

## Marathon County Board of Health

Tuesday, July 2, 2019 at 7:30 AM Meeting Location: 1000 Lake View Drive, Suite 100  
Wausau, WI 54403

*In addition to attendance in person at the location described below, Board of Health Members and the public are invited to attend by telephone conference.*

*Persons wishing to attend the meeting by phone may call into the telephone conference beginning ten minutes prior to the start time indicated below, using the following number: 715-261-1972.*

**Committee Members:** John Robinson, Chair; Sandi Cihlar, Vice-Chair; Lori Shepherd, Secretary; Mary Ann Crosby; Dean Danner; Kue Her; Michael McGrail; Laura Scudiere

**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)

**Marathon County Health Department Mission Statement:** To advance a healthy Marathon County community by preventing disease, promoting health, and protecting the public from environmental hazards. (Last updated: 5-7-13)

1. **Call to Order**
2. **Public Comment Period**
3. **Approval of the Minutes of the June 4, 2019 Board of Health Meeting**
4. **Operational Functions Required by Statute, Ordinance, or Resolution**
  - A. Update on action taken by the Marathon County Board of Supervisors on the proposed amendment to Marathon County Ordinance section 2.05(1) of the membership of the Board of Health
5. **Policy Discussion and Possible Action**
  - A. Update on state and county discussions regarding the 2019-2021 Biennial State of Wisconsin Budget along with an update on the WALHDAB/WPHA 2019-2020 legislative priorities
    - i. Status report on the proposed Resolution to Support Federal Medicaid Expansion in Wisconsin
    - ii. Other
  - B. 2019 the Year of Clean Drinking Water in Wisconsin: Overview of water quality in Marathon County

- C. Review components of draft policy statement on the training, dispensing and administration of naloxone by Marathon County department
- D. Reminder to complete the Board of Health self-assessment and confirm plans to discuss survey findings at the August 6, 2019 meeting
- E. Report from the Health & Human Services Committee June 24, 2019 meeting on policy issues impacting public health

**6. Educational Presentations/Outcome Monitoring Reports**

- A. Determine what educational report the Board of Health would like from the 2018 Annual Report

**7. Announcements**

- A. Other

**8. Next Meeting Date & Time, Location, Future Agenda Items: August 6, 2019**

- A. Board of Health self-assessment
- B. Draft resolution on marijuana
- C. Share Denison Organizational Culture Survey
- D. Other

**9. Adjourn**

FAXED TO: Daily Herald, City Pages,  
Marshfield News, Mid-West Radio Group

Signed \_\_\_\_\_

THIS NOTICE POSTED AT THE COURTHOUSE

Date \_\_\_\_\_ Time \_\_\_\_\_

Date \_\_\_\_\_ Time \_\_\_\_\_

By \_\_\_\_\_

*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 715-261-1500 or e-mail [infomarathon@mail.co.marathon.wi.us](mailto:infomarathon@mail.co.marathon.wi.us) one business day before the meeting.*

**MARATHON COUNTY BOARD OF HEALTH**  
**Meeting Minutes**  
June 6, 2019

Present: John Robinson, Mary Ann Crosby, Kue Her, Laura Scudiere, Lori Shepherd, Sandi Cihlar, Michael McGrail, Dean Danner,

MCHD Staff: Melissa Moore, Joan Theurer, Judy Burrows, Dale Grosskurth, Eileen Eckardt

Guests:

**1. Call to Order**

John Robinson called the meeting to order at 7:35 a.m.

**2. Public Comment Period**

None

**3. Approval of the Minutes of the March 5, 2019 Board of Health Meeting**

**Motion to approve the minutes made by Lori Shepherd, Second by Michael McGrail. Motion approved.**

**4. Operational Functions Required by Statute, Ordinance, or Resolution**

A. None

**5. Policy Discussion and Possible Action**

A. Update on state and county discussions regarding the 2019-2021 Biennial State of Wisconsin Budget along with update on the WALHDAB/WPHA 2019-2020 legislative priorities

Joan shared the County Executive Committee state budget priorities and identified three areas to support:

- Flexibility around levy limits
- Transportation aids
- Increasing healthcare access

John Robinson shared that the priority of increasing healthcare access was meant to show support of Medicaid expansion. The County chose to look at what had the largest impact on the County's budget. The three priorities will drive the dialogue between county board and legislators.

Joan shared that WPHA/WALHDAB state associations are encouraging counties to move forward a resolution in support of the proposal for Medicaid expansion. Joan asked the Board for their thoughts on moving forward a resolution.

John shared that the Joint Finance Committee is behind schedule compared to where it usually is at this point in the budget process, so there may still be adequate time to prepare a resolution.

Board members were provided a template to review for developing a resolution. John Robinson suggested bringing a resolution forward to the Health & Human Services Committee and the Executive Committee, but the Board of Health could sign on its own if needed.

**Motion to adopt the proposed resolution with corrections, and additions of data specific to Marathon County made by Sandi Cihlar. Second by Laura Scudiere. Motion carried unanimously.**

- B. Highlight of information learned to date from Marijuana & Youth Series and discuss implications for the prevention of substance misuse and abuse

Judy Burrows presented results of the Marijuana & Youth Series, and shared an overview of what the specific issues are, and what is being discussed to educate the community.

- Difference between hemp, marijuana, and medical marijuana
- More research needs to be done to determine potential medical benefits of marijuana ([www.learnaboutsam.org](http://www.learnaboutsam.org))
- Some extract products have a very high concentration of THC, such as wax, shatter, and butane honey oil
- Edibles can be dangerous as they take longer to feel the effect, due to the substance entering the body through the digestive tract
- Many THC containing food products are packaged very similarly to common products
- Seeing the same marketing strategies with marijuana products as with tobacco products in the past
- Devices being used for vaping are also being used for concentrated marijuana products, and are very easy to conceal

Judy asked Board members what questions, concerns and additional information they needed. Several retailers in the community are currently selling CBD products, but they are not regulated as to the level of THC in the products. Melissa Moore shared that despite the lack of regulation, several stores are already set up to sell marijuana products, at the point marijuana is legalized.

John Robinson asked the Board if a resolution should be written to recommend the federal government revise Schedule 1 to allow research to take place on marijuana. Components of the resolution discussed included: modify Schedule 1 to enable research, increase awareness and education as to the impact on youth and young adults, impact on safety in the workplace and travel, and unintentional consequences of criminalization. The Board will look at sample resolutions at an upcoming meeting.

- C. Report on the review on other counties policies regarding the administration of naloxone along with recommendations

Joan Theurer shared that Melissa Moore reached out to several counties in the state to determine what programs/policies they have in place for administration of naloxone. At this point there is not a county with a comprehensive county policy for staff. The Board was asked if they want the Health Department to look further into which departments and staff are trained to distribute and administer naloxone.

John Robinson suggested taking another month to look at the topic, and how to provide a public health support system that looks at how naloxone can expand treatment. Joan explained that it would need to

be a broad policy to include administration by employees who have face to face contact with at-risk populations.

D. Identify components of the Board of Health self-assessment and confirm next steps

Joan shared the draft self-assessment tool developed, and asked if the Board thought the assessment would give them the information needed. Board members suggested adding a place to comment on questions, compiling the individual assessments, and conducting the assessment annually.

Joan asked what role Board members see her and program directors playing in the process of conducting the assessment, and whether she would participate. John Robinson suggested having the Health Officer and program directors participate, but keep the results separate from the Board's. Discussion of the results should be facilitated rather than steered.

The assessment could be put together for the Board to take during the month of July, for discussion at the August meeting. Joan will reach out to Molly Bennett as to feasibility of facilitating the discussion of the assessment results.

E. Report from the Health & Human Services Committee May 20, 2019 meeting on policy issues impacting public health

- i. Proposed amendment to Marathon County Ordinance section 2.05(1) relating to the membership of the Board of Health

Mary Ann Crosby shared updates from the Health & Human Services Committee meeting held in May.

- Passed a resolution to make May mental health month
- Budget priorities for NCHC – County input
- Update on the transfer of the Birth to Three program from NCHC to the County
- Proposed amendment to Marathon County Ordinance section 2.05(1) relating to the membership of the Board of Health was approved

Sandi Cihlar suggested having a brief presentation to the County Board on the Board of Health's role in the health of the community when the amendment to the ordinance is proposed.

**6. Educational Presentations/Outcome Monitoring Reports**

A. Highlight efforts underway to prevent the transmission of measles

Eileen Eckardt shared that preparations are being done to prepare for a case of measles. Outreach to schools and day cares is being done to ensure staff are up to date on immunizations, as it could affect their absence rates. Letters were sent to Amish bishops in the county to educate the communities about the risks of measles, and availability of immunizations. Information is also given to health care providers in the community, on when to test and what to look for.

B. 2018 Annual Report

Joan shared the 2018 Annual Report has been published, and is intended to be the technical report used by the department for referencing specific data related to programs. The Board was asked if they would like any specific topics highlighted at a future meeting.

7. **Announcements**
  - A. Staffing update

Matthew Lillie, Environmental Health Sanitarian, will be leaving the department in July to earn his Master's Degree at the University of Iowa.

- B. Other

8. **Next Meeting Date & Time, Location, Future Agenda Items: July 2, 2019**

- A. Confirm attendance for the July 2, 2019 meeting
  - B. Agenda topics: Overview of water quality in Marathon County
  - C. Other

9. **Adjourn**

**Motion to adjourn made by Dean Danner. Second by Laura Scudiere. The meeting adjourned at 9:23 a.m.**

Respectfully submitted,

Lori Shepherd, Secretary  
Chris Weisgram, Recorder

## Health Officer Notes July 2019

### Operational Functions Required by Statute, Ordinance, or Resolution

**A. Update on action taken by the Marathon County Board of Supervisors on the proposed amendment to Marathon County Ordinance section 2.05(1) of the membership of the Board of Health**

John Robinson will share action taken at the June 25, 2019 Marathon County Board of Supervisors and the proposed amendment to the county ordinance regarding the Board of Health membership. John will share the presentation provided to the County Board on why the Board of Health exists and what it does. Enclosed, find presentation slides.

### Policy Discussion and Possible Action

**B. Update on statewide and county discussions on the 2019-2021 Biennial State of Wisconsin Budget along with an update on the WALHDAB/WPHA 2019-2020 legislative priorities**

John Robinson, Chair, along with Joan Theurer, Health Officer, will provide an update on status on key proposal is in the Governor's Budget, including the status of the draft Resolution to Support Federal Medicaid Expansion in Wisconsin. Enclosed, find draft resolution.

**C. 2019 the Year of Clean Drinking Water in Wisconsin: Overview of water quality in Marathon County**

Dale Grosskurth, Program Director – Environmental Health & Safety will provide an overview of water quality. Becky Frisch, Director of the Conservation, Planning, and Zoning Department will be joining the discussion. Enclosed, find An Overview of Groundwater in Marathon County document.

**D. Review components of draft policy statement on the dispensing and administration of naloxone by Marathon County department**

Joan Theurer and Laura Scudiere, Human Service Operations Executive at North Central Health Care and Board of Health members will share draft policy statement for Board review. Enclosed, find draft policy statement.

**E. Reminder to complete the Board of Health self-assessment and confirm plans to discuss survey findings at the August 6, 2019 meeting**

Joan Theurer will review timeline and confirm plans for the Board self-assessment.

**F. Report from the Health & Human Services Committee June 24, 2019 meeting on policy issues impacting public health**

Mary Ann Crosby, Marathon County Board Supervisor, will highlight discussion and action taken by the committee impacting public health.

**Educational Presentations/Outcome Monitoring Reports**

**A. Determine what educational report the Board of Health would like from the 2018 Annual Report**

Board members will share what information they would like highlighted from the 2018 Annual Report at a future board meeting.

**Announcements**

- A. Other

**Next Meeting Date & Time, Location, Future Agenda Items: August 6, 2019**

- A. Agenda topics: Board Health self-assessment, draft resolution on marijuana, Denison Organizational Culture survey
- B. Other



## Why does it exist? What does it do?

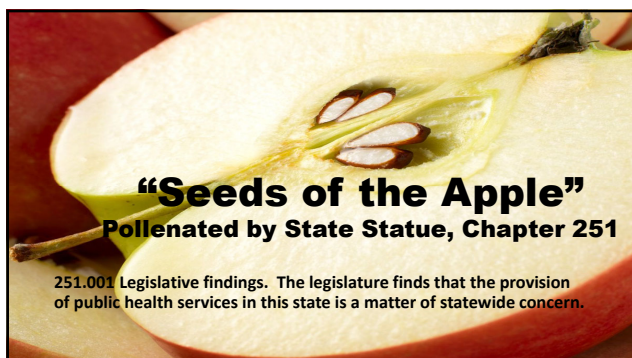
Marathon County Board of Health



### Apple a Day Keeps ...



- Prevent infectious disease threats to the public
- Prevent unsafe food and water
- Promote strong healthy families during the early years
- Creating places where it is easy to support healthy lifestyles
- Protect against health hazards
- Monitor and address community health priorities



### “Seeds of the Apple” Pollinated by State Statute, Chapter 251

251.001 Legislative findings. The legislature finds that the provision of public health services in this state is a matter of statewide concern.

## The Why?

Assure the local health department is meeting it's statutory charge, that is, **overseeing the health** of individuals, families and the communities in which they live, learn, work, and play



... Individuals who reflect the diversity of the community and have a demonstrated interest or competency in the field of public health.  
State Statute 251.03

### The Who?

John Robinson, Chair  
Sandi Cihlar, Vice-Chair, County Board of Supervisor  
Lori Shepherd, MD, Secretary  
Many Ann Crosby, County Board of Supervisor  
Dean Danner,  
Kue Her, RN  
Michael McGrail, MD  
Laura Scudiere



### The What?

- Assure state public health statutes and rules are carried out
- Assure it meets the requirements of a health department
- Adopt local public health regulations to protect and improve the public's health
- Assess public health needs & advocate for the provision of services
- Develop policy and provide leadership to meet public health needs
- Assure department collaborates with other partners

**Marathon County ...**

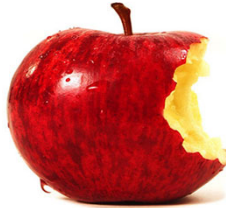
- Adopt human health hazards and licensing regulations
- Select community health priorities every 4 years
- Host educational meeting with public officials, advance resolutions
- Study the effectiveness of program services
- Represent the diverse perspectives of residents
- Advise the Health Officer



**The Policy Decision ...**

Broaden the diversity of members to be in a better position to respond to today's challenges in addressing the social and economic issues impacting the health of our community.

**Next time you see an apple ...**



**RESOLUTION #**  
**Resolution to Support Federal Medicaid Expansion in Wisconsin**

**WHEREAS**, all people deserve the opportunity to live in a county and state that creates conditions for everyone to be healthy; and

**WHEREAS**, public policy should strive toward the elimination of health disparities; and

**WHEREAS**, it is essential to provide healthcare coverage to the county's and state's most vulnerable populations; and

**WHEREAS**, accepting the federal Medicaid expansion dollars will provide coverage to an estimated 1,682 Marathon County residents and more than 82,000 Wisconsin residents living between 100 and 138 of the federal poverty level; and

**WHEREAS**, it is essential to support investing in health programs that build a healthier Marathon County and a healthier Wisconsin; and

**WHEREAS**, accepting federal Medicaid expansion dollars will generate \$48 million in new investments in Marathon County and \$324.5 million in savings to the state; and

**WHEREAS**, the money generated is intended to be invested back into health care programs in Marathon County and across Wisconsin, including: expanding access to behavioral health services; preventing childhood lead poisoning; improving access to dental services; enhancing Medicaid benefits and services for new community health benefits and postpartum coverage for new mothers; increasing funding for physicians and hospitals; increasing funding for providers in long-term care program and services, including Family Care IRIS and nursing homes; increasing access to dementia care specialists; and permanently ending the waitlist to serve all eligible children in the Children's Long-Term Support Waiver Program; and

**WHEREAS**, local health departments believe Wisconsin has an opportunity to invest in health related programs that will have a significant impact for Wisconsin residents; and

**WHEREAS**, that the Marathon County Board of Health unanimously took action on June 4, 2019 to support the acceptance of federal Medicaid expansion dollars made available by the Affordable Care Act.

**NOW, THEREFORE, BE RESOLVED THAT** the Marathon County Board of Supervisors supports the acceptance of federal Medicaid expansion dollars to expand access to health care for an estimated 1,618 Marathon County residents while providing \$48 million in new investments in Marathon County.

Respectfully submitted this \_\_\_ day of June, 2019.

**MARATHON COUNTY BOARD OF HEALTH or HEALTH AND HUMAN SERVICES  
COMMITTEE**



**FISCAL IMPACT:** \$48 million of new investments in Marathon County to reinvest into new programs to improve health care access and quality for all Marathon County residents, not just those enrolled in Medicaid.

**HEALTH IMPACT:** Supporting the increase access to health care is estimated to impact 1,618 Marathon County childless adults, parents and caretakers with incomes up to 138% of the federal poverty level, which is about \$17,000 per year for a single person working full time. In addition, new investments in Marathon County would increase services to Marathon County's vulnerable residents including new mothers, young children, and the elderly.

**REFERENCE:** Wisconsin Department of Health Services. Governor Ever's Budget Better, More Affordable Care, Covering More Wisconsinites. Supporting Marathon County Fact Sheet. P-02410(04/2019)

**Overview of Groundwater in Marathon County**  
**Marathon County Health Department**  
**June 27, 2019**

**Water Quality and Quantity 2018-2022 Marathon County Strategic Plan Objective**

The 2018-2022 Marathon County Strategic Plan identifies water quality and quantity as a priority - Objective 6.3: Protect and enhance the quantity and quality of potable groundwater and potable surface water supplies. Strategies for the Objective include:

- Updating the 2001 Groundwater Protection Plan
- Continue to develop and implement watershed management plans to minimize the impacts on water quality.
- Explore the County's role in conducting tests and analysis of contaminants in private wells and in evaluating whether such tests should be mandatory instead of voluntary. Explore alternative methods for snow and ice removal from hard surfaces to reduce the impacts of salt on surface water and groundwater
- Create new partnerships with agencies and organizations to further efforts to protect surface water and groundwater.

**Overview**

Marathon County has a population of 135,603 residents, with 65 percent of residents served by 1 of the 16 municipal water systems. Approximately 35 percent of Marathon County residents are served by private wells. This overview report provides information on groundwater as it relates to private wells.

It is unknown exactly how many private wells are in Marathon County as documentation does not exist for wells constructed prior to 1987. The Wisconsin Department of Natural Resources (DNR) has documented 11,531 private wells constructed between 1987 to present. The DNR estimates there are a total of 22,195 private wells in Marathon County.<sup>1</sup>

**Factors Impacting Quality of Drinking Water**

The quality of drinking water is affected by well construction methods and contaminants present in the groundwater. Well construction factors includes age and depth of the well. Wells with inadequate well casing materials, depth of casing, and/or grouting are more susceptible to contamination. In addition, shallow wells are more vulnerable to contamination.<sup>2</sup>

The level of risk for groundwater contamination is primarily dependent upon geology and land use.

Geology - Factors such as shallow soil over fractured bedrock, permeable sandy soil, and high water tables allow surface water and contaminants to move easily to groundwater.<sup>2</sup> Silt loam and clay soils are less permeable. Marathon County's soil geology varies making

some areas more vulnerable than others to groundwater contamination. There is little Marathon County can do to change the geology of the county.

Land Use – Private wells in Marathon County are mostly located in the agricultural and wooded areas of the county. Factors such as the location of wells as it relates to application of manure, fertilizer, and pesticides; improper management of barnyards; location of manure storage facilities; and private onsite wastewater treatment systems (POWTS) have the potential to contaminate the groundwater. Older POWTS which are not in compliance with current design and installation requirements which stipulate separation distances to high groundwater are most likely to contaminate groundwater. Also, the density of POWTS in some housing developments may create elevated levels of some contaminants.

### **Quality of Private Drinking Water in Marathon County**

The primary groundwater contaminants impacting health are bacteria, nitrates, fluorides, chemicals such herbicides/pesticides, and excessive minerals.

No county level data is available on the number of bacteria unsafe wells. In 2018, Marathon County Public Health Laboratory analyzed samples from individual wells. There were 176 (17.6%) wells with a bacteria unsafe initial sample, 57 (8.4%) wells were nitrate unsafe, 17 (2.5%) were both.

Bacteria: A 1994 Division of Public Health assessment indicated 23% of the private wells were positive for coliform bacteria. Approximately 3% of those coliform positive wells tested positive for *E. coli*.<sup>1</sup> Though generally not a cause illness, the presence of coliform bacteria indicate a pathway for harmful bacteria occurred. *E. coli* is a fecal bacteria and can cause health risks.<sup>4</sup> Statewide 17% of private wells are estimated to be bacteriologically unsafe.<sup>1</sup>

Nitrate: The 2018 Department of Natural Resources Wisconsin Groundwater Coordinating Council estimates 7.1% (1,578) of the 22,195 private wells in Marathon County exceed the federal nitrate standard of 10 milligram per liter (mg/L). Statewide the estimate is 9% of private wells exceed the nitrate standard. Health impacts of elevated nitrate levels include:

- Impact the blood's ability to carry oxygen, high levels of nitrate can cause methemoglobinemia or "blue baby syndrome" in infants.
- High levels of nitrate may also cause birth defects, thyroid problems, and certain kinds of cancer.<sup>3</sup>

The Department of Natural Resources Wisconsin Groundwater Coordinating Council estimated it would cost \$440 million to replace an estimated 42,000 private wells with elevated nitrate levels in Wisconsin. The cost estimate for Marathon County's 1,578 wells would be \$11.36 million. In Wisconsin, Transient Non-Community public wells (TNCs) includes approximately 300 churches, campgrounds, restaurants, and others entities providing water to the public have been identified as having elevated nitrates. Replacement of TNC wells is estimated at \$4 million or more.<sup>1</sup> Marathon County has 13 TNCs with elevated nitrate levels. Nitrate is

commonly associated with commercial fertilizer, animal manure, and POWTS. Agriculture is the source for approximately 90% of total nitrate inputs into groundwater.<sup>1</sup>

## Conclusion

Groundwater quality is a complex issue requiring collaborative approaches between local and statewide partners. Partners who have a role in groundwater quality include Conservation, Planning, and Zoning, UW-Extension, the Department of Natural Resources, the Department of Agriculture, Trade, and Consumer Protection, and UW Stevens Point Center for Watershed Science and Education. Currently, there is no comprehensive picture for groundwater quality in Marathon County.

## References

1. Wisconsin Groundwater Coordinating Council Report 2018, accessed on June 21, 2019 from <https://dnr.wi.gov/topic/groundwater/documents/GCC/Report/FullReport2018.pdf>
2. Wisconsin Groundwater Quality: Agricultural Chemicals in Wisconsin Groundwater April 2017, accessed on June 13, 2019 from <https://datcp.wi.gov/Documents/GroundwaterReport2017.pdf>
3. "Nitrate in Private Wells", Wisconsin Department of Health Services, accessed on June 14, 2019 from <https://www.dhs.wisconsin.gov/library/p-02128.htm>
4. "Got Water?", Wisconsin Counties Association, March 2019, accessed on June 13, 2019 from <https://indd.adobe.com/view/e9cc1f27-f180-4354-95da-2d88477c1bda>

## **Marathon County Board of Health Statement re: Workplace Naloxone Use Program**

**Summary** The Marathon County Board of Health recommends Marathon County Administration to direct county departments to assess the need and feasibility of implementing a program to make naloxone available in the workplace in the event of an overdose of employees, clients, customers, and visitors.

### **Issue**

Substance abuse continues to impact communities throughout Wisconsin, including Marathon County. One of the prevalent illicit substance of abuse is opioids, including heroin and prescription pain killers. Opioid overdoses resulted in 13 deaths in 2017 and 11 deaths in 2016 of Marathon County residents. <sup>i</sup>

Naloxone is a very effective drug for reversing opioid overdoses. Serious side effects from naloxone are very rare. Using naloxone during an overdose far outweighs any risk of side effects. <sup>ii</sup>

Approximately 85% of all overdoses are witnessed. Seen as a harm reduction tool, the availability of naloxone, along with overdose prevention trainings, are listed among the recommendations included in the [Wisconsin's Heroin Epidemic: Strategies and Solutions](#) report. <sup>iii</sup>

The Centers for Disease Control and Prevention recommend that workplaces are to consider a program to make naloxone available in the event of an overdose.

### **Considerations**

In assessing the need and feasibility for implementing a program to make naloxone available in the workplace, the Centers for Disease Control and Prevention, [Using Naloxone to Reverse Opioid Overdose in the Workplace: Information for Employers and Workers](#) outlined the following considerations:

1. Is there evidence of opioid use onsite or has your workplace experienced an opioid overdose?
2. Are there frequent visitors, clients, patients, or other members of the public that may be at increased risk of opioid overdose?
3. Is there staff willing to be trained and willing to provide naloxone? Does your workplace offer other first aid or emergency response interventions (first aid kits, AEDs, trained first aid providers)? Can naloxone be added and stored safely?
4. What liability and legal considerations should be addressed? What are the implications for licensed and non-licensed health care workers under Wisconsin's Good Samaritan law?
5. How quickly can professional emergency response personnel access your workplace to provide assistance?



When assessing the merits of implementing a workplace naloxone use program, the safety of administering at off-site work locations needs to be addressed.

For county departments where it has been determined there is a need to implement a workplace naloxone use program, additional feasibility considerations need to be explored including:

- Liability and other legal issues, including standing medical orders for health care personnel,
- Records management,
- Staff roles/responsibilities, including first aid response,
- Training to lower staff risks when providing naloxone,
- Purchasing and location of naloxone,
- Personal protection equipment,
- Follow-up care planning for the individual who overdosed,
- Maintenance of the program, updating procedures and training, and
- Costs related to personnel training and naloxone medication.

It may be beneficial to have administrative aspects of the program centralized at the county level, such as establishing written procedures, training, purchasing, etc. National and state best practice standards need to guide the development and implementation of any workplace naloxone use program.

### **Recommendations**

1. County Department Heads along with County Administration are in the best position to determine the need and feasibility of establishing a workplace naloxone use program.
2. County employees who have frequent visitors, clients, or other members of the public who may be at increased risk of opioid overdose may benefit from educational information on opioid overdose in recognizing an overdose and how to seek help.

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<sup>i</sup> Wisconsin Interactive Statistics on Health <https://www.dhs.wisconsin.gov/wish/index.htm>

<sup>ii</sup> Centers for Disease Control and Prevention. National Institute for Occupational Safety and Health. Using Naloxone to Reverse Opioid Overdose in the Workplace: Information for Employers and Workers. DHSS(NIOSH) Publication Number 2019-101 (October 2018) <https://www.cdc.gov/niosh/docs/2019-101/default.html>

<sup>iii</sup> Wisconsin State Council on Alcohol & Other Drug Abuse Prevention Committee Heroin Ad-hoc Committee (July 2014) <https://scaoda.wisconsin.gov/scfiles/docs/SCAODAHeroinReportFinal063014.pdf>

# Using Naloxone to Reverse Opioid Overdose in the Workplace: Information for Employers and Workers

## Introduction

Opioid misuse and overdose deaths from opioids are serious health issues in the United States. Overdose deaths involving prescription and illicit opioids doubled from 2010 to 2016, with more than 42,000 deaths in 2016 [CDC 2016a]. Provisional data show that there were more than 49,000 opioid overdose deaths in 2017 [CDC 2018a]. In October 2017, the President declared the opioid overdose epidemic to be a public health emergency.

Naloxone is a very effective drug for reversing opioid overdoses. Police officers, emergency medical services providers, and non-emergency professional responders carry the drug for that purpose. The Surgeon General of the United States is also urging others who may encounter people at risk for opioid overdose to have naloxone available and to learn how to use it to save lives [USSG 2018].

The National Institute for Occupational Safety and Health



Photo by ©Thinkstock

(NIOSH), part of the Centers for Disease Control and Prevention (CDC), developed this information to help employers and workers understand the risk of opioid overdose and help them decide if they should establish a workplace naloxone availability and use program.

## Background

### What are opioids?

Opioids include three categories of pain-relieving drugs: (1) natural opioids (also called opiates) which are derived from the opium poppy, such as morphine and codeine; (2) semi-synthetic opioids, such as the prescription drugs hydrocodone and oxycodone and the illicit drug heroin; (3) synthetic opioids, such as methadone, tramadol, and fentanyl. Fentanyl is 50 to 100 times more potent than morphine. Fentanyl analogues, such as carfentanil, can be 10,000 times more potent than morphine. Overdose deaths from fentanyl have greatly increased since 2013 with the introduction of illicitly-manufactured fentanyl entering the drug supply [CDC 2016b; CDC 2018b]. The National Institute on Drug Abuse [NIDA 2018] has more information about types of opioids.

### What is naloxone?

Naloxone hydrochloride (also known as naloxone, NARCAN® or EVZIO®) is a drug that can temporarily stop

many of the life-threatening effects of overdoses from opioids. Naloxone can help restore breathing and reverse the sedation and unconsciousness that are common during an opioid overdose.

#### *Side effects*

Serious side effects from naloxone use are very rare. Using naloxone during an overdose far outweighs any risk of side effects. If the cause of the unconsciousness is uncertain, giving naloxone is not likely to cause further harm to the person. Only in rare cases would naloxone cause acute opioid withdrawal symptoms such as body aches, increased heart rate, irritability, agitation, vomiting, diarrhea, or convulsions. Allergic reaction to naloxone is very uncommon.

#### *Limitations*

Naloxone will not reverse overdoses from other drugs, such as alcohol, benzodiazepines, cocaine, or



Centers for Disease Control  
and Prevention  
National Institute for Occupational  
Safety and Health

amphetamines. More than one dose of naloxone may be needed to reverse some overdoses. Naloxone alone may be inadequate if someone has taken large quantities

of opioids, very potent opioids, or long acting opioids. For this reason, call 911 immediately for every overdose situation.

## Opioids and Work

Opioid overdoses are occurring in workplaces. The Bureau of Labor Statistics (BLS) reported that overdose deaths at work from non-medical use of drugs or alcohol increased by at least 38% annually between 2013 and 2016. The 217 workplace overdose deaths reported in 2016 accounted for 4.2% of occupational injury deaths that year, compared with 1.8% in 2013 [BLS 2017]. This large increase in overdose deaths in the workplace (from all drugs) parallels a surge in overall overdose deaths from opioids reported by CDC [2017]. Workplaces that serve the public (i.e. libraries, restaurants, parks) may also have visitors who overdose while onsite.

### *Workplace risk factors for opioid use*

Opioids are often initially prescribed to manage pain arising from a work injury. Risky workplace conditions that lead to injury, such as slip, trip, and fall hazards or

heavy workloads, can be associated with prescription opioid use [Kowalski-McGraw et al. 2017]. Other factors, such as job insecurity, job loss, and high-demand/low-control jobs may also be associated with prescription opioid use [Kowalski-McGraw et al. 2017]. Some people who use prescription opioids may misuse them and/or develop dependence. Prescription opioid misuse may also lead to heroin use (Cicero et al. 2017). Recent studies show higher opioid overdose death rates among workers in industries and occupations with high rates of work-related injuries and illnesses. Rates also were higher in occupations with lower availability of paid sick leave and lower job security, suggesting that the need to return to work soon after an injury may contribute to high rates of opioid-related overdose death [MDPH 2018, CDC 2018c]. Lack of paid sick leave and lower job security may also make workers reluctant to take time off to seek treatment.

## Considering a Workplace Naloxone Use Program

Anyone at a workplace, including workers, clients, customers, and visitors, is at risk of overdose if they use opioids. Call 911 immediately for any suspected overdose. Overdose without immediate intervention can quickly lead to death. Consider implementing a program to make naloxone available in the workplace in the event of an overdose. The following considerations can help you decide whether such a program is needed or feasible:

- Does the [state](#) where your workplace is located allow the administration of naloxone by non-licensed providers in the event of an overdose emergency?
- What liability and legal considerations should be addressed? Does your state's Good Samaritan law cover emergency naloxone administration?
- Do you have staff willing to be trained and willing to provide naloxone?
- Has your workplace experienced an opioid overdose or has there been evidence of opioid drug use onsite (such as finding drugs, needles or other paraphernalia)?
- How quickly can professional emergency response personnel access your workplace to



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- provide assistance?
- Does your workplace offer other first aid or emergency response interventions (first aid kits, AEDs, trained first aid providers)? Can naloxone be added?
- Are the risks for opioid overdose greater in your geographic location? The National Center for Health Statistics provides data on drug overdose deaths in an online state dashboard. [CDC 2018a.]

- Are the risks for opioid overdose greater in your industry or among occupations at your workplace? [See MDPH 2018 and CDC 2018c.]
- Does your workplace have frequent visitors, clients, patients, or other members of the public that may be at increased risk of opioid overdose?

Review the above questions periodically even if a program is not established right away. Ideally, a naloxone program is but a part of a more comprehensive workplace program on opioid awareness and misuse prevention.

## Establishing a Program

You will need policies and procedures for the program. These should be developed in consultation with safety and health professionals. Involve the workplace safety committee (if present) and include worker representatives. You also will need a plan to purchase, store, and administer naloxone in case of overdose. Additional considerations for establishing a program are described below.

### Risk assessment

Conduct a risk assessment before implementing the naloxone program.

- Decide whether workers, visiting clients, customers, or patients are at risk of overdose.
- Assess availability of staff willing to take training and provide naloxone.
- Consult with professional emergency responders and professionals who treat opioid use disorders in your area.

### Liability

Consider liability and other legal issues related to such a program.

### Records management

Include formal procedures for documenting incidents and managing those records, to include safeguarding the privacy of affected individuals. Maintain records related to staff roles and training.

### Staff roles

Define clear roles and responsibilities for all persons designated to respond to a suspected overdose. Include these roles and responsibilities in existing first aid or emergency response policies and procedures (first aid kits, AEDs, training for lay first-aid providers, and/or onsite health professionals).

## Training

Train staff to lower their risks when providing naloxone. Staff must be able to:

- Recognize the symptoms of possible opioid overdose.
- Call 911 to seek immediate professional emergency medical assistance.
- Know the dangers of exposure to drug powders or residue.
- Assess the incident scene for safety concerns before entering.
- Know when NOT to enter a scene where drug powders or residues are visible and exposure to staff could occur.
- Know to wait for professional emergency responders when drug powders, residues, or other unsafe conditions are seen.
- Use personal protective equipment (PPE; nitrile gloves) during all responses to protect against chemical or biological exposures including opioid residues, blood, or other body fluids.
- Administer naloxone and recognize when additional doses are needed.
- Address any symptoms that may arise during the response, including agitation or combativeness from the person recovering from an overdose.
- Use additional first aid, CPR/basic life support measures. Opioid overdose can cause respiratory and cardiac arrest.

Prepare for possible exposure to blood. Needles or other sharps are often present at the scene of an overdose. Provide bloodborne pathogen training to responding staff members and consider additional protection, such as hepatitis B vaccination.

## Purchasing naloxone

Naloxone is widely available in pharmacies. Most states allow purchase without a prescription. Choose nasal sprays or injectable forms that can be delivered with an auto-injector, a pre-filled syringe, or a standard syringe/needle. Customize training to fit the formulation stocked at your workplace.

Consider the nasal spray formulation for its safety to lay providers and its ease of administration. Research shows that people trained on intranasal spray reported higher confidence both before and after training compared with people trained on injectable forms [Ashrafioun et al. 2016].

Stock a minimum of two doses of naloxone. Some workplaces may choose to stock more. In some cases, one dose of naloxone is inadequate to reverse an overdose. The size, layout, and accessibility of the workplace may require placement of doses in multiple locations. Consider the time needed to replace supplies when determining the number of doses to stock.

## Naloxone storage

Follow manufacturer instructions for storing naloxone. Keep in the box or storage container until ready for use. Protect from light and store at room temperature (59-77°F or 15-25°C). Naloxone can expire and its potency can wane over time. Note the expiration date for timely replacement.

## PPE and other equipment storage

Store personal protective equipment, such as disposable nitrile gloves, and other first aid equipment, such as a responder rescue mask, face shield, or bag valve mask (for use in rescue breathing or CPR) close to the naloxone for quick response. Include sharps disposal containers if injectable naloxone is used.

## Follow-up care planning

Develop a plan for immediate care by professional healthcare providers, referral for follow-up care, and ongoing support for any worker who has overdosed. Include emergency assistance and support (i.e. Employee Assistance Program, mental health services) for lay staff responders and bystanders if necessary.



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## Maintaining a program

Re-evaluate your program periodically. Assess for new risks. Plan for maintaining equipment and restocking of naloxone (including replacement of expired naloxone), other first aid supplies, and PPE.

### *Check for updates to procedures and guidance*

Incorporate new medical and emergency response guidance regarding naloxone purchase, storage, and administration.

### *Training review and update*

Schedule refresher training annually. Training on opioid overdose and naloxone use can be combined with other first aid/CPR training and certifications.

## References

- Ashrafioun L, Gamble S, Herrmann M, Baciewicz G [2016]. Evaluation of knowledge and confidence following opioid overdose prevention training: A comparison of types of training participants and naloxone administration methods. *Subst Abus* 37(1):76-81. doi: 10.1080/08897077.2015.1110550
- BC [2017]. Naloxone risk assessment tool – for non-public sector organizations. Prepared for the Joint Task Force on Overdose Response. Vancouver, BC: Canada. [https://www2.gov.bc.ca/assets/gov/overdose-awareness/naloxone\\_risk\\_assessment\\_-\\_non-governmental\\_sectors.pdf](https://www2.gov.bc.ca/assets/gov/overdose-awareness/naloxone_risk_assessment_-_non-governmental_sectors.pdf)
- BLS (Bureau of Labor Statistics) [2017]. Economic News Release: Census of Fatal Occupational Injuries Summary, 2016. Washington, DC: Bureau of Labor Statistics, December 19, <https://www.bls.gov/news.release/cfoi.nr0.htm>
- CDC (Centers for Disease Control and Prevention) [2016a]. CDC guideline for prescribing opioids for chronic pain — United States, 2016. *MMWR* 65(1):1–49. <https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm>
- CDC [2016b]. Fentanyl Law Enforcement Submissions and Increases in Synthetic Opioid-Involved Overdose Deaths — 27 States, 2013–2014. *MMWR* 65(33):837-843
- CDC [2017]. Provisional counts of drug overdose deaths, as of 8/16/2017. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System. [https://www.cdc.gov/nchs/data/health\\_policy/monthly-drug-overdose-death-estimates.pdf](https://www.cdc.gov/nchs/data/health_policy/monthly-drug-overdose-death-estimates.pdf)
- CDC [2018a]. NVSS Vital Statistics Rapid Release: 12 Month-ending Provisional Number of Drug Overdose Deaths by Drug or Drug Class, as of 8/5/2018. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System. <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>
- CDC [2018b]. Health alert network: rising numbers of deaths involving fentanyl and fentanyl analogs, including carfentanyl, and increased usage and mixing with non-opioids. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. <https://emergency.cdc.gov/han/han00413.asp>
- CDC [2018c]. Occupational Patterns in Unintentional and Undetermined Drug-Involved and Opioid-Involved Overdose Deaths — United States, 2007–2012. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. [https://www.cdc.gov/mmwr/volumes/67/wr/mm6733a3.htm?s\\_cid=mm6733a3\\_e](https://www.cdc.gov/mmwr/volumes/67/wr/mm6733a3.htm?s_cid=mm6733a3_e)
- Cicero TJ, Ellis MS, Kasper ZA. [2017]. Increased use of heroin as an initiating opioid of abuse. *Addict Behav.* Nov;74:63-66.
- Hedegaard H, Warner M, Miniño AM. [2017]. Drug overdose deaths in the United States, 1999–2016. NCHS Data Brief, no 294 (Data table for Figure 2). Hyattsville, MD: National Center for Health Statistics. 2017/ CDC. Wide-ranging online data for epidemiologic research (WONDER). Atlanta, GA: CDC, National Center for Health Statistics; 2016. <https://www.cdc.gov/nchs/products/databriefs/db294.htm>
- Kowalski-McGraw M, Green-McKenzie J, Pandalai S, Schulte PA [2017]. Characterizing the interrelationships of prescription opioid and benzodiazepine drugs with worker health and workplace hazards. *J Occup Environ Med.* Nov; 59(11):1114-1126
- MDPH (Massachusetts Department of Public Health) [2018]. Opioid-related Overdose Deaths in Massachusetts by Industry and Occupation, 2011-2015. Boston, MA: MDPH Occupational Health Surveillance Program. <https://www.mass.gov/files/documents/2018/08/15/opioid-industry-occupation.pdf>
- NIDA [2018]. Opioids: brief description. Washington, DC: National Institutes of Health, National Institute on Drug Abuse. <https://www.drugabuse.gov/drugs-abuse/opioids>
- USSG (U.S. Surgeon General) [2018]. Surgeon General’s Advisory on Naloxone and Opioid Overdose. Washington, DC: U.S. Department of Health and Human Services, Office of the U.S. Surgeon General. <https://www.surgeongeneral.gov/priorities/opioid-overdose-prevention/naloxone-advisory.html>

# Resources

## *Burden of opioid use*

[edworkforce.house.gov/news/documentsingle.aspx?DocumentID=402497](http://edworkforce.house.gov/news/documentsingle.aspx?DocumentID=402497)

## *Commonly abused drugs*

[drugabuse.gov/drugs-abuse/commonly-abused-drugs-charts](http://drugabuse.gov/drugs-abuse/commonly-abused-drugs-charts)

## *Confidentiality*

[hhs.gov/hipaa](http://hhs.gov/hipaa)

## *Emergency response resources*

[cdc.gov/niosh/topics/emres/responders](http://cdc.gov/niosh/topics/emres/responders)

[hhs.gov/about/news/2018/04/05/surgeon-general-releases-advisory-on-naloxone-an-opioid-overdose-reversing-drug](http://hhs.gov/about/news/2018/04/05/surgeon-general-releases-advisory-on-naloxone-an-opioid-overdose-reversing-drug)

[cdc.gov/niosh/docs/wp-solutions/2010-139](http://cdc.gov/niosh/docs/wp-solutions/2010-139)

## *Fentanyl*

[cdc.gov/niosh/topics/fentanyl/risk](http://cdc.gov/niosh/topics/fentanyl/risk)

[cdc.gov/niosh/ershdb/emergencyresponsecard\\_29750022](http://cdc.gov/niosh/ershdb/emergencyresponsecard_29750022)

[cdc.gov/drugoverdose/opioids/fentanyl](http://cdc.gov/drugoverdose/opioids/fentanyl)

## *Liability Issues*

[drugpolicy.org/sites/default/files/Fact%20Sheet\\_State%20based%20Overdose%20Prevention%20Legislation%20%28January%202016%29](http://drugpolicy.org/sites/default/files/Fact%20Sheet_State%20based%20Overdose%20Prevention%20Legislation%20%28January%202016%29)

[shrm.org/resourcesandtools/legal-and-compliance/employment-law/pages/employers-naloxone](http://shrm.org/resourcesandtools/legal-and-compliance/employment-law/pages/employers-naloxone)

[networkforphl.org/asset/qz5pvn/legal-interventions-to-reduce-overdose](http://networkforphl.org/asset/qz5pvn/legal-interventions-to-reduce-overdose)

## *Naloxone*

[samhsa.gov/medication-assisted-treatment/treatment/naloxone](http://samhsa.gov/medication-assisted-treatment/treatment/naloxone)

[drugabuse.gov/related-topics/opioid-overdose-reversal-naloxone-narcan-evzio](http://drugabuse.gov/related-topics/opioid-overdose-reversal-naloxone-narcan-evzio)

[tn.gov/health/health-program-areas/health-professional-boards/csmd-board/csmd-board/naloxone-training-information](http://tn.gov/health/health-program-areas/health-professional-boards/csmd-board/csmd-board/naloxone-training-information)

[ccohs.ca/oshanswers/hsprograms/firstaid\\_naloxone](http://ccohs.ca/oshanswers/hsprograms/firstaid_naloxone)

## *Naloxone access*

[drugabuse.gov/publications/medications-to-treat-opioid-addiction/naloxone-accessible](http://drugabuse.gov/publications/medications-to-treat-opioid-addiction/naloxone-accessible)

[narcan.com/availability](http://narcan.com/availability)

[getnaloxonenow.org](http://getnaloxonenow.org)

## *NIOSH resources on opioids*

[cdc.gov/niosh/topics/opioids](http://cdc.gov/niosh/topics/opioids)

[cdc.gov/niosh/topics/fentanyl](http://cdc.gov/niosh/topics/fentanyl)

## *Overdose prevention*

[surgeongeneral.gov/priorities/opioid-overdose-prevention](http://surgeongeneral.gov/priorities/opioid-overdose-prevention)

[surgeongeneral.gov/priorities/opioid-overdose-prevention/naloxone-advisory](http://surgeongeneral.gov/priorities/opioid-overdose-prevention/naloxone-advisory)

[cdc.gov/drugoverdose/prevention](http://cdc.gov/drugoverdose/prevention)

To receive documents or other information about occupational safety and health topics, contact NIOSH:  
Telephone: 1-800-CDC-INFO (1-800-232-4636)  
TTY: 1-888-232-6348  
CDC INFO: [www.cdc.gov/info](http://www.cdc.gov/info)

or visit the NIOSH website at <http://www.cdc.gov/niosh>  
For a monthly update on news at NIOSH, subscribe to *NIOSH eNews* by visiting [www.cdc.gov/niosh/eNews](http://www.cdc.gov/niosh/eNews)

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**Wisconsin Department of Health Services  
Division of Public Health  
PHAVR - WEDSS**

**YTD Disease Incidents by Episode Date**

**Incidents for MMWR Weeks 1 - 23 (Through Week of June 8th, 2019)**

**Jurisdiction: Marathon County**

Disease Group	2019				Total
	Week 20	Week 21	Week 22	Week 23	
Blastomycosis	0	0	0	0	1
Campylobacteriosis (Campylobacter Infection)	0	0	0	0	12
Carbapenem-Resistant Enterobacteriaceae	0	0	0	0	1
Carbon Monoxide Poisoning	0	0	0	0	5
Chlamydia Trachomatis Infection	8	6	3	5	156
Cryptosporidiosis	0	1	1	0	8
Ehrlichiosis / Anaplasmosis	0	1	0	0	2
Giardiasis	0	0	0	2	5
Gonorrhea	7	3	1	2	63
Haemophilus Influenzae Invasive Disease	0	0	0	0	1
Hepatitis B	0	0	0	1	5
Hepatitis C	0	0	0	1	16
Influenza	0	0	0	0	62
Invasive Streptococcal Disease (Groups A And B)	0	0	1	1	10
Lyme Disease	2	0	1	0	3
Mycobacterial Disease (Nontuberculous)	0	1	0	0	5
Pathogenic E.coli	0	0	0	1	3
Pertussis (Whooping Cough)	0	0	0	0	3
Salmonellosis	0	0	1	0	7
Streptococcus Pneumoniae Invasive Disease	0	0	2	0	8
Syphilis	0	0	0	0	2
Tuberculosis	0	0	0	0	1
Tuberculosis, Latent Infection (LTBI)	0	0	0	0	4
Varicella (Chickenpox)	0	0	0	0	1
	17	12	10	13	384