

# Polychlorinated Biphenyls (PCBs)

## Patient Education and Care Instruction Sheet

---

### What Are Polychlorinated Biphenyls (PCBs)?

PCBs are a group of man-made chemicals that have no smell or taste. PCBs can be found in

- Water and
- Soil, and
- Sometimes in the air.

They are also found in the fat of some meats and fish. PCBs were banned in 1977 because they can harm your health.

---

### How Can PCBs Harm My Health?

If you have come in contact with PCBs, you may not feel sick. Becoming sick will depend on

- How much of the PCBs got on or into your body,
- The way the PCBs got on or into your body (through skin, breathing, or swallowing),
- How long you were in contact with the PCBs,
- How many times you were in contact with PCBs, and
- Your general health.

A high exposure to PCBs may cause an acne-like rash called "chloracne."

Studies have shown changes in the blood and urine of people who came in contact with PCBs at their workplaces.

The U.S. government banned manufacturing and using PCBs in 1977 because medical studies proved that PCBs caused cancer in animals. Other studies have shown that PCBs can cause cancer in humans as well.

---

### How Can PCBs Affect a Child's Health?

Studies have shown that mothers who breastfeed and come in contact with large amounts of PCBs may have children born with damaged immune systems. Still, the health value of breastfeeding usually outweighs the risk from contact with PCBs in the mother's milk.

Pregnant mothers exposed to high levels of PCBs may have children with

- Darkened skin,
-

- Facial abnormalities,
- Lowered intelligence,
- Altered nerve function, and
- Behavior problems.

Other studies show that women who ate PCB-polluted fish may have problems with their reproductive systems.

**How Can I Come in Contact with PCBs?**

The table below shows how you can come in contact with PCBs.

**Table 1: How people come in contact with PCBs**

Equipment and Products	<p>Before 1977 PCBs were used in</p> <ul style="list-style-type: none"> <li>• Fluorescent lighting,</li> <li>• Electrical devices including microscopes, transformers, and capacitors,</li> <li>• Pesticides and flame retardants,</li> <li>• Paints, adhesives, and ink,</li> <li>• Road surfacing materials, and</li> <li>• Construction materials including plaster and caulk.</li> </ul>
Waste Sites	<p>PCBs have been found at illegal or poorly kept dumping sites, even after those sites have been converted to other purposes.</p>
Foods	<p>PCBs have been found in fats of polluted fish, beef and pork meats, and dairy products.</p>
Polluted Air and Water	<p>You can come into contact with PCBs by breathing the air near waste sites or by drinking polluted well water.</p>

**How Can I Reduce My Family's Risk of Coming in Contact with PCBs?**

You can reduce the risk of coming in contact with PCBs by

- Preventing children from playing in the dirt near waste sites or with old appliances, electrical equipment, or transformers.
- Opening all windows, use fans in your workspace, and wear an appropriate respirator and protective gloves when working on any products or appliances that contain PCBs.
- Seeking medical guidance as soon as possible if you think you have come in contact with PCBs.

---

**How Can I Reduce My Family's Risk of Coming in Contact with PCBs in Foods?**

You can reduce your family's risk of coming in contact with PCBs in food by

- ❑ Obeying fish advisories.
- ❑ Checking food guidelines and see if your family needs to reduce their saturated fat intake. You can find more information at <http://health.gov/dietaryguidelines/2010.asp>.
- ❑ When you cooking fish, remove the skin, trim the fat, and broil, bake, or grill the fish so that the fat drips away.
- ❑ Choosing lean cuts of meat when possible. Cut off all the fat you can see before cooking the meat, and broil, grill, roast, or use a pressure cooker instead of frying. Do not cook meat in lard, bacon grease, or butter.
- ❑ Choosing low-fat dairy products.

---

**What Should I Do if I Come in Contact with PCBs at Work?**

If you believe that you are coming in contact with PCBs at work, wear protective clothing as necessary and

- Shower and change your clothes before leaving work,
- Keep your work clothes separate from other clothes, and
- Have the company launder your work clothes separately.

Workers who may be exposed to chemical hazards should be monitored in a systematic program of medical surveillance to prevent occupational injury and disease.

---

**How Can I Find Out if I have Come in Contact with PCBs?**

Your doctor can test your blood, body fat and tissue, or breast milk to find out if you have come in contact with PCBs.

---

**When Should I Call My doctor?**

Call your doctor if you have any of the following symptoms:

- Skin problems or changes,
- Joint pain,
- Appetite loss,
- Nausea,
- Stomach pain, or
- Breast lumps or changes.

---

**Where Can I Get More Information?**

For more information:

- Contact your doctor for general information about your health.
- Call the Centers for Disease Control and Prevention information line at 1-800-CDC-INFO (232-4636) for information about

---

PCBs.

- Visit ATSDR's Web site at <http://www.atsdr.cdc.gov> to find information about any of the things we have discussed.

---

**Follow-up  
Instructions**

- ❑ Come back to the laboratory for more testing on:

\_\_\_\_\_

- ❑ Come back to the clinic on:

\_\_\_\_\_

- ❑ Other instructions:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

---