

**This document provides information about ways in which people might be exposed to contamination from the Gowanus Canal, and provides suggestions about how people can avoid or limit such exposure.**

| Pathways of Possible Exposure to Gowanus Canal Contaminants: | EPA Recommendations to the Public   | Explanation of Recommendations  |
|--|---|---|
| Breathing air immediately above or adjacent to the Canal.    | No specific recommendations.  | Exposures to hazardous or toxic air pollutants are within EPA's risk ranges, which means that EPA does not consider them to present an unacceptable risk. See the back of this sheet for more information.  |
| Living in a houseboat.                                       | Keep bilge free of Canal water. Minimize direct contact with the water. Ensure adequate ventilation. Spaces higher above the waterline may be preferable to those lower in the houseboat. Direct contact with Canal water accumulating in the bilge should be avoided.                                  | EPA has <u>not</u> conducted any sampling inside houseboats (air, bilge water, etc.). However, it is possible that elevated levels of air pollutants volatilizing off the Canal water could build up inside a houseboat, especially during hot weather.<br>See also "Direct contact with Canal water," below.   |
| Kayaking and canoeing on the Canal.                          | Use care to avoid tipping. Minimize direct contact with the water; avoid splashing water on yourself or others. Wash body and clothing soon after paddling.   | See also "Direct contact with Canal water," below.  |
| Direct contact with Canal water.                             | Avoid – particularly after a rainstorm. Never swim in the Canal. If accidental immersion occurs, avoid ingesting water; and wash body and clothing thoroughly as soon as possible. If Canal water accumulates in a building due to flooding, minimize contact and wash body and clothing after contact. | The risks from direct contact with Canal water identified in EPA's Remedial Investigation are from exposure to toxic chemicals – primarily Polycyclic Aromatic Hydrocarbons. There is also a risk from exposure to elevated levels of pathogens (bacteria); these are most commonly associated with sewage discharges from Combined Sewer Overflows during a rainstorm. If you feel sick after contact with Canal water, you may wish to seek medical advice. See the back of this sheet for information on how to respond to flood water in homes and other buildings. |
| Direct contact with Canal sediment (mud).                    | Avoid. If accidental contact occurs (whether in the Canal or as a result of flood water carrying mud onto land or into a building ), wash body and clothing thoroughly, as soon as possible.  | The risks from direct contact with Canal sediment are associated with various toxic chemicals, including PAHs, polychlorinated biphenyls (PCBs), and various heavy metals.  |
| Eating fish or crabs from the Canal.                         | Avoid.  | See the back of this sheet for more information.  |

### **Additional information on air pollutants above and adjacent to the Gowanus Canal:**

Air pollutants of concern to humans are categorized by EPA as “criteria” air pollutants and “hazardous” (toxic) air pollutants.

Criteria air pollutants: These are pollutants that are very common in almost all urban areas throughout the world. The air in parts of New York City – like air in many other major urban areas – does not always meet EPA’s National Ambient Air Quality Standards for some of these criteria pollutants. Particularly on warm summer days with low wind, ozone levels throughout much of the New York City metropolitan area can rise to unhealthy levels. You can call 800-535-1345 for advisories about unhealthy air pollution levels from the New York State Department of Environmental Conservation ; or, to see a current Air Quality Index forecast for your area, visit: <http://www.airnow.gov/index.cfm?action=airnow.main>.

Hazardous air pollutants: At Gowanus Canal, EPA measured levels of a number of hazardous or toxic air pollutants at various locations. Measurements were taken (1) at the typical breathing height of a person in a canoe or kayak – about 3 feet above the surface of the water; (2) at street level immediately adjacent to the Canal; and (3) at locations 1000 feet away from the Canal (called “background” locations). The measurements were compared to EPA health-based reference levels for these pollutants. They were also compared to levels of the same pollutants found in three other urban areas. All of the measured toxic air pollutants at the locations above or near the Canal were within EPA’s risk ranges – this means the levels are considered by EPA to be *acceptable*. (Note that the EPA risk ranges are based on the assumption of long-term exposure; for example, for residents living near the Canal, exposure to ambient air is assumed to be 250 days/year, 24 hours/day, for 30 years.)

### **General information (not specific to the Gowanus Canal) on responding to flood water in homes and other buildings:**

- The federal Emergency Management Agency (FEMA) publication “Recovering From and Coping With Flood Damaged Property” is available at: <http://www.fema.gov/hazard/flood/coping.shtm> .
- The NYS Department of Health publication “Health Checklist for Repairing Your Flood Damaged Home” is available at: [http://www.health.ny.gov/environmental/indoors/air/flood\\_checklist.htm](http://www.health.ny.gov/environmental/indoors/air/flood_checklist.htm) .

### **Information about fish and crab Advisories:**

Fish and crabs caught in the Gowanus Canal have higher (worse) levels of contaminants than those caught in the open water of New York Harbor, beyond the mouth of the Canal. In order to provide clear, easy-to-follow general advice, EPA recommends that no one should eat any fish or crabs from the Gowanus Canal. The New York State Department of Health provides specific advice for anglers and others who may eat fish from local waters such as the Upper Bay of New York Harbor (including Gowanus Canal and other tributaries), available on the web at: <http://www.health.ny.gov/environmental/outdoors/fish/fish.htm> .

### **Gardening near the Gowanus Canal:**

EPA has *not* tested topsoil on residential properties near the Canal, and EPA has *not* tested any plants growing near the Canal. As “common sense” advice, EPA suggests that people wash themselves and their clothing after gardening; and wash all vegetables before eating, including both home-grown and store-bought vegetables.