Message

From: Werner, Lora [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=921F9F156035403FA605C142A287CC1A-LWERNE02]
Sent: 11/1/2017 1:23:40 PM
To: Markiewicz, Karl [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=a9af7eaacbcb41d8a469eb1f11183ad6-Kmarkiew]
Subject: Fwd: Ames Warehouse Fire (Parkersburg, WV) Public Health Update

Sent from my iPhone

Begin forwarded message:

From: "Edge, Charles (ATSDR/DTHHS/OD)" <ibd7@cdc.gov>
Date: October 31, 2017 at 4:48:04 PM EDT
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Subject: Ames Warehouse Fire (Parkersburg, WV) Public Health Update

This public health update was developed by the federal Agency for Toxic Substances and Disease (ATSDR) at the request of the U. S. Environmental Protection Agency after consultation with state and local public health departments in West Virginia and Ohio. Beginning shortly after the fire started on October 21st, EPA and the State have been monitoring environmental conditions around the Ames Warehouse fire at Camden and Broadway in Parkersburg. Additional air monitoring was conducted by the Center for Toxicology and Environmental Health (CTEH) working for Wood County authorities beginning the Monday after the fire started. Because information on the contents of the warehouse has not been certain, this air monitoring has focused on particulate matter less than 10 micrometers in diameter (PM10) and less than 2.5 micrometers (PM2.5) to track the smoke from the fire. These particulates are small enough to be breathed deep into the lungs and are usually a good indicator of potential health issues. Additional measurements have been made of common breakdown products of plastics and carbon monoxide. All fires can also be evaluated by the concentrations of carbon monoxide that are produced.

The primary concern for health officials has been "spikes" of both PM10 and PM2.5. These spikes have been above 24 hour air quality standards for open air for brief periods of time during the day or night. You can learn more about air quality standards at https://www.airnow.gov/; look for information on the Air Quality Index (AQI) on the right side of the page. Many of the spikes have occurred after midnight until just before dawn, usually lasting for periods of less than an hour up to about 4 hours. Then the concentrations dropped below the air standards. Because of wind conditions and the hilly nature of the ground around the warehouse, it is not known how long these higher concentrations have lasted in any given area away from the sampling locations. Local authorities in consultation with state and federal

public health and environmental officials made the recommendations to protect public health, including advice on sheltering in their homes and avoiding the smoke. West Virginia officials provided periodic updates to their counterparts in Ohio to make sure individuals in the area possibly affected by the smoke from the fire were made aware of the recommendations to protect themselves. Air quality in the area of the fire have improved dramatically over the weekend. Average results on October 27-28, 2017 from EPA showed PM2.5 results in the good to moderate air quality index ranges. There were much lower and less frequent spikes of higher concentrations compared to what were observed earlier in the week, with the maximum values as expected at the source air perimeter monitoring location.

Smoke from any fire irritates the lungs, nose, and throat. Individuals with pre-existing respiratory and cardiac conditions are more sensitive to the effects of the smoke from this fire. From what ATSDR has seen in the environmental data so far, once exposure to the smoke from this fire has stopped, any symptoms should subside fairly quickly. If any individual has symptoms that persist, residents should consult their personal healthcare provider or medical home. Other professionals through the local hospitals, regional poison control centers, and public health agencies are available to your clinician(s)/healthcare provider should they have questions on the effects of the smoke.

There have been strong plastics odors as well as typical combustion odors in areas where the smoke has been. Information on what would be causing these odors is not known. The public health implications of these odors cannot be determined until additional information is available. However, strong odors in air can cause symptoms in people. Symptoms from odors vary based on your personal sensitivity to the odor. In general, as the odors from the smoke increase, more people may experience symptoms. In general, the most common symptoms from odors are:

- <!--[if !supportLists]--><!--[endif]-->headaches,
- <!--[if !supportLists]--><!--[endif]-->nasal congestion,
- <!--[if !supportLists]--><!--[endif]-->eye, nose, and throat irritation,
- <!--[if !supportLists]--><!--[endif]-->nausea, and
- <!--[if !supportLists]--><!--[endif]-->cough

Young children, the elderly, and pregnant women may have higher sensitivity to odors than other people. People more sensitive to odors can experience:

- <!--[if !supportLists]--><!--[endif]-->chest tightness,
- <!--[if !supportLists]--><!--[endif]-->shortness of breath,
- <!--[if !supportLists]--><!--[endif]-->wheezing,
- <!--[if !supportLists]--><!--[endif]-->heart palpitations,
- <!--[if !supportLists]--><!--[endif]-->nausea,
- <!--[if !supportLists]--><!--[endif]-->drowsiness, and
- <!--[if !supportLists]--><!--[endif]-->mental depression

These symptoms generally occur at the time of exposure and tend to subside quickly when the odors go away. The intensity of these symptoms depend on the concentration of the odor in air, frequency of the odor, and duration of the odor Avoiding the smoke and the odors should reduce a reaction. More information about odors and their health effects can be found at: https://www.atsdr.cdc.gov/odors/index.html. A number of respiratory viruses are also circulating during this time of year. In combination with the smoke and/or odors, symptoms experienced may be exacerbated. A medical clinician can assist in determining the cause of your symptoms.

West Virginia Department of Health and Human Resources and the Ohio Department of Health initiated a process called syndromic surveillance during the event. Syndromic surveillance is a means of tracking emergency department chief complaints including respiratory symptoms. Based on the information to date, an increase of patients with respiratory symptoms was seen at Ohio emergency departments in Washington County earlier in the week. This increase was determined to be related to seasonal illness.

From what ATSDR has learned so far, people in the areas potentially affected by the smoke have done well protecting themselves following the advice from local officials. The need for additional studies is being considered by ATSDR and other federal health agencies. If it is determined that there is a need or benefit for additional studies, state and federal health agencies will work through local authorities to conduct those studies. When additional information on the contents of the warehouse and the air and water quality becomes available, a better appreciation of the potential health effects of this fire can be made. This additional information should help with the decision for any additional studies.

The federal, local, and state health and environmental professionals working on this fire will continue to work together until we are confident that the community concerns are addressed.

Charles Edge
ATSDR ERP