

# PEHSU Information on Gulf Coast Oil Spill for Parents and Community Members

The Pediatric Environmental Health Specialty Units (<u>PEHSU</u>) Network encourage families, pediatricians, and communities to work together to ensure that children are protected from exposure to environmental hazards.

#### Children are at Risk

Environmental pollutants are especially harmful to children. They eat, drink, and breathe more than adults on a pound for pound basis. A child's nose and mouth are closer to the ground than the nose and mouth of an adult; so children more easily breathe in pollutants in the air, which may accumulate close to the ground if they are heavier than air. Because children play on the ground, they are more likely to have skin contact with pollutants than adults. Toddlers may crawl and as a result, may get contaminated soil, sand and other substances on their hands and clothes. It is normal for toddlers to put their hands in their mouth so they will accidentally get more toxic substances in their bodies than older kids and adults.

#### About Oil

The oil washing up on shore is referred to as weathered oil. This means it has been mixed with seawater and exposed to sunlight and air. It is not the same as crude oil coming out of the ground nor like a refined oil such as motor oil. Understanding the potential risks to children is hard because so little is known about the toxicity of weathered oil and the mix of weathered oil and sand, often called "tar balls." According to the National Institute for Occupational Safety and Health (NIOSH), skin and respiratory problems were the most common complaints from workers who cleaned up other oil spills. It is sensible to prevent children from touching or playing with oil on shore and from swimming in water contaminated with oil or products used for clean up. Parents should check with local health officials to find out which beaches or shore areas are affected (see links at end of fact sheet).

#### Steps to Take to Protect Children from Hazards

The oil spill in the Gulf Coast may expose children to potential pollutants and concerns. Until the oil spill is resolved, the following should be kept in mind:

- The US Environmental Protection Agency (EPA) is <u>testing</u> the air, water, and soil. The substances being tested have the potential to cause various health effects depending upon the level of exposure, the length of exposure, and the susceptibility of the individuals exposed.
- The Centers for Disease Control and Prevention (CDC) is providing health guidance based upon these <u>results</u>.
- It is important to keep in mind that children may be especially at risk. Parents and caregivers should follow alerts issued by the state health department and local health departments. They should urge their children to do the same.
- Local Poison Control Centers (1-800-222-1222 or <u>www.aapcc.org</u>) are available to respond to questions related to acute, sudden exposures.

• The PEHSU network is available to assist with additional questions, particularly those regarding low dose, long term exposures (888-347-2632 or <u>www.pehsu.net</u>).

## Recommendations for contact with shore areas or clean-up efforts:

- Children should not be allowed to play in or around areas where the water or beach contains oil or sludge.
- Adults should handle clean-up efforts, including issues related to animals or birds exposed to the oil.
- Children, and whenever possible teens, should not be involved in clean-up efforts and should only return after the area is cleaned up. In short, children should be the last group to return to areas impacted by oil or other toxic substances.

## Frequently asked questions:

#### 1. What if my child is exposed to the oil?

- Wash hands with soap and water after oil contact.
- If necessary clean off oil with baby oil or suntan lotion. If these don't work, try a product such as a citrus based cleaning agent that states it is safe for use on skin. Do not use gasoline or other products such as paint thinner or turpentine.
- Watch for skin or eye irritation.

## 2. What if there is a bad smell or odor?

For many substances related to the spill, we may be able to smell an odor at a level below that shown to cause injury in adults. There is very little information on these exposures to children, particularly over the long term. Children with chronic lung conditions (like asthma) may be at higher risk. The most recent data, as of June 16, 2010, indicates that air levels of the main substances of concern are below worker health reference levels but their odor may still be present. In addition, the levels in the air may change over time as conditions in the Gulf are changing. It is a good idea to recheck monitoring information from time to time. Since these chemicals can irritate the eyes, nose and throat even at low levels. If you smell odors, you should report that information to authorities. If the smell bothers you, stay indoors, close the doors and windows, and turn on your central air conditioning. If you have a window air conditioner, instead of a central unit, it may be better not to use the air conditioner. If you must use it, turn the settings to the recirculation mode, which closes the outside air feature.

## 3. Should I, as an adult, wear a face mask of some kind?

Wearing a face mask is not recommended and will not help with the smell. The chemicals that can be smelled from the oil spill can only be filtered by an activated charcoal mask. If you are involved with clean up, you should follow the protection and mask advice of the authorities involved with the clean up.

## 4. My child has asthma, what should I do?

Children with asthma may be more sensitive to health effects from breathing polluted air than others. In general, you should discuss this with your primary care provider. As always, ask your local health department about ozone alert and other routine air pollutant levels as well as allergen levels if your child has these as potential triggers. In addition, check as described above for any oil spill data. When in doubt, avoid beach and coastal areas that have oil on shore or in the water.

## 5. What about seafood contamination?

Crude oil can damage seafood and cause bad flavors and odors which make it unfit to eat. Federal and State authorities are monitoring the waters from which seafood is harvested. It is very important to check

regularly with local authorities to learn about fishing and oyster bed restrictions and to strictly obey them. As of June 16, 2010, seafood caught in areas that remain open for fishing are recognized by public health and food experts as being safe to eat. Do not eat food that has an unpleasant or unusual smell or that tastes differently than expected.

## 6. Is it safe for my children to play on the beach or go in the ocean?

Oil is coming up on some beaches around the gulf coast, but most beaches are still free of oil. Before heading to the beach, it's a good idea to check with local or state authorities about beach conditions. Common sense says that beachgoers should avoid swimming in water that visibly has oil in it. Remember that children tend to swallow water when they swim, unlike most adults. Crude oil contains many toxic chemicals. Fresh crude oil is a skin irritant that may cause redness, burning and even ulcers with prolonged contact. Not surprisingly, children can be more at risk to these substances than adults. Fortunately the more toxic chemicals tend to dissipate and evaporate and the spill is far off shore. Most of the oil washing up along the coast has been 'weathered' into tar balls that are less toxic. Even so, it is wise to discourage your children from touching or playing with any tar balls or oil slicks. Though the oil washing up on the beaches probably isn't as harsh, it's still a good idea to keep it off your skin.

## 7. How long should children be allowed to play outdoors when we can smell the oil?

Some children may be more sensitive to health effects than others, particularly children with asthma. As long as public health authorities continue to report extremely low levels of air contaminants, outdoor play continues to be appropriate. Each child, however, should be considered individually, recognizing that parents should minimize exposure if odors make the child feel sick.

## 8. Is my water safe to drink?

The oil spill is not expected to affect drinking water but of course this situation could change. If you live near that region or even just visiting, pay attention to information being distributed by local authorities and water utilities. If you use well water, oil is not expected to impact those either.

If you detect any changes in the taste or smell of your water, contact your water supplier. If you have a private well, consider getting your water tested. Seek a different source of drinking water in the unlikely event of contamination.

# 9. Members of my family are working on clean-up. Are there precautions we should take?

There is no sign of exposures being brought home on clothes from clean-up workers. However, simple precautions can be taken. If workers have been wearing protective outerwear, they should remove it before entering either their home or family car. If they are not wearing protective outerwear, workers should shower and change clothes before entering the family car or home. When this is not possible, they should shower as soon as they return home. Their work clothes should be washed separately from family wash.

# Talking to Children and Helping them to Cope is Important

- Children may have trouble understanding and coping with the oil spill.
- Talking to children about the oil spill can help them understand the situation and what they can do to keep themselves safe.
- Some children may develop a range of stress-related symptoms. For example, it may be upsetting for them to see dead or oil-covered birds or animals. Adults may need to take steps to promote adjustment and <u>help children cope</u>.

- Some children may develop a range of stress-related symptoms. Parents should watch for signs of stress such as sleep problems, behavior change, change in school performance, increased fighting with siblings, and substance abuse. It is important to make your child's doctor aware if your child or teen develops any of these problems. Adults may need to take steps to promote adjustment and help children cope. Raising a family and taking care of children is challenging when there are tough economic conditions. Children can sense stress and become anxious or upset if no one communicates with them. Adults should <u>talk to kids</u> about the economy and the possible effects of the oil spill.
- Communities may need to identify outdoor areas (parks, playgrounds, yards, etc.) that are clean and free from safety and hazards. This would include ensuring that routes to and from living, learning, and playing places are cleaned and made free of hazards.

#### Resources

What You Can Do (US Environmental Protection Agency) <u>http://www.epa.gov/bpspill/whatyoucando.html</u>

CDC (Centers for Disease Control and Prevention) <u>http://emergency.cdc.gov/gulfoilspill2010/</u>

Food and Drug Administration (FDA) <u>http://www.fda.gov/Food/ucm210970.htm</u>

Deepwater BP Oil Spill and Federal Response (White House) <u>http://www.whitehouse.gov/deepwater-bp-oil-spill/</u>

American Academy of Pediatrics Children and Disasters Web site <a href="http://www.aap.org/disasters/index.cfm">http://www.aap.org/disasters/index.cfm</a>

Pediatric Environmental Health Specialty Units <u>www.pehsu.net</u>

State Health Department Websites:

Louisiana: <u>http://www.dhh.louisiana.gov/offices/?ID=378</u>

Alabama: <u>http://www.adph.org/riskcommunication/Default.asp?id=4362</u>

Mississippi: http://msdh.ms.gov/msdhsite/ static/23,9689,195.html

Florida: <u>http://www.dep.state.fl.us/deepwaterhorizon/</u>

August 2010

**Disclaimer:** Based upon interpretation of the current literature, the organizations listed above are providing this guidance for persons who wish to take a precautionary approach to personal decisions, and is not meant to substitute for personal medical consultation with your health care provider.

The Pediatric Environmental Health Specialty Unit Program wishes to acknowledge the advice and assistance in development of this fact sheet by The American Academy of Pediatrics and the American Academy of Clinical Toxicology.

This material was developed by the Association of Occupational and Environmental Clinics (AOEC) and funded under the cooperative agreement award number 1U61TS000118-01 from the Agency for Toxic Substances and Disease Registry (ATSDR).

Acknowledgement: The U.S. Environmental Protection Agency (EPA) supports the PEHSU by providing funds to ATSDR under Inter-Agency Agreement number DW-75-92301301-0. Neither EPA nor ATSDR endorse the purchase of any commercial products or services mentioned in PEHSU publications.