



Centers for Disease Control and Prevention
National Environmental Public Health Tracking Network

CO Poisoning Can Be Stopped

A Tool Kit



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Goals and Guiding Principles



In 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.



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Goals and Guiding Principles



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.

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.

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Goals and Guiding Principles



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 spokespersons 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.

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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 exist.”

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.

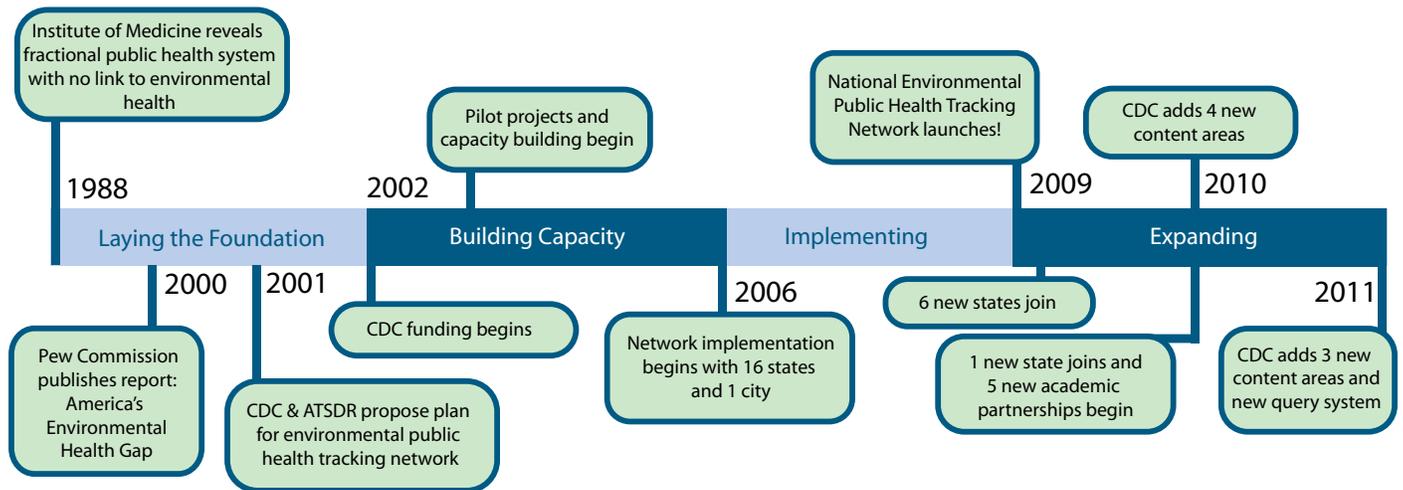
Before tracking, environmental health surveillance was more difficult than infectious disease surveillance, a traditional area of concern for CDC and state and local health departments.

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





CO Poisoning Can Be Stopped

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 the environment and carbon monoxide poisoning and the places where we live, work and play. 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 the best Internet resource connecting environmental and health information. This resource can give (INSERT YOUR ORGANIZATION NAME) the power to help save lives and better protect the people we serve.
 - The Tracking Network is unique because it brings together data that would usually be collected and kept by many separate agencies and then standardizes it. This process allows us to see how our health and the environment are related.
 - The Tracking Network also offers tools to help make sense of these data —such as maps that show where environmental and health problems are happening—and then makes that valuable information available to people who need it, from scientists to decision makers.
 - The Tracking Network is used by states, cities, universities and professional organizations to help make critical decisions about where to target environmental public health resources that will protect people and save lives.
- The Tracking Network is helping us better understand when carbon monoxide (CO) poisonings happen.
 - Each year, about 450 people in the U.S. die from unintentional non-fire related CO poisoning and thousands more end up in the emergency room or admitted to the hospital because they've been exposed to CO.
 - By providing data about hospital admissions, emergency room visits and deaths related to CO poisoning, the Tracking Network is helping public health officials understand who is at risk, as well as how they are being exposed to CO, and where they are getting medical help.

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CO Poisoning Can Be Stopped

Key Messages and Talking Points



- This information can help public health officials plan how and where to best target prevention efforts and protective policies. For example, we can identify where to increase community outreach and public education about the dangers of carbon monoxide poisoning and how to avoid it.
- (INSERT ORGANIZATION) was able to put (INSERT ACTION, SAFEGUARD, ETC.) in place to help prevent carbon monoxide poisonings, which could save (INSERT LOCAL/ STATE NUMBERS) of lives in (INSERT CITY/STATE).
- The Tracking Network is a valuable resource for (INSERT ORGANIZATION).
 - The Tracking Network is a one-of-a-kind tool that provides information that cannot be found, or is hard to find, anywhere else.
 - The Tracking Network fills the information gap and 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. ■



CO Poisoning Can Be Stopped

The Facts



CO poisoning is the leading cause of non-drug poison related deaths in the United States.

Carbon monoxide, or CO, is a gas that you cannot see or smell

and it can cause sudden illness and death. It is the leading cause of non-drug poison-related death in the United States.¹ CO is found in fumes from cars, portable generators, heating systems and more. Each year in the United States, about 450 people die from unintentional non-fire related CO poisoning, more than 21,000 visit the emergency room and more than 2,300 have to stay in the hospital.²

The National Environmental Public Health Tracking Network is helping us understand the connection between CO poisoning and the places where we live, work and play. By tracking hospital stays, emergency room visits and deaths related to CO poisoning, the Tracking Network is helping public health officials understand who is at-risk, as well as where and how they are being exposed to CO. This information helps public health officials to better target prevention efforts and protective policies. [Free resources](#) for public education and mass media are available from CDC.

About Carbon Monoxide Poisoning

- Breathing high levels of CO can cause severe illness or death in just minutes. CO poisoning happens because red blood cells pick up CO quicker than they pick up oxygen. If there is a lot of CO in the air, your body may replace oxygen in blood with CO. This blocks oxygen from getting into your body, which can damage tissues and cause death.³
- The most common symptoms of CO poisoning are headache, dizziness, weakness, nausea, vomiting, chest pain, confusion and loss of consciousness. CO poisoning can be difficult to diagnose because the symptoms are a lot like those for other illnesses. People who are sleeping or intoxicated can die from CO poisoning before ever experiencing symptoms.³
- Most CO poisoning occurs in fall and winter months.
- All people are susceptible to CO poisoning. Certain people are more at-risk to its effects including unborn babies, infants, and people with chronic heart disease, anemia, or respiratory problems.^{3,4}

1 http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5605a1.htm?s_cid=mm5605a1_e
 2 <http://www.ncbi.nlm.nih.gov/pubmed/21570230>
 3 <http://www.cdc.gov/co/faqs.htm>
 4 <http://www.cdc.gov/niosh/topics/co-comp/>

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CO Poisoning Can Be Stopped

The Facts



What We Are Learning from the Environmental Public Health Tracking Network

- In order to understand how CO poisoning is connected to the places we live, work and play, the Tracking Network provides data from a variety of sources. These include hospital and emergency department databases and death certificate data.
- By viewing where and how carbon monoxide poisonings occur, public health officials can use the Tracking Network to determine the most affected areas and people that could most benefit from education, awareness and prevention efforts. It also helps us see national trends in CO related injuries and deaths.
- According to data in the Tracking Network, 1,171 individuals died from all causes of CO poisoning in the United States in 2007. This includes fire and non-fire related CO poisonings.

Carbon Monoxide Poisoning Can Be Stopped

Carbon monoxide poisoning is preventable. There are several things you and your family can do to avoid carbon monoxide poisoning and ensure your safety.

- **DO** have your heating system, water heater, and any other gas, oil, or, coal burning appliances serviced by a qualified technician every year.
- **DO** install a battery-powered CO detector in your home. As with smoke detectors, replace the battery when you change the time on your clocks each spring and fall. If the alarm sounds, leave your home immediately and call 9-1-1.
- **DO** seek prompt medical attention if you suspect carbon monoxide poisoning and are feeling dizzy, light-headed, or nauseous.
- **DO NOT** use a generator, charcoal grill, camp stove, or other gasoline or charcoal burning device inside the home, basement, or garage or near a window.
- **DO NOT** run a car or truck inside a garage attached to your house, even if you leave the door open.
- **DO NOT** burn anything in a stove or fireplace that is not vented or may be clogged.
- **DO NOT** use a gas cooking range or oven to heat your home.⁵ ■



CO Poisoning Can Be Stopped

Matte Article



Carbon Monoxide, or CO, can cause sudden illness or death if inhaled.

CO Poisoning: Tips for Staying Safe

Carbon monoxide, or CO, is a gas that you cannot see or smell.

It can cause sudden illness and death if inhaled. CO is found in fumes produced by oil, coal or gas-burning furnaces and appliances, stoves, and gas ranges, or by burning charcoal and wood.

CO poisoning often occurs following power outages during emergencies such as hurricanes or winter storms. When the power goes out people sometimes use alternative sources of heating or cooking like portable generators and charcoal grills. These heating and cooking devices can cause CO to build up in a home and to poison the people inside.

CO poisoning also occurs when heating systems like gas- and oil-burning furnaces are not properly maintained or ventilated. According to the Centers for Disease Control and Prevention (CDC), every year carbon monoxide poisoning is responsible for hundreds of deaths and nearly 20,000 injuries as people begin using their furnaces to combat colder temperatures and portable generators during power outages.

CO poisoning is deadly. At first you may have a headache, or feel dizzy or weak. You may also feel sick or be confused. Not everyone feels all of these. Some that do may think it's just the flu or a cold. If you feel these things while in your home, you should go outside right away and call 911.

You Can Prevent Carbon Monoxide Exposure

Do have your heating system, water heater and any other gas, oil, or coal burning appliances serviced by a qualified technician every year.

Do install a battery-operated CO detector in your home and check or replace the battery when you change the time on your clocks each spring and fall. If the detector sounds leave your home immediately and call 911.

Do seek prompt medical attention if you suspect CO poisoning and are feeling dizzy, light-headed, or nauseous.

Don't use a generator, charcoal grill, camp stove, or other gasoline or charcoal-burning device inside your home, basement, or garage or near a window. Keep generators outside at least 20 feet from any window, door, or vent.

Don't run a car or truck inside a garage attached to your house, even if you leave the door open.

Don't burn anything in a stove or fireplace that isn't vented.

Don't heat your house with a gas oven.

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CO Poisoning Can Be Stopped

Matte Article



By using CDC's National Environmental Public Health Tracking Network (Tracking Network) to look at CO poisoning data, public health officials can understand who is at-risk, as well as where and how they are exposed to CO. This information helps public health officials to better target prevention efforts and protective policies.

The Tracking Network is a tool that can help public health officials understand the relationships between some environmental and health problems. It does this by collecting and sharing data that would traditionally be kept separately by many government and public health agencies. For example, the data available for CO poisoning comes from three different sources. Bringing it all together helps us to discover the connections between our health and the environment.

You can learn more about the Environmental Public Health Tracking at www.cdc.gov/ephtracking and CO poisoning at www.cdc.gov/co. ■



CO Poisoning Can Be Stopped

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; they can be used as they have been written, or, they can be customized for your own purposes with language and information that will best resonates with your constituents.

Tips for Using Social Media:

- Social media is a powerful tool 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; <http://twitter.com/>
- CDC’s Tracking Network has an active Facebook page and Twitter account. “Friends” can follow us and share relevant and interesting posts.
 - 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 your Twitter account. For example, during fall and winter months when the risk of CO poisoning is higher, share or retweet news stories and add your own comments and tweets to the discussion. 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 CO poisoning-related material, use #COpoisoning. 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 help Twitter users find other compatible users through 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

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CO Poisoning Can Be Stopped

Social Media Examples



Sample Posts/Tweets for Social Media

Goal: Educate about the connection between carbon monoxide (CO) poisoning and when people are at risk.

Facebook	Twitter
<p>Most carbon monoxide poisoning occurs during the fall and winter months. CDC's Tracking Network equips public health officials with information that helps you target your outreach to the right people in the right places: www.cdc.gov/ephtracking</p>	<p>Most CO poisoning occurs in fall & winter. CDC's Tracking Network equips pub health officials w/ info to help educate & prevent http://bit.ly/eZiMpa</p>
<p>Carbon monoxide poisoning can kill in minutes. CDC's Tracking Network helps public health officials know what populations are at-risk and where: www.cdc.gov/ephtracking</p>	<p>CDC's Tracking Network helps pub health officials know what populations are most at-risk for CO poisoning: http://bit.ly/eZiMpa</p>
<p>Public health professionals: The Tracking Network has information on hospital stays, emergency room visits and deaths related to carbon monoxide poisoning. Access this tool to help target your outreach: www.cdc.gov/ephtracking</p>	<p>#Publichealth pros: The Tracking Network hosts info on CO poisoning hospital stays & more. Use it to target your outreach http://bit.ly/eZiMpa</p>
<p>Facebook poll: Public health pros: What is the leading cause of carbon monoxide poisoning in your region:</p> <ul style="list-style-type: none"> • Indoor grilling • Cars running in unvented areas • Home heating systems • Indoor generator use 	<p>#Publichealth pros: What is the leading cause of CO poisoning in your region?</p>
<p>Public education is the key to preventing carbon monoxide poisoning. Every year, ~450 people die from carbon monoxide (CO) poisoning. Learn to prevent: http://go.usa.gov/kN1</p>	<p>Pub education is key to preventing #COpoisoning. Learn to prevent: http://bit.ly/eZiMpa</p>



CO Poisoning Can Be Stopped

Social Media Examples



Goal: Provide CO poisoning prevention tips.

Facebook	Twitter
Carbon monoxide poisoning can be deadly! Use generators safely. Place them outside, 20 feet away. http://go.usa.gov/kN1	#COpoisoning can be deadly! Use generators safely. Place them outside, 20 feet away. http://go.usa.gov/kN1
Carbon monoxide poisoning often causes deaths after disasters. Replaced your CO detector battery lately? http://go.usa.gov/Dtd	#COpoisoning causes deaths after disasters. Replaced your CO detector battery lately? http://go.usa.gov/Dtd
Prevent carbon monoxide poisoning! Never use a gas range or oven to heat a home after a disaster. http://go.usa.gov/Dtd	Prevent #COpoisoning! Never use a gas range or oven to heat a home after a disaster. http://go.usa.gov/Dtd
Prevent CO poisoning! Never run gas-powered generators inside the home or near vents, windows or doors http://go.usa.gov/Dtd	Prevent #COpoisoning! Never run gas-powered generators inside the home or near vents, windows or doors http://go.usa.gov/Dtd

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

Facebook	Twitter
Check out connections between health and the environment in your area: www.cdc.gov/ephtracking	Check out 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