannabis products, i.e., cannabis products with ideally lower THC content, or a high CBD/THC ratio.

Source: International Journal of Drug Policy: https://www.sciencedirect.com/science/article/pii/S0955395921002863



Health Impacts - Pregnancy

No amount of marijuana use during pregnancy or adolescence is known to be safe. Until and unless more is known about the long-term impact, the safest choice for pregnant women and adolescents is not to use marijuana.

Marijuana use during pregnancy can affect the developing fetus.

- THC can enter the fetal brain from the mother's bloodstream.
- It may disrupt the endocannabinoid system, which is important for a healthy pregnancy and fetal brain development.
- Studies have shown that marijuana use in pregnancy is associated with adverse outcomes, including lower birth weight.

Source: U.S. Surgeon General's Advisory: Marijuana Use and the Developing Brain: https://www.hhs.gov/surgeongeneral/reports-and-publications/addiction-and-substance-misuse/advisory-on-marijuana-use-and-developing-brain/index.html

Health Impacts - Youth

The teen brain is actively developing and continues to develop until around age 25. Marijuana use is associated with increased risk for the following issues:

- Harm to brain health.
- Mental health issues.
- Impaired driving.
- Increased potential for marijuana use disorder.

Source: Marijuana and Youth: The Impact of Marijuana Use on Teen Health and Wellbeing: https://www.cdc.gov/marijuana/featured-topics/marijuana-youth.html



Health Impacts - Youth

The human brain continues to develop from before birth into the mid-20s and is vulnerable to the effects of addictive substances.

Frequent marijuana use during adolescence is associated with:

- Changes in the areas of the brain involved in attention, memory, decision-making, and motivation. Deficits in attention and memory have been detected in marijuana-using teens even after a month of abstinence.
- Impaired learning in adolescents. Chronic use is linked to declines in IQ, school performance that jeopardizes professional and social achievements, and life satisfaction.
- Increased rates of school absence and drop-out, as well as suicide attempts.

Source: U.S. Surgeon General's Advisory: Marijuana Use and the Developing Brain: https://www.hhs.gov/surgeongeneral/reports-and-publications/addiction-and-substance-misuse/advisory-on-marijuana-use-and-developing-brain/index.html

Health Impacts - Youth

In 2022, 30.7% of 12th graders reported using marijuana in the past year, and 6.3% reported using marijuana daily in the past 30 days.

These levels are significantly lower than they were during the pre-pandemic years of 2020 and 2019, when prevalence levels were 35% and 36%, respectively. The decline from 35% in 2020 to 31% in 2021 is the largest one-year decline among 12th grade students ever recorded in the 48 years of the survey for this measure.

Source: Monitoring the Future National Survey Results on Drug Use, 1975-2022: https://monitoringthefuture.org/wp-content/uploads/2022/12/mtf2022.pdf

As cannabis legalization and use have increased across the country, the perception that cannabis is dangerous or can be harmful has decreased, especially among youth.

Source: Joint Perceptions of the Risk and Availability of Cannabis in the United States, 2002-2018: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8478130/



Teens Who Used Marijuana in the Past 30-days (High School)



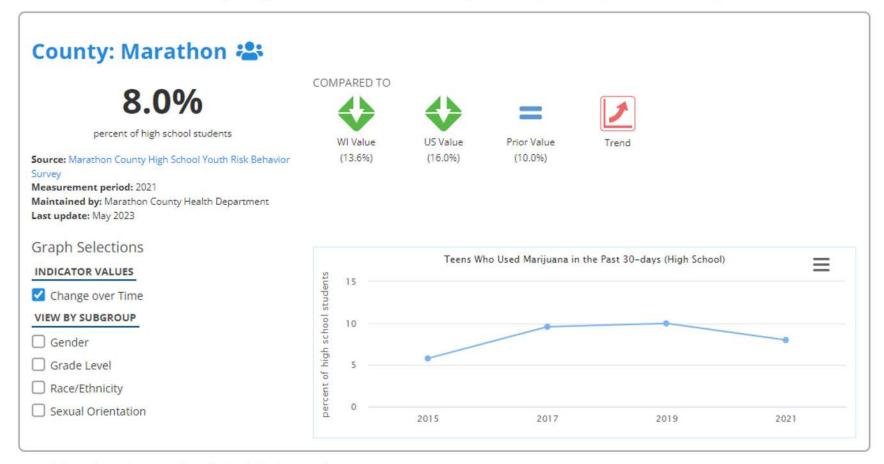
County: Marathon



Measurement Period: 2021



Percentage of high school students that used marijuana in the past 30 days before the survey



Source: Marathon County Youth Risk Behavior Survey:

https://www.marathoncountypulse.org/indicators/index/view?indicatorId=6679&localeId=3136



Health Impacts - Potency

Marijuana has changed over time. The marijuana available today is much stronger than previous versions. The THC concentration in commonly cultivated marijuana plants has increased three-fold between 1995 and 2014 (4% and 12% respectively).

Marijuana available in dispensaries in some states has average concentrations of THC between 17.7% and 23.2%. Concentrated products, commonly known as dabs or waxes, are far more widely available to recreational users today and may contain between 23.7% and 75.9% THC.

Source: U.S. Surgeon General's Advisory: Marijuana Use and the Developing Brain: https://www.hhs.gov/surgeongeneral/reports-and-publications/addiction-and-substance-misuse/advisory-on-marijuana-use-and-developing-brain/index.html

Scope of Use

Marijuana is the most commonly used federally illegal drug in the United States.

- Among people aged 12 or older in 2021, 61.2 million people (or 21.9 percent of the population) used illicit drugs in the past year.
- The most commonly used illicit drug was marijuana, which 52.5 million people used. Nearly 2 in 5 young adults 18 to 25 used illicit drugs in the past year; 1 in 3 young adults 18 to 25 used marijuana in the past year.

Source: National Survey on Drug Use and Health (NSDUH): https://www.hhs.gov/about/news/2023/01/04/samhsa-announces-national-survey-drug-use-health-results-detailing-mental-illness-substance-use-levels-2021.html



HOW TO USE CANNABIS RESPONSIBLY

Consuming cannabis (marijuana, hashish, weed, pot, edibles, etc.) can be risky, depending on how you use and what you do afterward. If you decide to use, here is important information to keep yourself and others safe.

USE SPARINGLY

- Cannabis is stronger than it used to be because modern marijuana plants contain higher amounts of tetrahydrocannabinol (THC). The higher the THC content, the stronger the effects on your brain and behavior.^{12.3}
- The effects of high concentrations of THC are not fully understood but can impair your judgment and coordination, and lead to poisonings, car crashes, and other injuries. It can also increase your risk for acute psychosis.^{4,5,6,7}
- Everyone reacts differently to cannabis. Factors
 include gender, previous experience, the method in
 which it is used, and the strength of the cannabis.⁸
 Your experience may also be affected by body weight



GO SLOW WITH EDIBLES

- First-time and infrequent cannabis users may want to start with 5mg of THC (approximately half a dose) to gauge their reaction before using more.
- It takes the average person 30 minutes to feel anything at all and up to 2 hours to feel the full effect of one dose.^{9,14} so be mindful and pace your use to avoid becoming too high.

Source: Let's Talk Cannabis Illinois: https://www.prevention.org/lets-talk-cannabis/using-marijuana/#adults





Minnesota Office of Cannabis Management

Minnesota is the 23rd state in the nation to legalize cannabis use for people 21 and older. Learn more about the legislation.

Safe and responsible use

- Cannabis should always be used responsibly and never used before driving a vehicle or operating heavy machinery. Driving under the influence of cannabis is illegal and subject to additional DWI sanctions. Learn more at the Minnesota Office of Traffic Safety.
- If you are pregnant or breastfeeding, have been diagnosed with or are predisposed to serious mental illness, talk with your health care provider before using cannabis.
- · To avoid dangerous interactions with prescribed medications, talk to your health care provider or pharmacist before using cannabis.
- Make sure your cannabis is stored safely. Keep your products in child-resistant packaging, clearly labeled and locked up.
- If you think your cannabis use is disrupting your daily life or causing problems at home, work, or school, talk to your health care provider or substance use counselor.

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Minnesota.gov

General inquiries: cannabis.info@state.mn.us

Source: Minnesota Office of Cannabis Management: https://www.cannabis.mn.gov/consumers.html



Big Tobacco & Big Marijuana

Tobacco and marijuana products are often made, packaged, and marketed in ways that can make young people more vulnerable to use.

- Flavored products with candy, sweet, or fruity flavors
- Colorful packaging that looks harmless
- E-cigarettes, vapes, and tanks that can be utilized for tobacco or marijuana









FDA Warns Consumers About the Accidental Ingestion by Children of Food Products Containing THC – June 16, 2022

Edible products containing tetrahydrocannabinol (THC) can be easily mistaken for commonly consumed foods such as breakfast cereal, candy, and cookies, and accidentally ingested.

Accidental ingestion of these products can lead to serious adverse events, especially in children.

Some edible products are designed to mimic the appearance of well-known branded foods by using similar brand names, logos, or pictures on their packaging. These copycats are easily mistaken for popular, well-recognized foods that appeal to children.

The FDA is aware of reports of copycat products packaged to look like Cap'n Crunch, Cocoa Pebbles, Cocoa Puffs, Froot Loops, Fruity Pebbles, Nerds Ropes, Starbursts, Sour Patch Kids, and

Trix, among others.



Source: U.S. Food & Drug Administration: https://www.fda.gov/food/alerts-advisories-safety-information/fda-warns-consumers-about-accidental-ingestion-children-food-products-containing-thc

Societal Impacts - Pediatric Poisonings

There were 7043 cases of pediatric edible cannabis exposures recorded in the National Poison Data System (NPDS) during the study period.

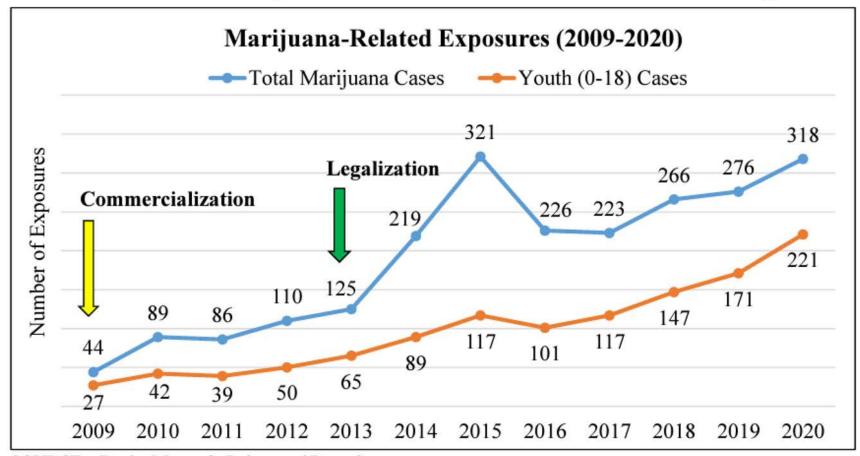
The number of cases rose from 207 cases in 2017 to 3054 cases in 2021, an increase of 1375.0%.

This study demonstrates that unintentional cannabis exposures in young children are increasing rapidly. These exposures can cause significant toxicity and are responsible for an increasing number of hospitalizations.

Source: Pediatric Edible Cannabis Exposures and Acute Toxicity: 2017–2021: https://publications.aap.org/pediatrics/article/151/2/e2022057761/190427/Pediatric-Edible-Cannabis-Exposures-and-Acute?autologincheck=redirected



Societal Impacts - Pediatric Poisonings



SOURCE: Rocky Mountain Poison and Drug Center

Source: Rocky Mountain High Intensity Drug Trafficking Are: https://www.rmhidta.org/_files/ugd/4a67c3_b391ac360f974a8bbf868d2e3e25df3d.pdf



Societal Impacts - Hospitalizations

As cannabis use increases across the U.S., cannabis-associated emergency department (ED) visits have also increased.

Between 2006 and 2014, the average annual increase in the rate of cannabis-associated ED visits was 12.1%. The rate increased 17.3% from 2016 to 2017 and 11.1% from 2017 to 2018.

Furthermore, for youth, the rate increased 17.4% from 2017 to 2018.

Source: Trends and characteristics of cannabis-associated emergency department visits in the United States, 2006-2018: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9885359/



Societal Impacts - Impaired Driving

Traffic Deaths Related to Marijuana When a <u>DRIVER</u> Tested Positive for Marijuana

| Crash Year | Total Statewide Fatalities | Fatalities with <u>Drivers</u> Testing Positive for Marijuana | Percentage Total Fatalities |
|------------|-------------------------------|--|--------------------------------|
| 2013 | 481 | 55 | 11.4% |
| 2014 | 488 | 75 | 15.4% |
| 2015 | 547 | 98 | 17.9% |
| 2016 | 608 | 125 | 20.6% |
| 2017 | 648 | 138 | 21.3% |
| 2018 | 632 | 115 | 18.2% |
| 2019 | 596 | 127 | 21.3% |
| 2020 | 622 | 131 | 20.1% |

Source: Rocky Mountain High Intensity Drug Trafficking Are:

https://www.rmhidta.org/_files/ugd/4a67c3_b391ac360f974a8bbf868d2e3e25df3d.pdf



Local Opt-Out

In many states, municipalities and counties can opt-out of allowing adult-use cannabis retail dispensaries or on-site consumption licenses from locating within their jurisdictions.

Source:

New York State Office of Cannabis Management: https://cannabis.ny.gov/local-government

Michigan Legislature: https://www.legislature.mi.gov/(S(kxoca3kf0zeq0qlmkafdmnip))/mileg.aspx?page=getObject&objectName=mcl-333-27956

California Department of Cannabis Control: https://cannabis.ca.gov/cannabis-laws/where-cannabis-businesses-are-allowed/



Summary

The U.S. is experiencing a rapidly evolving marijuana landscape, where law is changing incredibly fast and state/local governments are having to adapt very quickly.

Marijuana potency is much higher now than ever before.

No amount of marijuana use during pregnancy or adolescence is known to be safe.

Marijuana legalization is impacting impaired driving, pediatric poisonings, and hospitalizations.

In states where adult-use marijuana is legal, some localities have opted out of recreational marijuana sales.



Resources

U.S. Surgeon General's Advisory: Marijuana Use and the Developing Brain: https://www.hhs.gov/surgeongeneral/reports-and-publications/addiction-and-substance-misuse/advisory-on-marijuana-use-and-developing-brain/index.html

Cannabis (Marijuana) Research Report, National Institute on Drug Abuse: https://nida.nih.gov/publications/research-reports/marijuana/what-are-marijuana-effects

Marijuana and Youth: The Impact of Marijuana Use on Teen Health and Wellbeing: https://www.cdc.gov/marijuana/featured-topics/marijuana-youth.html

Smart Approaches to Marijuana (SAM) Impact Report 2023-2024: https://learnaboutsam.org/wp-content/uploads/2023/04/2023-Report.pdf





Public Health Statements

Colorado Revised Statute 25-1.5-110 directs the Colorado Department of Public Health & Environment to appoint a panel of health care professionals (known as the Retail Marijuana Public Health Advisory Committee or RMPHAC) to monitor the science related to retail marijuana and health effects. Their mission is to translate the science into meaningful public health statements and recommendations.

Through CDPHE's guidance the RMPHAC uses <u>Our Process</u> to review scientific literature and make Evidence Statements and Public Health Statements to protect marijuana consumers and the general public. Additionally, the RMPHAC provides Public Health Recommendations and identifies Research Gaps in the science.

The following statements have "substantial evidence" meaning robust scientific findings that support the outcome with no credible opposing scientific evidence.

Impaired Driving:

- Using alcohol and marijuana together increases impairment and the risk of a motor vehicle crash more than using either substance alone.
- Driving soon after using marijuana increases the risk of a motor vehicle crash.
- The standard serving size for a marijuana edible is 10mg. For less-than-weekly marijuana users, eating
 or drinking marijuana containing 10mg or more of THC is likely to cause impairment that affects your
 ability to drive, bike, or perform other safety-sensitive activities.

Adolescents & Young Adults:

- Daily or near-daily marijuana use by adolescents and young adults in strongly associated with developing a psychotic disorder such as schizophrenia in adulthood.
- Marijuana use by adolescents and young adults is strongly associated with developing psychotic symptoms in adulthood, such as hallucinations, paranoia and delusional beliefs. The risk is higher with more frequent use and among those who start using marijuana at a younger age.

Neurological, Cognitive & Mental Health:

- Daily or near-daily use of marijuana is strongly associated with impaired memory, persisting a week or more after quitting.
- THC, a component of marijuana, can cause psychotic symptoms such as hallucinations, paranoia, delusional beliefs, and feeling emotionally unresponsive during intoxication. These symptoms are worse with higher doses.
- Marijuana users can become addicted to marijuana.

Unintentional Exposures in Children:

• Legal marijuana access is strongly associated with increased numbers of unintentional exposures in children which can lead to hospitalizations.

Pregnancy & Breastfeeding:

• Maternal use of marijuana during pregnancy is associated with infants being born small for gestational age (birth weight less than 10th percentile for gestational age).

Respiratory Effects:

• Daily or near-daily marijuana smoking is strongly associated with chronic bronchitis, including chronic cough, sputum production and wheezing.

View the full literature review at the Colorado Department of Public Health & Environment: https://marijuanahealthreport.colorado.gov/Literature-review

Tuberculosis (TB)

Meranda Eggebrecht, MPH, BSN, RN

Family Health & Communicable Disease Director



Topics

- What is it?
- Why is it important?
- What is public health's role?



Tuberculosis (TB) Disease

- Airborne disease caused by the bacterium Mycobacterium tuberculosis
- Usually considered a respiratory disease but can affect many other parts of the body such as the kidney, spine and brain.
- Not everyone infected with TB bacteria becomes sick. As a result, two TB-related conditions exist: latent TB infection (LTBI) and TB disease.
- If not treated properly, TB disease can be fatal.



World's Top Infectious Killer

Despite being a preventable and curable disease, 1.5 million people die from TB each year – making it the world's top infectious killer.

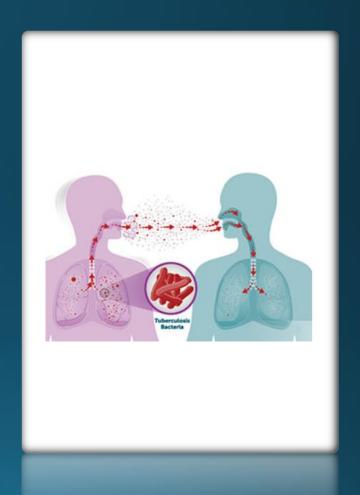
Otherwise Known As

• Consumption, kings evil, scrofula, Potts disease, phthisis, lupus vulgaris, white plague, wasting disease.



TB spreads from person to person when someone with contagious TB coughs, speaks or sings

TB Spreads Through the Air

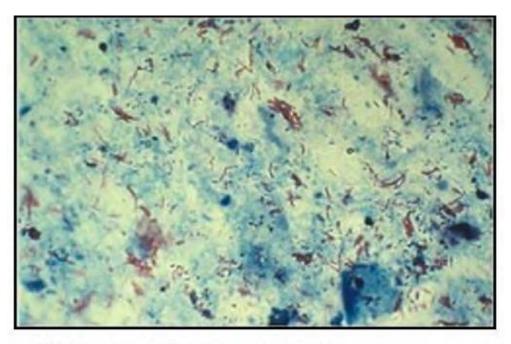


Risk of Developing Active TB Disease

- Anyone can get TB
- Some people have a higher risk of getting infected with TB
 - People who have contact with someone who has infectious TB disease
 - People who were born in or who frequently travel to countries where TB disease is common including Mexico, the Philippines, Vietnam, India, China, Haiti, Guatemala, and other countries with high rates of TB
 - Health care workers and others who work or live in places at high risk for TB transmission, such as homeless shelters, jails, and nursing homes



Tuberculosis can be diagnosed by collecting specimens for smear, culture, and PCR examination



Acid-Fast bacilli stained in smear Tubercle bacilli are shown in red



Treatment

- TB treatment can take 4, 6, or 9 months depending on the regimen
- Direct Observation Therapy (DOT) is the standard of care for treatment of active TB disease. Wisconsin statutes and Wis. Admin Code § DHS 145.10(6)(b) state that the local health officer or the health department may require a person to receive DOT.
- The Wisconsin TB Program recommends performing DOT seven days a week for two weeks at the initiation of treatment. After two weeks, DOT can be decreased to five days a week during the first two months of treatment. After first two months of treatment, DOT can be further decreased, if necessary and appropriate for the patient.



Importance of Treatment

- Timely diagnosis and treatment of both active TB disease and latent TB infection are critical steps to eliminating TB in the United States.
- Bacteria of TB are unique very slow growing, take a longer time to treat with medicine
- Several different TB medicines are used to treat to ensure all bacteria are killed
- About 5 to 10% of infected persons who do not receive treatment for latent TB infection will develop TB disease at some time in their lives.



Drug Resistant TB

- Drug-resistant TB can occur when the drugs used to treat TB are misused or mismanaged.
- Treatment of multi-drug resistant and extreme-drug resistant TB is expensive, takes a long time to complete, disrupts lives, and has potentially life-threatening side effects.
- The average cost of treating a person with TB disease increases with greater resistance.
 - Direct costs average from \$20,000 to treat drug-susceptible TB to \$568,000 to treat the most drug-resistant form of the disease.
 - When including productivity losses (e.g., lost income) experienced by patients while undergoing treatment, costs are even higher.



Role of Public Health

- Case management resource
 - New active TB disease = 24-32 hours per week per client
 - Ongoing active TB disease = 8 hours per week per client
- Facilitation of comprehensive TB patient evaluation, testing, and treatment
- Assistance with sputum collection for submission to the Wisconsin State Lab of Hygiene for diagnosis and monitoring treatment response
- Provision of antituberculosis medications
- Management of care, from diagnosis to cure

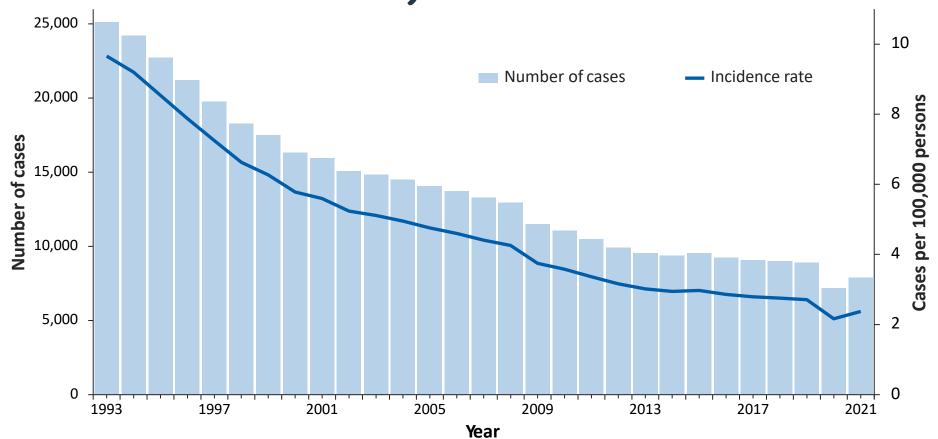


Role of Public Health Cont.

- Provision of DOT for all clients with TB disease and clients with LTBI on a case-by-case basis
- Education on TB for patients and families
- Monitoring of medication side-effects and adherence
- Management of clients with complex social and economic needs affecting adherence to the TB treatment plan
- Facilitation of respiratory isolation for persons with infectious TB
- Identification and monitoring of contacts, including TB testing



TB Cases and Incidence Rates, United States, 1993–2021



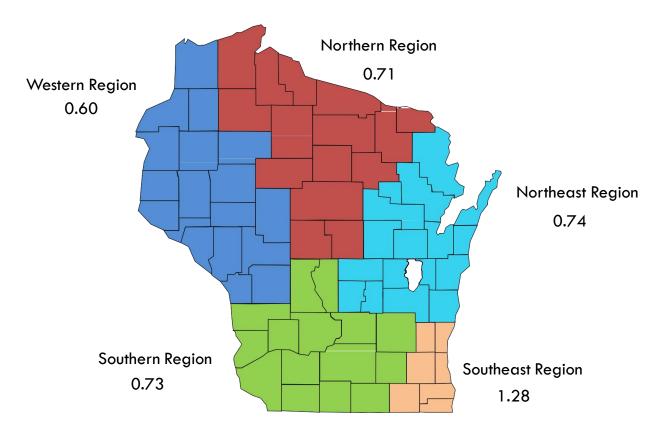


Reported TB Cases Wisconsin, 1953–2021



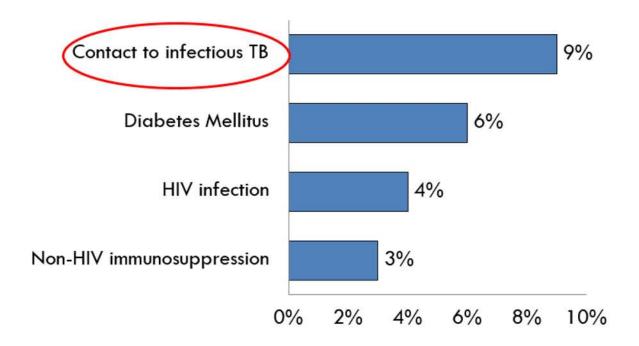


Average TB Incidence rates by Regions in Wisconsin 2012-2021

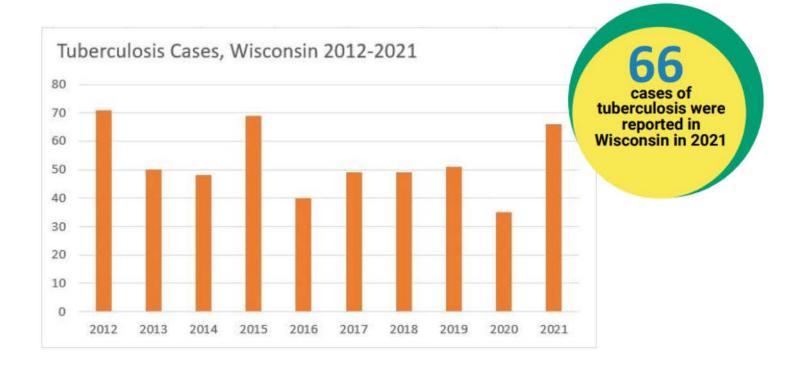


Reported TB Cases by Risk Factor, Wisconsin, 2005–2021

Most Common Risk Factors Reported Among all TB patients









Case average

Wisconsin has had an average of 54 TB cases per year during the past 10 years.



Multi-drug resistance

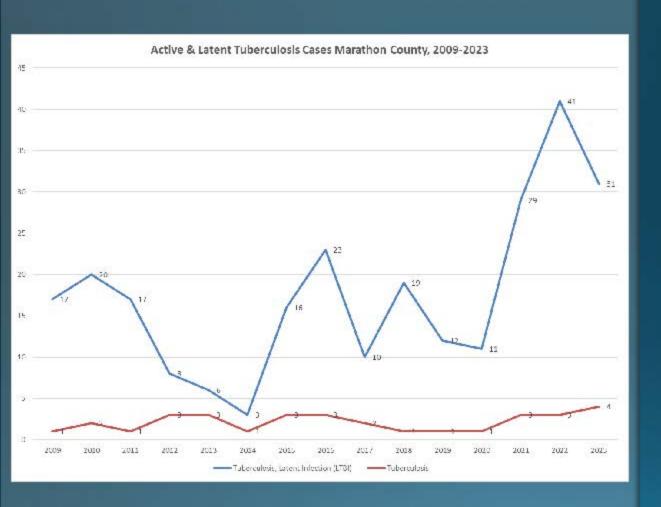
Wisconsin's rate of multi-drug resistant TB is one of the highest in the U.S. Wisconsin treated 19 patients with MDR-TB in the past 10 years.



In 2021, eight people died from TB or complications of the disease.







Marathon County Rates

Marathon County TB Response

- Case management resource
 - New active TB disease = 24-32 hours per week per client
 - Ongoing active TB disease = 8 hours per week per client
- Time in DOT* since January 2023 = 178 hours (22.25 work days)
- From January 2023 August 2023, expensed \$4,533.62 in interpretive services
- About 80% of cultural liaison time since mid-June



^{*}Does not include prep time, documentation time, overall case management, contacting and testing of close contacts

Vision of Marathon County Health Department

To advance a healthy Marathon
County community by preventing
disease, promoting health, and
protecting the public from
environmental hazards.

References

- Centers for Disease Control and Prevention. National Center for HIV, Viral Hepatitis, STD, and TB Prevention. Tuberculosis (TB) in the United States 1993–2021* (data updated as of July 8, 2022) Division of Tuberculosis Elimination; National Tuberculosis Surveillance System.
- Centers for Disease Control and Prevention. Tuberculosis. https://www.cdc.gov/tb/default.htm
- https://www.dhs.wisconsin.gov/publications/p02194a.pdf
- Wisconsin Department of Health and Human Services.
 https://www.dhs.wisconsin.gov/tb/tb-tuesdays-tb101-8-24-21.pdf
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- World Health Organization. Global tuberculosis report 2022; 27 October 2022 (https://www.who.int/publications/i/item/9789240061729)
- World Health Organization. Tuberculosis. https://www.who.int/health-topics/tuberculosis









YTD Disease Incidents by Episode Date

Incidents for MMWR Weeks 1 - 38 (Through the week ending September 23, 2023)

Jurisdiction: Marathon County

| Disease Group | Disease | 2023 | | | | | | | | | |
|---|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| | | Week 30 | Week 31 | Week 32 | Week 33 | Week 34 | Week 35 | Week 36 | Week 37 | Week 38 | Total |
| Babesiosis | Group Total: | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 8 |
| Blastomycosis | Group Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Campylobacteriosis (Campylobacter Infection) | Group Total: | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 25 |
| Carbon Monoxide Poisoning | Group Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Chlamydia Trachomatis Infection | Group Total: | 11 | 11 | 7 | 8 | 6 | 5 | 5 | 8 | 11 | 249 |
| Coccidioidomycosis | Group Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Coronavirus | Group Total: | 8 | 15 | 23 | 46 | 49 | 43 | 42 | 57 | 91 | 2417 |
| Cryptosporidiosis | Group Total: | 2 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 1 | 16 |
| Ehrlichiosis / Anaplasmosis | Group Total: | 0 | 3 | 3 | 0 | 1 | 1 | 0 | 1 | 0 | 40 |
| Giardiasis | Group Total: | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 13 |
| Gonorrhea | Group Total: | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 36 |
| Haemophilus Influenzae Invasive Disease | Group Total: | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Hepatitis B | Group Total: | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 11 |
| Hepatitis C | Group Total: | 1 | 0 | 2 | 0 | 2 | 1 | 1 | 0 | 0 | 31 |
| Histoplasmosis | Group Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Influenza | Group Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| Invasive Streptococcal Disease (Groups A And B) | Group Total: | 2 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 18 |
| Legionellosis | Group Total: | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Lyme Disease | Group Total: | 14 | 10 | 9 | 9 | 7 | 8 | 3 | 5 | 2 | 171 |
| Meningitis, Other Bacterial | Group Total: | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| MRSA | Group Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Mycobacterial Disease (Nontuberculous) | Group Total: | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 12 |
| Pathogenic E.coli | Group Total: | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 9 |
| Pertussis (Whooping Cough) | Group Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Salmonellosis | Group Total: | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 21 |
| Shigellosis | Group Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Streptococcus Pneumoniae Invasive Disease | Group Total: | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 8 |
| Syphilis | Group Total: | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Toxic Shock Syndrome | Group Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Tuberculosis | Group Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Tuberculosis, Latent Infection (LTBI) | Group Total: | 2 | 0 | 2 | 2 | 0 | 1 | 0 | 0 | 1 | 34 |
| Varicella (Chickenpox) | Group Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | Period Total: | 42 | 47 | 55 | 73 | 70 | 64 | 59 | 74 | 110 | 3172 |