

# TRACKING 101 INTROTO ENVIRONMENTAL PUBLIC HEALTHTRACKING

Bureau of Environmental and Occupational Health

Division of Public Health

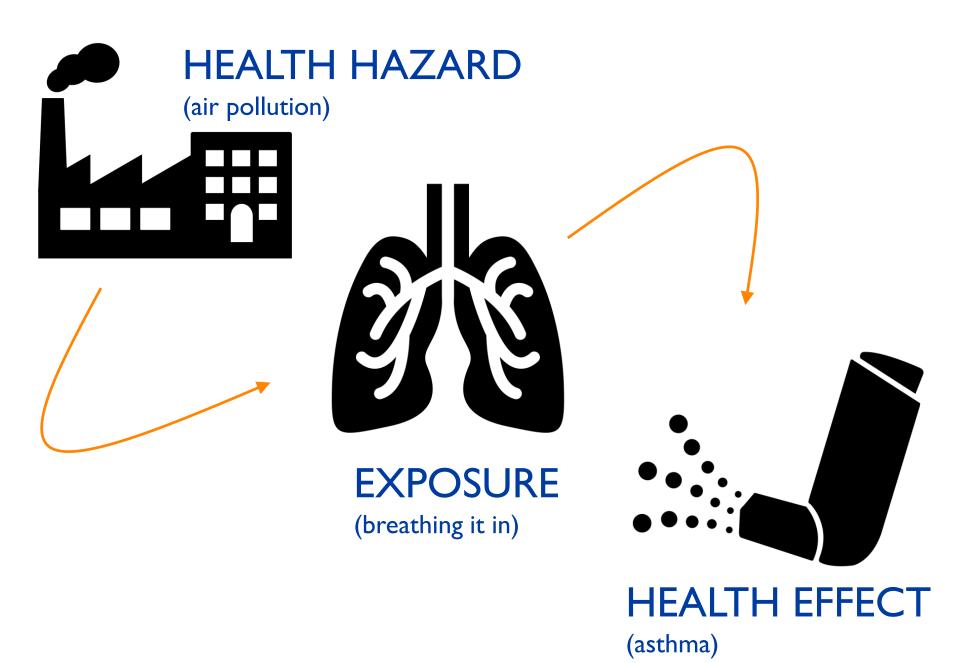
Wisconsin Department of Health Services

#### **CHRISTY VOGT, MPH, CHES**

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## YOUR SOURCE FOR ENVIRONMENTAL PUBLIC HEALTH DATA.



## To get the right data, you might have to visit several databases.







## To get the right data, you might have to visit several databases.





## **Data Topics**

Air quality Water quality **Asthma** Birth outcomes Cancer Carbon monoxide poisoning Childhood lead poisoning Heart attack Heat stress **Immunizations** Lyme disease

Oral health (fluoridation)



## Data Topics: PLANNED FOR 2017

Alcohol Outlet Density +
Life Expectancy
Cancer-Causing Emissions



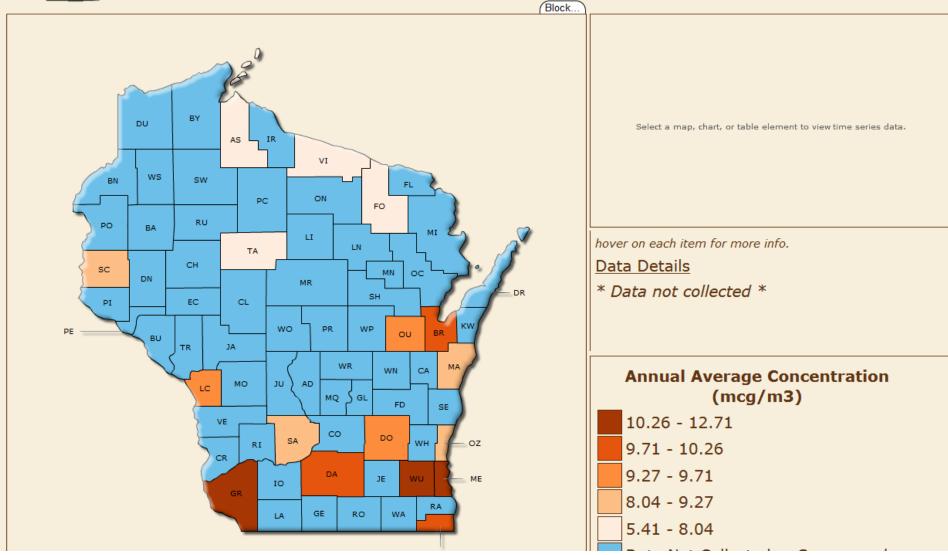




#### Wisconsin Environmental Public Health Tracking Program

Query Map Chart Table Search Links

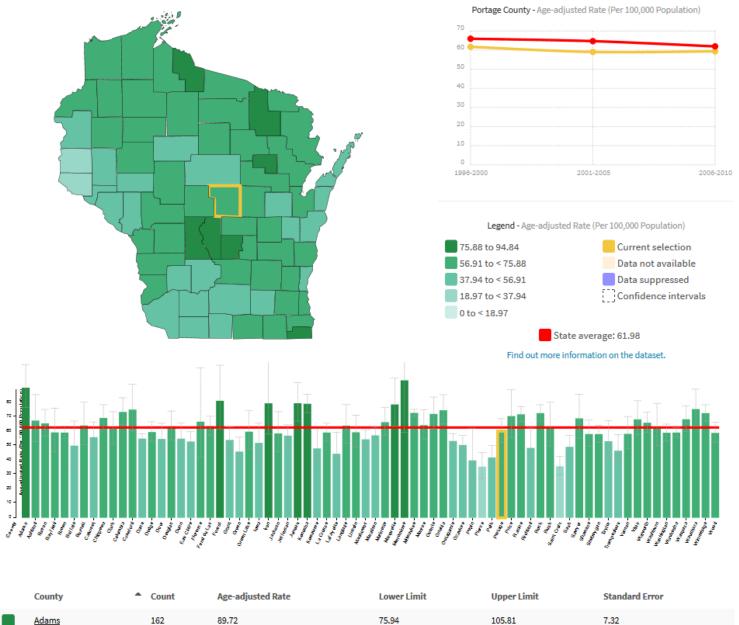
 $\label{eq:air-Quality-Particulate Matter 2.5 > County > Screen > Annual Average Concentration (mcg/m3) > 2010$ 



Report

Resources +

▼ Dataset: Cancer - Lung & Bronchus 🌣 Filter: 2006-2010 ~ All Ages ~ Age-adjusted Rate (Per 100,000 Population) . © Current selection: Portage



<u>Adams</u>

Lill Chart

**≡** Table

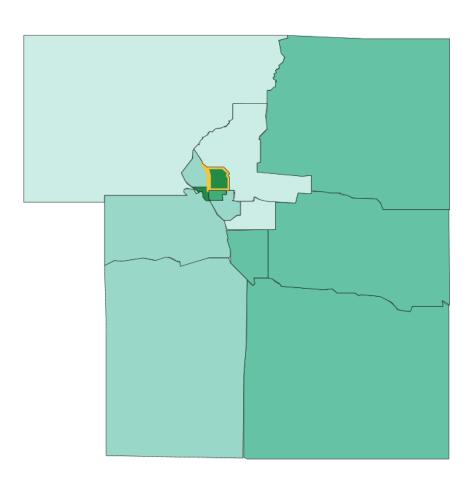
Report

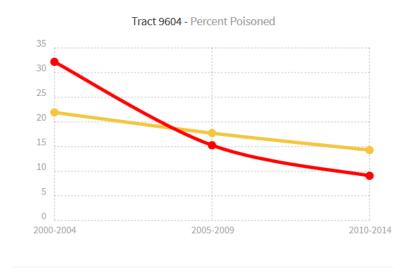
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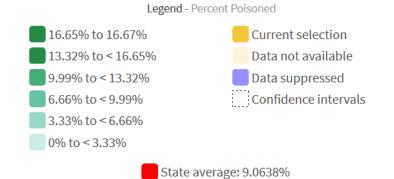
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Resources -

TDataset: Childhood Lead Poisoning - Portage - Blood lead level of 5-10µg/dL Filter: 2010-2014 ~ Birth to <6 years ~ Percent Poisoned Current selection: Tract 9604





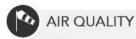


Find out more information on the dataset.



#### **PORTAGE C**

DASHBOARD | 2015 ENVIRONMEN



Ozone

0.0 Annual days above standard Wisconsin: 0.7

Particulate Matter 2.5 0.0 Annual days above standard Wisconsin: 0.1



#### **HOME HAZARDS**

Carbon Monoxide (CO)

7.4 Rate of ER visits per 100,000 peo Wisconsin: 8.2

Childhood Lead Poisonin

1.3% Percent with blood lead 25 µg/L Wisconsin: 6.3%



#### **HEALTH INDICATO**

**Heat Stress** 

20.8 Rete of ER visits per 100,000 peo Wisconsin: 16.5

Melanoma

Rate of cases per 100,000 people

\*This indicator is represented per 10,000 people on the data portal.



WISCONSIN ENVIRONMEN dhs.wi.gov/epht | dhstracking( Wisconsin Department of Health Service





Below you will find our suggest points unique to environmenta consider how it might be put to way. If you have questions abo

#### COMMUNITY HEALTH ASSESSMEN

Data from the profiles can be used in your health departm and federal requirements.

#### **ACCREDITATION**

The profiles can be used to address the Public Health Accre 1.3: Analyze public health data to identify trends in health economic factors that affect the public's health.

#### **GRANT PROPOSALS**

Data in this profile can help you and your team develop a r programs and show where there is still work to be done.

#### **EDUCATION AND OUTREACH**

When creating programs and outreach materials for your extent of a problem. Communities have used their profile

#### POLICY DEVELOPMENT

This profile contains measures that can be used to justify t used as baseline measures with which to monitor changes







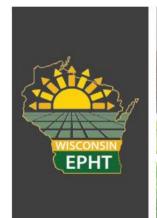
PORTAGE COUNTY **ENVIRONMENTAL HEALTH PROFILE** 





WISCONSIN ENVIRONMENTAL PUBLIC HEALTH TRACKING PROGRAM

# It's that time again!



2017





WASHINGTON COUNTY
ENVIRONMENTAL
HEALTH PROFILE





WISCONSIN ENVIRONMENTAL PUBLIC HEALTH
TRACKING PROGRAM

## **BEFORE**





Below you will find our suggestions for how to use this profile. This profile contains many data points unique to environmental health. As you explore the information on the following pages, consider how it might be put to good use in your community. We are here to help you along the way. If you have questions about how to integrate these data into your work, let us know!

#### **COMMUNITY HEALTH ASSESSMENTS**

Data from the profiles can be used in your health department or hospital's community health assessments to help meet state and federal requirements.

#### **ACCREDITATION**

The profiles can be used to address the Public Health Accreditation Board's accreditation standards. For instance, Standard 1.3: Analyze public health data to identify trends in health problems, environmental public health hazards, and social and economic factors that affect the public's health.

#### **GRANT PROPOSALS**

Data in this profile can help you and your team develop a rationale for funding requests. These data can help justify existing programs and show where there is still work to be done.

#### **EDUCATION AND OUTREACH**

When creating programs and outreach materials for your community, these data can help you build your case and show the extent of a problem. Communities have used their profile data to target education efforts to areas with the most need.

#### **POLICY DEVELOPMENT**

This profile contains measures that can be used to justify the need for a policy. If a policy is put in place, these data can be used as baseline measures with which to monitor changes over time.

How have you used your county's profile? Tell us about it!

dhstracking@wi.gov 608-267-2488



#### COMMUNITY HEALTH ASSESSMENTS

Tracking data can help flesh out your community health assessment and help meet state requirements.

#### COMMUNITY HEALTH IMPROVEMENT PLANS

Use Tracking data and <u>Ideas for Taking Action</u> to help prioritize environmental health and plan strategies for community improvement. Use the data to track progress in meeting your goals.

#### RESEARCH

Tracking data can be used to explore answers to environmental health research questions.

#### **MEDIA STORIES**

Strengthen your interview or article with facts and figures from Tracking and our resources.



If you have questions about how to integrate the data into your work, let us know!

#### SOCIAL MEDIA

Localize your posts with data from your community.

#### **ACCREDITATION**

The profiles can be used to address Public Health Accreditation Board's standards; for example, Standard 1.3—Analyze public health data to identify trends in health problems, environmental public health hazards, and social and economic factors that affect the public's health.

#### **GRANT PROPOSALS**

Tracking data and resources can help you and your team develop rationale for funding requests. These data can help justify existing programs and show where work needs to be done.

#### **EDUCATION AND OUTREACH**

When creating programs and outreach materials for your community, Tracking data can help you make your case and show the extent of the problem.

#### POLICY DEVELOPMENT

Tracking data and profiles contain measures that can be used to justify the need for a policy. Once a policy is in place, the data can be used as a baseline to track progress over time.

## **AFTER**

## **BEFORE**



### PORTAGE COUNT

DASHBOARD | 2015 ENVIRONMENTAL HEALTH PROFILE



#### AIR QUALITY

Ozone

0.0 Annual days above standard Wisconsin: 0.7

#### Particulate Matter 2.5

0.0 Annual days above standard Wisconsin: 0.1



#### WATER QUALITY

Arsenic

0.6 Average concentration in µg/L Wisconsin: 1.3

#### Nitrate

4.4 Average concentration in mg/L Wisconsin: 1.5



#### HOME HAZARDS

#### Carbon Monoxide (CO)

7.4 Rate of ER visits per 100,000 people Wisconsin: 8.2

#### Childhood Lead Poisoning

1.3% Percent with blood lead 25 µg/L Wisconsin: 6.3%



#### **BIRTH OUTCOMES**

#### Low Birth Weight

6.0% Percent of births <2500 grams
Wisconsin: 7.3%

#### Preterm Birth

9.3% Percent of births <37 weeks gestetion Wisconsin: 10.3%



#### **HEALTH INDICATORS**

#### Heat Stress

20.8 Rete of ER visits per 100,000 people Wisconsin: 16.5

#### Melanoma

21.7 Rate of cases per 100,000 people Wisconsin: 18.4

#### Lung Cancer

59.4 Rate of cases per 100,000 people Wisconsin: 62.0

#### Asthma

237.0 Rate of ER visits per 100,000 people\*

\*This indicator is represented per 10,000 people on the data portal.



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References on next page



#### WISCONSIN ENVIRONMENTAL PUBLIC HEALTH TRACKING PROGRAM

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Wisconsin Department of Health Services | Division of Public Health | Bureau of Environmental and Occupational Health



#### SAUK COUNTY

DASHBOARD | 2017 ENVIRONMENTAL HEALTH PROFILE



Childhood Lead Poisoning

1.4% Percent with blood lead ≥5 μg/dL
Wisconsin: 6.4%

Carbon Monoxide Poisoning

14.2 Rate of ER visits per 100,000 people Wisconsin: 7.9

CLIMATE

**Heat Stress** 

28.9 Rate of ER visits per 100,000 people
Wisconsin: 16.5

Lyme Disease

12.4 Crude rete per 100,000 people
Wisconsin: 22.7

#### **HEALTH OUTCOMES**

#### Asthma

31.4 Rate of ER visits per 10,000 people\*

#### Melanoma

14.3 Rate of cases per 100,000 people
Wisconsin: 21.6

#### Heart Attack

28.3 Rate of hospitalizations per 10,000

Wisconsin: 27.4



#### Arsenic

0.4 Average concentration in µg/L
Wisconsin: 1.4

#### Nitrate

2.1 Average concentration in mg/L Wisconsin: 1.5

#### Fluoride

Percent of population with fluoridated public water
Wisconsin: 88.6%



#### **AIR QUALITY**

#### Ozone

Annual days above standard Wisconsin: 3.8

#### Particulate Matter (PM) 2.5

O Annual days above standard Wisconsin: 0.3

\*Note these rates are per 10,000 people, while the others are per 100,000. To compare these measures to others, be sure to multiply the rates by 10.

 Above state value (with exception of fluoride where below state value is not preferred) At or below state value (with exception of fluoride where above state value is preferred) ^ Data are suppressed data details on next page

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## **AFTER**

## **BEFORE**





We know it is a challenge to translate data into action. To help get you started, we have listed strategies that can improve environmental public health.

Use the data in the County Environmental Health Profiles and in the online data portal to target education, programming, and policies to address your community's needs. Visit What Works for Health and The Community Guide for more ideas.\*

This document includes many hyperlinks. We recommend you view it online: bit.lv/ideasfortakingaction



AIR QUALITY



WATER QUALITY



HOME HAZARDS



**BIRTH OUTCOMES** 



HEALTH INDICATORS

#### STRATEGY

Collaborate with community partners to develop active and shared transportation infrastructure.

- Bicvcle and pedestrian master plans
- Active transportation to school through <u>safe routes</u> and <u>walking school buses</u>
- · Public transportation system introduction, expansion, and incentives for use
- Workplace supports for active commuting

Encourage the use of lower-polluting diesel technologies among local and regional transit authorities.

Consider incorporating permeable pavement into sidewalk, road, and parking lot projects.

Encourage residents to test their wells and take appropriate steps to ensure good water quality.































CONTINUED ON NEXT PAGE

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dhs.wi.gov/epht | MAY 2015 | dhstracking@wi.gov State of Wisconsin | Department of Health Services | Division of Public Health | P-00719a (5/15)

<sup>\*</sup>This is a companion document to the 2015 County Environmental Health Profiles. It is not intended to be an exhaustive list.



#### **ASTHMA**

#### Ideas for Taking Action

Wisconsin Environmental Public Health Tracking Program



#### TAKING ACTION

We know it's a challenge to translate data into action. To help get you started, we created a short menu of potential strategies for addressing asthma. To help communities of all sizes and resource levels, we organized this guide by the scope of the strategy, from addressing knowledge, attitudes, and skills to addressing laws and policies.

#### INDIVIDUAL LEVEL | Knowledge, Attitudes, Skills

- · Promote asthma self-management education.
- Ensure asthma patients have an up-to-date asthma action plan.
- · Create educational materials that are culturally appropriate and written in plain language.

#### INTERPERSONAL LEVEL | Family, Friends, Social Networks

- · Offer environmental home assessments to identify and remove asthma triggers.
- . Train doctors to create asthma management plans with their patients.
- Encourage homeowners to practice integrated pest management.
- · Create a circle of support among families, clinicians, and school nurses.

#### ORGANIZATIONAL LEVEL | Organizations, Schools, Workplaces

- · Encourage child care centers and schools to identify environmental asthma triggers via a facility walkthrough.
- . Ensure students with asthma have an updated asthma action plan on file at school.
- · Train teachers, child care workers, and school nurses how to administer rescue inhaler medication.

#### COMMUNITY LEVEL | Design, Access, Connectedness, Spaces

- · Promote the school flag program to alert the community to outdoor air quality.
- · Promote nonsmoking environments and smoking cessation options for community members.

#### POLICY LEVEL | National or Local Laws and Policies

- Promote best practices for cleaning and pest management in schools and child care centers.
- Promote school policies that limit school bus idling.
- Encourage property owners and operators to adopt smokefree policies in apartment buildings.
- Promote housing rehabilitation loan and grant programs.

Find more strategies and explore asthma data at dhs.wisconsin.gov/epht.

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Bureau of Environmental and Occupational Health





dhs.wisconsin.gov/epht. | MAY 2017 | dhstracking@wi.gov
Department of Health Sentose | Division of Public Health | F.01795A (55:2017)
Each strategy contains links to more resources. View this document on the Resources section of <u>our website to access the links</u>

## **AFTER**



### CHILDHOOD LEAD POISONING

Ideas for Taking Action

Wisconsin Environmental Public Health Tracking Program



#### TAKING ACTION

We know it's a challenge to translate data into action. To help get you started, we created a short menu of potential strategies for addressing childhood lead poisoning. To help communities of all sizes and resource levels, we organized this guide by the scope of the strategy, from addressing knowledge, attitudes, and skills to addressing laws and policies.

#### INDIVIDUAL LEVEL | Knowledge, Attitudes, Skills

- Encourage families in high-risk areas to get their children tested for lead poisoning at the appropriate ages.
- Encourage community members to seek out certified lead-safe renovation contractors.
- . Educate people who work with lead on the job or as a hobby on ways to reduce their exposure.

#### INTERPERSONAL LEVEL | Family, Friends, Social Networks

- · Educate doctors about the importance of having children tested for lead poisoning.
- Educate doctors to ask patients about their jobs and hobbies that might involve lead.

#### ORGANIZATIONAL LEVEL | Organizations, Schools, Workplaces

- Educate staff at worksites that have lead about how to prevent lead from going home.
- · Educate contractors about the advantages of lead certification.
- · Work with child care settings to talk with parents of children in their care.

#### COMMUNITY LEVEL | Design, Access, Connectedness, Spaces

- Encourage neighborhood organizations to talk to residents about lead hazards.
- Eliminate lead-based paint in homes.

#### POLICY LEVEL | National or Local Laws and Policies

- Encourage worksites to develop policies to minimize exposure to lead and lead dust leaving the facility.
- Promote existing policy around certified lead-safe renovation.
- Promote housing rehabilitation loan and grant programs.

Find more strategies and explore childhood lead poisoning data at dhs.wisconsin.gov/epht.

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Bureau of Environmental and Occupational Health

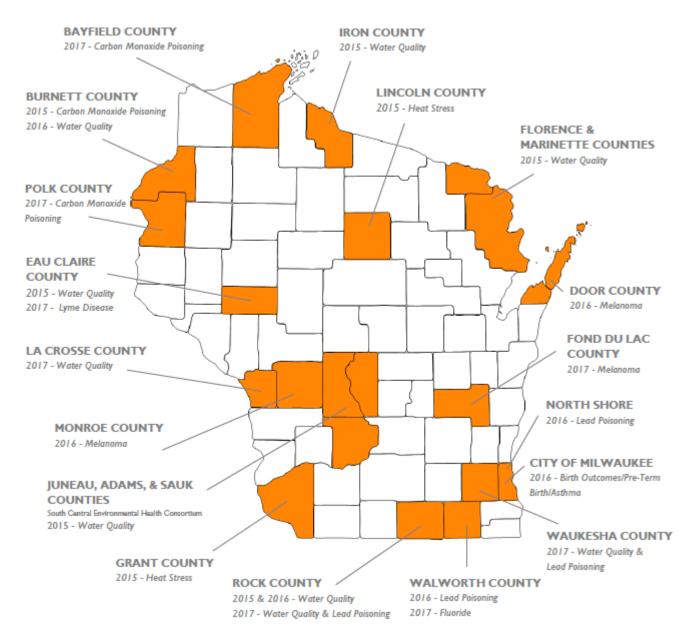




dhs.wisconsin.gow/epht | MAY 2017 | dhstracking@wi.gov Department of Health Sankoes | Division of Public Health | P-0.1798 B/52017) Each strategy contains Inks to more resources. View this document on the Recourse section of our website to socies the Inks.



## **Mini-Grants**



## **Mini-Grants**



Find newsletters, surveillance briefs, success stories, publications, and more on this page from the Wisconsin Environmental Public Health Tracking Program.

Information on this page has been organized into three categories. Please choose one of the following tabs.

Resourc	es	Success Stories	Publications
		ities that have integrated Enviro u have a story to share, <mark>please le</mark>	_
Story Topic +	Story Location +	Story Title	<b>*</b>
Well Water	Florence and Marinette Counties	Simplifying Well Water Test Results P-01595C (PDF, 538 KB)	
Well Water	Florence and Marinette Counties	Increasing Arsenic Testing in Private Wells P-01595D (PDF, 612 KB)	
Well Water	Rock County	Increasing Well Water Testing P-01603 (PDF, 727 KB)	
Nitrate	Rock County	Identifying Nitrate Sources to Improve Future Planning P-01603A (PDF, 550 KB)	
Nitrate	Eau Claire County	Development of a Nitrate Taskforce P-01595A (PDF, 605 KB)	
Well Water	Eau Claire County	Overcoming Communication Challenges to Improve Well Testing P-01595B (PDF, 780 KB)	
Well Water	Eau Claire County	A New Sampling Strategy: Using Partnerships to Improve Well Water Testing P-01595 (PDF, 742 KB)	
Well Water	Eau Claire County	Testing the Waters: Using Well Water Data to Target Outreach P-00989A (PDF, 1 MB)	
Heat	Wisconsin	Adding a Heat Response Plan	Template to an Extreme Heat

## **Surveillance Briefs**



#### **SURVEILLANCE BRIEF**

Wisconsin Environmental Public Health Tracking Program

#### UNDERSTANDING WISCONSIN PRECIPITATION DATA

By Megan Christenson, MS, MPH12; Christy Vogt, MPH, CHES1; Colleen Moran, MS, MPH1; Jessica Maloney, BS2; Paul Creswell, PhD1

'Wisconsin Environmental Public Health Tracking Program;
"Wisconsin Climate and Health Program;



SUMMARY - Historical climate data indicate that Wisconsin's climate is getting wetter with more frequent and intense rain events, which can lead to damaging floods. A number of health impacts may result from floods, including injury, drowning, waterborne disease, and effects resulting from power outages.

The Wisconsin Climate and Health Program offers resources such as the Flood Toolkit to help communities prepare for flooding events. The Wisconsin Tracking Program's portal allows user to view spatial and temporal trends in precipitation.

#### BACKGROUND

Wisconsin's climate has generally become warmer and wetter since 1950 groundwater flooding, runoff, and and this trend is expected to continue into the future (WICCI, 2011).

Heavy rain events have become both more frequent and more intense from 1950 to 2006 (WICCI, 2011). These

heavy rainfall events can lead to contaminated wells, which have important implications for public health. Furthermore, flooding events can stress local resources when they occur repeatedly in a season.

Flooding can cause a variety of direct and indirect health impacts. Direct health impacts from floods include injury, drowning, waterborne disease, respiratory infections, and skin infections (Rose et al. 2001; Greenough et al. 2001). Indirect health impacts

Department of Health Services | Division of Public Health | Bureau of Environmental and Occupational Health P-XXXX (09/2017)



- Flooding (coming soon!)
- Health
   Disparities/Asthma
- Lyme Disease
- Carbon Monoxide Poisoning
- Heat Stress
- UV Radiation
- Lung Cancer and Radon



## **Tutorials**

#### TRACKING 101

Intro to Tracking

#### TRACKING 110

County Environmental Health Profiles

#### **TRACKING 201**

Portal Basics

#### **TRACKING 210**

Portal Data by Census Tracts

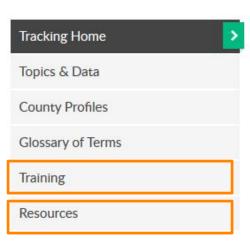
#### **TRACKING 250**

Portal Tips and Tricks

#### **TRACKING 270**

Portal Terminology and Data Details





### Environmental Public Health Tracking













Wisconsin Environmental Public Health Tracking is your source for environmental health data in Wisconsin

#### COMPREHENSIVE.

We house data on nearly a dozen environmental public health topics such as air quality, asthma, Lyme disease, and many others.

#### CURRENT.

We work with data managers to host the most up-to-date data available.

#### EASY.

Our data portal & has improved mapping, exporting, mobility, and the capacity to display data below the county-level. Note that the portal works best with Firefox and Chrome internet browsers.

Interested in Tracking? Subscribe to our quarterly newsletter №!

#### NEW DATA AND FEATURES ADDED TO TRACKING PORTAL

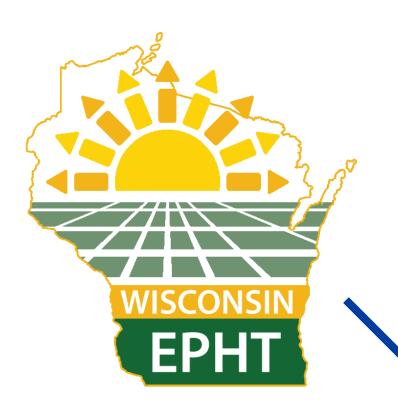
The Tracking portal on now offers immunization and historical precipitation data! In addition to new data, the portal now has the ability to compare datasets. Need help using the new features? Let us know 

✓



## dhs.wisconsin.gov/epht







TRACKING



## TRACK.

Explore the data, compare counties, age groups, and years



## ANALYZE.

Create charts, maps, and tables to visualize and interpret the data



## ACT.

Use the data to target education, programming, and policies to address your community's needs



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