

Centers for Disease Control and Prevention

National Environmental Public Health Tracking Network

### Asthma and Air Pollution

### A Tool Kit



This toolkit provides messages related to the National Tracking Network. We strongly encourage you to use tool kit components as guides, substituting your own local and regional level messaging and data whenever possible

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# Goals and Guiding Principles



n today's world, we are exposed to between 3,500 and 5,000 messages a day. From TV ads to news stories, and tweets to Web sites, there's a fierce competition for our attention—and our response. As public health professionals, you have a uniquely valuable message to communicate, that often pertains to keeping people healthy and saving lives.

Whether communicating with citizens, other public health professionals, or policymakers, the following steps can help your organization cut through the clutter and be heard:

1.

#### Know your audience

Different audiences require different messages and methods of delivery. Identify your audience, understand what's important to them, and identify what barriers may keep them from action. Then say what you need to say in a way that connects your ideas to that specific audience's needs or wants.



2.

#### Say it simply

Use plain language, explain technical terms, and be brief. Regardless of profession or background, we all appreciate straightforward, efficient explanations.



3.

#### Say it often

Advertising studies suggest that a person needs to be exposed to a message three to five times to receive the full effect of the message. Choose the mediums, such as social media, websites, interviews and articles, that your audience uses to communicate, and reinforce your messages often.



4.

#### Touch the heart

Tell stories that people connect with on an emotional level and underscore that story with data that show the larger perspective. Use personal or local stories to illustrate the big picture.





## Goals and Guiding Principles





This tool kit was developed as a resource for your organizaton, with messages that are intended to resonate with either certain demographics or your audiences overall.

This toolkit can be used to help meet the communication goals set by CDC's Environmental Public Health Tracking Network (Tracking Network).

#### **Tracking Network Communication Goals**

- Educate about the existence of the Tracking Network and how it can be used to show the connections between health and the environment.
- Demonstrate the effect that Tracking Network findings can have on specific environmental public health issues (for example, heart health and exposure to air pollution).
- Encourage partners, stakeholders, and other organizations to access information from and participate in the Tracking Network and help them recognize it as a valuable tool and good investment.

#### **Audiences**

This tool kit was developed as a resource for your organization, with messages that are intended to resonate with either certain demographics or your audiences overall. These audiences include:

- State and local **public and environmental health practitioners:** This group will benefit from general awareness of the Tracking Network and exposure to success stories and specific examples of how data are being used. Encourage them to not only use existing and new Tracking Network services but also advocate use of the program among peer groups.
- Decision makers: This group could include city, county, or state health department leadership or elected officials. These are people who might need information for making resource decisions and potential legislative or policy-making opportunities.
   They are a critical audience for the Tracking Program. Try to provide them with an overall understanding of the functions of the Tracking Network and examples of practical applications of its data. These examples can show how the Tracking Network has proven valuable to cities, states and regions.
- Interested public: This group will likely include persons who look to your organization for health or environment-specific information and discover the Tracking Network via that search. They will benefit most from exposure to specific articles and health-specific information that show the connection between a particular health condition and the environment. Because traditional media channels such as television, radio, and newspapers are important information resources for this group, they will benefit from your organization's active engagement with, and response to, media coverage that relates to health and the environment.



#### **How to Use Tool Kit Components**

**Decade of Tracking** This piece is a straightforward story of the Tracking Network. It uses the simple structure of "Before and After Tracking" to explain the effect the Tracking Network has had.

**Ideas for use:** Use this item as an introductory piece that tells the story of tracking. Include it as a link, borrow from it when developing presentations, and use it when informing colleagues about available resources, interviews, and materials.

**Timeline:** This piece serves as a visual demonstration of how the Tracking Network (and its parent, the Tracking Program) began and has evolved.

**Ideas for use:** Use when creating briefings, as background for presentations, and as a resource for interviews and material development.

**Key Messages and Talking Points:** The key messages and talking points have been written to support you and your spokespeople as you address the critical role the Tracking Network has played in addressing environmental and public health issues. These messages may be used as is or can be customized and incorporated into your own messaging. We encourage you to use local-,regional-,or state-specific data whenever possible; using these data will further underscore the importance of this resource for your constituents.

**Ideas for use include:** Incorporate these messages into talking points for presentations, speeches, media interviews and copy for materials.

**The Facts:** This fact sheet was developed to provide you with health- and environment-specific information that can be used to coincide with awareness events and more. For example, the Heart Health and the Air Pollution fact sheet contains information that relates specifically to American Heart Month as well as general statistics about heart health and air pollution.

**Ideas for use:** Incorporate these facts into your outreach via speeches, emails, Web site content, material development, and social media channels. Provide the fact sheet as a resource to news media. Include interesting data as part of your organization e-mail signature during awareness events. Also, provide the fact sheet to your partners as a resource to distribute.



# Goals and Guiding Principles



**Matte Article:** This article has been developed as a stand-alone piece that highlights the connection between a health topic and the environment. Its messaging reach is designed to be broad and valuable for everyone from general consumers looking for information about a particular disease to health professionals who want to raise awareness among patients.

**Ideas for use:** Submit this piece to community papers, provide it to organizations to publish in their newsletters, post it on your Web site, include a link to it on your Facebook wall, and share it via tweets. Distribute or make it available electronically to local schools, medical centers, nursing homes, and health care professionals. Provide this piece to decision makers and use local data when possible – it will inform them about the environment-health connection and how that can affect their constituents; they can also use it on their Web sites. You can also include it in newsletters and incorporate into your organization's mailings.

**Social Media Examples:** This document contains example topics and sample copy for use on social media channels such as Facebook and Twitter. These posts/tweets were written with the goal of helping your organization engage in a dialogue with your many and varied audiences. Specific examples are provided that can be used to help communicate the value of the Tracking Network to health departments, health practitioners, decision makers and other interested organizations and individual persons.

**Ideas for use:** Use posts on Facebook and tweets on Twitter. Share with partners who have social media outlets.

#### **Effective Communication: A Crucial Investment**

As grantees and partners of the National Environmental Public Health Tracking Network, your organization is an important voice that helps communicate the value of the Tracking Network, and ensures that it can grow and evolve to provide even better service into the future. By incorporating this message at every opportunity into your documents, policy briefings, community outreach, social networks, and media outreach, you serve as an influential resource that can provide critical information and translate the value of the Tracking Network to your different audiences. Together, we can educate people about the connection between health and the environment, encourage Tracking Network use, and help potential partners and champions recognize this tool as a crucial investment that saves lives, protects people and saves money through prevention.



Environmental Public Health Before and After Tracking:

### A Decade of Tracking





"When the Pew
Commission report
came out, everyone —
the press, the public,
Congress — couldn't
believe that a tracking
program didn't already
evist"

Shelly Hearne, Dr. P.H. Founding Executive Director, Trust for America's Health (2000)

"CDC's National Environmental Public Health Tracking Network is the most important accomplishment of the past decade."

Thomas A. Burke, Ph.D., M.P.H.
Associate Dean for Public Health
Practice and Training
Professor, Department of Health
Policy and Management
Johns Hopkins Bloomberg
School of Public Health (2010)



After a decade of tracking via a national environmental public health tracking program, our understanding of the connections between public health and the environment is vastly improved. CDC's Environmental Public Health Tracking Program began 10 years ago with the idea that health and environmental problems are not always separate issues with unrelated solutions. Though the program began in 2002, the actual

online Environmental Public Health Tracking Network launched in 2009. This website is a valuable tool that is helping draw a clear picture of the intricate relationships between environment and health. And, as we move forward, the Tracking Network has the potential to empower more and more organizations to save lives and protect health.

**Before tracking,** even simple questions about health and the environment could take months to answer.

**With a tracking** network in place, public health officials can respond quickly, often within hours, to locate hazard sources or answer citizens' concerns.

**Before tracking,** collections of data were created and held by many different government departments within their separate department "silos."

**With tracking,** standards and tools to link these disparate sources of information now exist and can help answer important questions about the public's health.

**Before tracking,** environmental and health fields were often separated both physically and philosophically.

With tracking, these two worlds are brought together to benefit of all.

**Before tracking,** public health and environmental officials concentrated mainly on acute events such as hazardous chemical releases or point-source pollution, such as air pollution from a specific factory.

**With tracking** in place, officials can trace amounts and geographic spread of pollutants over time. This capability allows the officials to monitor long-term trends and place those acute events in context.

**Before tracking,** environmental health surveillance was more difficult than infectious disease surveillance, a traditional area of concern for CDC and state and local health departments.

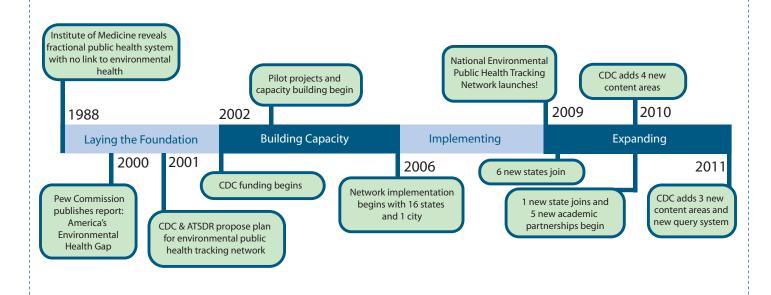
**With tracking,** we can apply the same "disease detective" skills to finding environmental causes of illnesses and then take preventive measures to protect the public's health. ■



#### **Environmental Public Health Tracking Network:**

### **A Timeline**







Asthma and Outdoor Air Pollution

## Key Messages and Talking Points





The following key messages and talking points can help you and your spokespeople convey and emphasize the effect the Tracking Network can have.

#### How to Use

The following key messages and talking points can help you and your spokespeople convey and emphasize the effect the Tracking Network can have on addressing the connections between asthma and outdoor air pollution. These messages and talking points may be used as they have been written, or, they can be customized for your own purposes. We encourage you to use local-, regional-, or state-specific information whenever possible because it will further underscore the importance of this resource for your constituents. Each of the three key messages presented are supported by three to four additional talking points.

#### **Key Messages**

- The National Environmental Public Health Tracking Network is a one-of-a-kind tool that brings together information that cannot be found, or is hard to find, anywhere else.
  - o The Tracking Network is the best Internet resource connecting environmental and health information.
  - The Tracking Network is unique because it brings together and standardizes data that would usually be kept by many different agencies, allowing us to see how our health and the environment are related.
  - The Tracking Network helps make sense of these data with tools such as maps that show where environmental and health problems are happening. This makes that valuable information more useful to people who need it, from scientists to decisionmakers.
  - Policy makers, educators, and public health workers can protect people and save lives by using The Tracking Network to help make critical decisions about where to target environmental public health resources.
- The Tracking Network is helping us better understand the relationship between asthma and the environment, which prepares us to respond and save lives.
  - o Exposure to outdoor air pollution can play a role in asthma attacks among adults and children with asthma.
  - o The latest data from 2009 shows that asthma is more common in:
    - Children than adults
    - Women than men
    - African Americans than in Hispanics or Caucasians.



Asthma and Outdoor Air Pollution

## Key Messages and Talking Points



- o The information and data in the Tracking Network are useful in providing estimates about who is experiencing asthma and where. With this information, we can make better decisions and plan how and where to best focus asthma prevention efforts.
- o (INSERT ORGANIZATION) was able to put (INSERT ACTION, SAFEGUARD, ETC.) in place to help reduce outdoor air pollution, which will help (INSERT LOCAL /STATE NUMBERS) of asthma sufferers in (INSERT CITY/STATE).
- More research is needed to study the links between environmental hazards and asthma.
  - o This is why asthma is a part of the Environmental Public Health Tracking Network.
  - o The Tracking Network tracks the following asthma and air pollution data:
    - Outdoor air pollution, including ozone and fine particle measures
    - Estimates of people living with asthma
    - Percent of people told by a physician they have asthma
    - Asthma-related hospital stays
- The Tracking Network boosts (INSERT ORGANIZATION) ability to save lives and protect the health of the people we serve
  - o The Tracking Network fills information gaps.
  - The Tracking Network helps us respond quickly to environmental public health issues.
  - Please help others use this important and valuable resource. Everyone who is looking for information about a health and environmental connection should and can use the Tracking Network at www.cdc.gov/ephtracking.







Asthma has no cure, but it can be controlled. If asthma is properly controlled, deaths, ermergency room visits and hospital stays usually can be prevented.

#### Asthma is a disease that affects your lungs and makes breathing

**difficult.** In the United States, about 25 million people live with asthma. That's about one out of every 12 people.¹ Asthma affects people of all genders, races and ages. For some people, symptoms only appear when they are exposed to something that irritates their breathing. Other people have a kind of asthma that makes breathing difficult all of the time. We know that there is a connection between exposure to air pollution and asthma symptoms. For example, many adults and children with asthma are more likely to have symptoms when ozone and particle pollution are in the air. The National Environmental Public Health Tracking Network is helping us understand the connection between outdoor air quality and asthma. By tracking asthmarelated hospital admissions and the number of people reporting that they live with asthma, the Tracking Network is helping identify high-risk groups and shaping asthma prevention efforts.

#### **About Asthma**

- Asthma is a disease that affects the lungs. A person with asthma has it all the time, but will only have attacks when something bothers their lungs.
- Exposure to certain things in the environment, called triggers, can cause an asthma attack. During an asthma attack, the sides of the airways in your lungs swell and the airways shrink. Less air gets in and out of your lungs, and mucus that your body produces clogs up the airways even more. An asthma attack may include coughing, chest tightness, wheezing, and trouble breathing.<sup>2</sup>
- Asthma attack triggers are different for every person. The most common indoor triggers for asthma include mold, dust, secondhand smoke, and pet dander. The most common outdoor triggers for asthma attacks are pollen, exercise, pesticides, air pollution, and traffic-related exhaust.<sup>3</sup>
- Asthma affects all genders, races and ages. The disease often starts in childhood and is more common in children than in adults.
- Asthma has no cure, but it can be controlled. If asthma is properly controlled, deaths, emergency room visits and hospital stays usually can be prevented.

#### **Asthma in the United States**

- In 2010, about 25.7 million people in the United States had asthma. Of these, 12.8 million people had at least one asthma attack, including 4.1 million children under 18.1
- In 2010, about 7 million children in the U.S. had asthma.<sup>1</sup>
- In 2009, there were 3,388 deaths related to asthma. That means that more than 9 people die every day from asthma-related problems.<sup>1</sup>
- Asthma costs in the U.S. were about \$56 billion in 2007. <sup>4</sup>

www.cdc.gov/asthma/triggers www.cdc.gov/asthma/vitalsigns.htm

www.cdc.gov/nchs/faststats/ashtma www.cdc.gov/asthma/faqs.htm





#### The Connection between Asthma and Air Quality<sup>5, 6</sup>

Air pollution can make asthma symptoms worse and trigger attacks. Adults and children with asthma may be more sensitive to air pollution exposures such as ground level ozone and particulate matter.

- Ground Level Ozone is a main component of smog. Ozone can trigger asthma attacks and make existing asthma worse. It is produced at ground level when pollution from cars and trucks, power plants, factories, and other sources react with heat and sunlight. Ozone is often worst on hot summer days, especially in the afternoons and early evenings.
- Particulate Matter is a term that refers to a wide range of pollutants that are suspended
  as tiny particles in the air. These can include dust, dirt, soot, smoke, and little drops of
  liquids. Some of these fine particles can get into the deep part of your lungs and can
  trigger asthma attacks or other breathing problems.

Particle pollution can be bad any time of year, even in winter. It can be especially bad

- when the weather is calm and air pollution builds up;
- near busy roads, during rush hour, and around factories that produce air pollution;
- when smoke is in the air from wood stoves, fireplaces, or burning vegetation.

### What We Are Learning from the Environmental Public Health Tracking Network

Understanding the burden of asthma involves collecting data about people diagnosed and living with asthma and also collecting data about people who experience asthma attacks. These data can then be analyzed and shared with key stakeholders.

- The Tracking Network includes data about people who have been told by a physician that they have asthma and the number of hospital stays for asthma.
- This information can provide estimates about the people who are affected by asthma
  and where they may receive care for asthma related issues. These estimates can be
  used to plan and evaluate asthma control efforts. Many of these asthma control efforts
  are coordinated by CDC's National Asthma Control Program.
- Data in the Tracking Network show that the number of asthma hospital admissions increased from 2007 to 2009 for several states reporting into the system. Having this information can alert public health and medical professionals to look for additional asthma prevention education opportunities. ■

<sup>5</sup> www.epa.gov/airnow/health-prof/Asthma\_ Flyer\_Final.pdf

<sup>6</sup> www.cdc.gov/ashtma







Air pollution can make asthma symptoms worse and trigger attacks.

#### Asthma and Outdoor Air Pollution Don't Mix: **Tips for Controlling Your Asthma**

#### In the United States, about 25 million people live with asthma.

That's about one out of every 12 people, according to the most recent data from the Centers for Disease Control and Prevention (CDC). And if you or your child is one of them, you've probably experienced the panic that comes with an asthma attack. When you are outside, things like ozone and particle pollution can be triggers for an asthma attack. As we head into summer, here is some information that may help you decrease your risk of asthma attacks related to outdoor air pollution.

Air pollution can make asthma symptoms worse and trigger attacks. Adults and children with asthma may be more sensitive to outdoor air pollution exposures such as ground level ozone and particulate matter. Ozone is often found in smog and particle pollution is often found in haze, smoke, and dust. Both can irritate the airways, causing wheezing, chest tightness and coughing. Long-term exposure to ozone and particle pollution has been found to injure the lungs and has been shown to cause asthma in children.

A tool from the Centers for Disease Control and Prevention is helping us understand the relationship between asthma and the outdoor air we breathe. The National Environmental Public Health Tracking Network (Tracking Network) is a tool that can help us understand the relationships between some environmental and health problems, including asthma. It does this by collecting and sharing data that would traditionally be kept separately by many government and public health agencies. Bringing it all together helps us to discover the connections between our health and the environment.

The Tracking Network is helping us map how many people have asthma and their location during asthma-related hospital admissions. This information can help public health officials deliver the right help for issues in these communities, such as policies that keep the air clean. The Tracking Network website also provides tips that can be used by individuals to help lower their risk of asthma attacks, such as limiting outside activities when the air quality is unhealthy.

Asthma is a life-long disease but it can be managed. Understanding how outdoor air pollution and asthma are connected is part of that process. Use the following information and tips to help decrease your risk of an asthma attack caused by outdoor air pollution.

Ozone is often the worst on hot summer days, especially in the afternoons and early evenings. Particle pollution can be high any time of year, even in winter. It can be especially high:

- when the weather is calm and air pollution builds up;
- near busy roads, during rush hour traffic, and around factories;
- when smoke is in the air from wood stoves, fireplaces, or burning plants.



Protect yourself and your family:

- Know what your risk for asthma is and how sensitive you are to air pollution.
- Know when air pollution may be high in your area and reduce your exposure. Use the Environmental Protection Agency's <u>Air Quality Index</u> to get accurate information.
- Plan activities when and where outdoor air pollution levels are lower.
- Listen to your body and keep your medicine with you when you are active outdoors.
- See your health care provider when you need to and follow an asthma self-management plan. CDC's National Asthma Control Program has tools to help you.

You can learn more about this important topic at www.cdc.gov/ephtracking and asthma at www.cdc.gov/asthma.



### Social Media Examples





These posts/tweets were written to help your organization "talk" with your many audiences.

#### This document contains example topics for social media

**channels** such as Facebook and Twitter. These posts/tweets were written to help your organization "talk" with your many audiences. Specific examples are provided that can be used to help communicate the value of the Tracking Network to health departments, decision makers and other interested parties. Each post/tweet is organized under a goal of the Tracking Network: each is written so that it may be used as is or customized by your organization with language and data that will best resonate with your constituents.

#### **Tips for Using Social Media:**

- Social media channels are powerful tools that can help you communicate with and engage your audience. If you do not already have social media tools in place, set up a Facebook page and Twitter account here:
  - www.facebook.com; twitter.com/signup
- CDC's Tracking Network has an active Facebook page and Twitter account. "Friends" can follow us and share relevant and interesting posts.
  - o Facebook: like CDC National Environmental Public Health Tracking Network
  - Twitter: follow @CDC\_EPHTracking
- Watch for general news articles about public health and the environment and share these articles on your Facebook wall and Twitter account.
- Use the provided tool kit materials, such as the fact sheet and key messages, to create new posts and tweets that underscore how effective the Tracking Network is and has been.
- Tips for Facebook:
  - When mentioning the Tracking Network, use @CDC National Environmental Public Health Tracking Network
- Tips for Twitter:
  - Hashtags make your tweets searchable and allow them to become part of the broader conversation on a given topic. When posting asthma month-related material, use #asthma. When mentioning the Tracking Network, use #CDCEPHT.
  - Help build the Tracking Network's Twitter following by including @CDC\_EPHTracking in your #FF (Follow Friday) tweets. Follow Friday (#FF) is a hashtag used to recommend relevant Twitter users to your existing followers. It helps people find new and interesting Twitter users in an organic way: via their friends' recommendations. Here's an example of what a Follow Friday tweet looks like:

#FF #Medical #Health @DMC\_Heals @HenryFordNews @ClevelandClinic @KHNews @kevinmd @DoctorsLounge @GoHealthDotCom @DrDavidHanscom @meyouhealth





## Social Media Examples

#### **Sample Posts/Tweets for Social Media**

Goal: Educate about the connection between asthma and the environment via Asthma Awareness Month or summer months when air pollution is high and may affect asthma.

Facebook	Twitter
May is Asthma Awareness Month. Check out CDC's National Asthma Control Program: www.cdc.gov/asthma/nacp.htm	May is #Asthma Awareness Month. Check out CDC's info: www.cdc.gov/asthma/nacp.htm
CDC's Tracking Network equips public health officials with information to help asthma sufferers breathe easier: www.cdc.gov/ephtracking	CDC's Tracking Network equips pub health officials w/ info to help you breathe easier: http://bit.ly/eZiMpa
People with asthma are more likely to have symptoms when they are exposed to outdoor air pollution. CDC's Tracking Network helps public health officials know what populations have asthma and where: www.cdc.gov/ephtracking	CDC's Tracking Network helps public health officials know what populations have #asthma and where: http://bit.ly/eZiMpa
Public health professionals: The Tracking Network has information on asthma hospital stays and the number of people living with asthma. Access this tool to help target your asthma outreach: www.cdc.gov/ephtracking	#Publichealth pros: The Tracking Network has info/data on asthma hospital stays & more. Use it to target outreach http://bit.ly/eZiMpa
Exposure to air pollution can increase the risk of asthma attacks. Check the air quality index to find out if the air is healthy near you:  http://www.airnow.gov	Air pollution exposure = Increased risk of asthma attacks. Check air qual index for your area http://www.airnow.gov





## Social Media Examples

#### Goal: Raise awareness about the connection between public health issues and the environment via Tracking Network.

Facebook	Twitter
Did you know there's a connection between asthma and air pollution? Check out other connections between health and the environment in your area: www.cdc.gov/ephtracking	Did you know #asthma & #airpollution are connected? Check out other health/enviro info near you http://bit.ly/eZiMpa
Want to learn what environmental health issues are of most concern in your area? Use CDC's Tracking Network to find out: www.cdc.gov/ephtracking	Use the @CDC_EPHTracking Network to learn about issues near you http://bit.ly/eZiMpa
According to Tracking Network information, asthma-related hospital admissions are on the rise in several statesis yours one of them?  www.cdc.gov/ephtracking	Asthma-related hospital admissions are on the rise according to Tracking Network data. Learn more about asthma rates http://bit.ly/eZiMpa
Poll: CDC's Tracking Network is helping us better understand the relationship between environment and health, equipping us to respond and save lives. What environmental health problems are you concerned with right now?  How air pollution affects asthma How lead poisoning can affect children; or How carbon monoxide poisoning affects the brain and body	What #environmental #health problems are you concerned with right now? http://bit.ly/eZiMpa







#### Goal: Demonstrate Tracking Network's value as a resource and attract people to the website

Facebook	Twitter
You work to protect people and save lives. Use the Tracking Network to access environmental health information that helps you do just that!  www.cdc.gov/ephtracking	#Health & #enviro info can protect people and save lives! Check out @ CDC_EPHTracking Network http://bit.ly/eZiMpa
(INSERT YOUR ORGANIZATION NAME) is using the CDC's Tracking Network to understand how public health and the environment are connected. What environmental health issues most concern you?  www.cdc.gov/ephtracking	We're using the @CDC_EPHTracking Network to understand how Health & the environment are connected. You can too! http://bit.ly/eZiMpa
INSERT YOUR ORGANIZATION NAME) is using the CDC's Tracking Network to understand how health and the environment are connected. What environmental health issues most concern you?  www.cdc.gov/ephtracking	#PublicHealth professionals, use the @CDC_EPHTracking Network to find #enviro health info to help make resource decisions http://bit.ly/eZiMpa





#### The stories provided here highlight how the Tracking

**Network has been** used to improve public health. You can share these stories as examples of how the Tracking Network has been used for asthma and outdoor air pollution issues, as examples of how the network could be used to benefit your community, or as models for your own success story using network data. You can find more success stories on the Tracking Network in the Asthma and Outdoor Air sections. .

### Take a look at how New York City used its tracking network to improve asthma conditions in East Harlem.

Kids in East Harlem are twice as likely to have asthma as neighbors just a few blocks away in the Upper East Side. Serious asthma episodes can be caused by a variety of factors, including tobacco smoke, dust mites, furred and feathered animals, certain molds, chemicals, and strong odors in the environment. Children who live in low-income neighborhoods, like East Harlem, are also at greater risk for developing asthma.

The New York City Environmental Public Health Tracking Program teamed up with the East Harlem Asthma Center of Excellence to make the connection between their community and asthma. The NYC tracking program mapped childhood asthma hospital stays by neighborhood and studied these stays over time. They found that hospital stays are four times higher for East Harlem kids than for those living in the city's highest-income neighborhoods.

NYC tracking data also showed that asthma hospital stays for children jump in the fall. Now, health department workers send special messages to doctors and other health care providers via the city's Health Alert Network, encouraging them to update patients' asthma control plans. Since this activity started, there has been a drop in rates of asthma-related hospital stays among New York City's children.

### Take a look at how New York City used its tracking network to improve asthma conditions in East Harlem.

About 130,000 Mainers – including 28,000 children – have asthma. Maine often has elevated levels of ozone and particulate matter. Ozone is a main ingredient in smog, and at ground level, ozone can be a health risk. Studies have shown that as ozone levels increase, asthma-related hospital stays and emergency department visits tend also to increase.

Maine's tracking program linked outdoor ozone data with asthma-related emergency department data. Now scientists can estimate ozone-related asthma cases both in a community and statewide. Further studies show asthma cases associated with ozone levels by age, sex, and geography.

\*\*next page\*\*





The tracking program has analyzed the association between asthma and outdoor air quality. The health department has used this information to identify Mainers at high risk. Asthma has no cure, but it can be controlled. Learning about this association has helped the Maine Tracking Program provide information to health care professionals. They can now target people who are at risk and can share prevention tips.