



Fact Sheet for Schools: Caulk containing PCBs may be present in older schools and buildings

Between 1950 and 1979, caulk containing potentially harmful PCBs (polychlorinated biphenyls) was used in many buildings, including schools. Although PCBs were banned in the United States in 1979, contaminated caulk still exists in older establishments that have not had the caulk replaced. PCB bioaccumulation in children can damage immune, reproductive, nervous, and endocrine systems.

Children can be exposed to PCB-contaminated caulk by:

- Breathing air into which PCBs have been emitted from caulk
- Breathing in dust contaminated with PCBs
- Touching caulk and contaminated soil directly
- Putting their hands into their mouths after touching the caulk, soil, and surrounding building materials.

What are PCBs?

PCBs are organic chemicals that were used in construction materials and electrical products produced before 1979. With increased awareness and cleanup efforts, PCB levels in the United States have decreased substantially. However, caulk containing these chemicals may still be present in older schools and buildings, sometimes at high levels.

How are people exposed to PCBs?

People whose workplaces and jobs involve working with PCB-laden objects or in PCB cleanup are at the highest risk for elevated exposure. Most people have some accumulation of PCBs in their bodies. Fish, meat, and dairy contain small amounts of PCBs. In fact, most people's exposure to PCBs is via the food chain. When products containing PCBs are disposed of improperly, PCBs can enter waterways and contaminate fish and other animals. Indoor air has been found to contain PCBs from caulk and other sources in building materials and electrical equipment. People can also be exposed to PCBs when handling PCB-containing products such as caulk.

Does the caulk in my home or other places contain PCBs?

PCBs in caulk have not been found in single-family homes. EPA has only found the chemical in caulk in large, older apartment complexes and some older buildings, such as schools.

What can I do about PCBs in schools?

An important step that a school system can do is to minimize the potential for PCBs to be present in the indoor air. Indoor air levels of PCBs within a school can be reduced by ensuring that the ventilation system is operating as designed, and to repair or improve the system if it is not.

Many old lighting systems contain ballasts manufactured with PCBs. These PCBs can get into the air if the ballast fails or ruptures. Replacement of old lighting systems with new, energy efficient systems will eliminate a potential source of PCBs.

If caulk containing PCBs is discovered, you should avoid direct contact with caulk and nearby porous materials, if possible. If caulk-containing PCBs are discovered, be sure to limit exposure to the caulk until it has been safely removed. Here are some ways for decreasing exposure:

- Keep children from touching caulk or surfaces near caulk.
- Clean frequently to reduce dust.
- Use wet cloths to clean surfaces.
- Use vacuums with HEPA filters.
- Wash children's hands with soap and water before eating.
- Wash children's toys often.
- Wash surfaces, window sills, walls, and objects often in rooms known to have PCB-containing caulk or other PCB-containing materials.
- Consider testing the air for PCBs or test the caulk.
- Follow safe work practices when renovating.

What NOT to Do:

- Do not attempt to remove PCB-containing caulk by yourself. PCBs should be removed by personnel wearing protective equipment who follow procedures to minimize the spread of PCBs.
- Do not sweep caulk with dry brooms or use dusters because they spread dust.

Are children in direct danger if their school has caulk containing PCBs?

PCBs accumulate in the body in high levels only after prolonged exposure to the chemical. Follow the recommended procedures to reduce exposure. Restricting children from areas where PCB-containing caulk is located, promoting safe work practices during renovation activities in schools, and removing caulk safely as part of a PCB removal or renovation project reduces the potential for exposure.

EPA is helping to address the issue of PCBs in caulk

EPA has conducted research on how the public is exposed to PCBs in caulk and on the best approaches for reducing exposure and potential risks associated with PCBs in caulk. Where PCBs have been found in caulk, EPA is committed to helping schools and communities enact plans to reduce exposure. Please contact your regional PCB coordinator at 888-835-5372 for help with assessing contamination and exposure and developing cleanup plans.

Contact

Call EPA's Toxic Substances Control Act (TSCA) Hotline: 888-835-5372 to learn more about PCBs in caulk and to get information on PCB professionals in your area.





Fact Sheet for Schools: PCBs in Caulk School Checklist

✓ School Checklist

☐ Was your school built or remodeled between 1950 and 1979?

Many older schools and older buildings built or remodeled before 1979 have been found to have caulk containing PCBs (polychlorinated biphenyls). These chemicals can have adverse effects on human health, so children and teachers need to be informed about potential risks.

☐ Do you see walls or window sills in your school with caulk?

PCBs can, over time, be released from caulk into the air. Find out if your school has PCBs by having a professional test for PCBs in the air or in the caulk.

☐ Have PCBs already been detected in your school's caulk?

If so, caulk with the highest levels of PCBs should be removed in the short term. Ultimately, the goal is to remove all PCB-contaminated caulk at levels greater than 50 parts per million.

☐ Do children touch surfaces frequently or play in soil around their school?

Yes, young children can put their hands in their mouths after touching PCB-contaminated surfaces, which could seriously impact their health. Wash children's hands and toys often to reduce potential exposure.

Soil around schools and buildings may also contain PCB caulk dust or flakes. This would include playground soil and soil surrounding building foundations. Children can accidentally swallow the soil after handling it when outdoors, or the soil may be tracked indoors from shoes onto carpet and floors where children have a greater risk of ingesting it. Teach children to wipe and remove their shoes and to wash their hands after playing outside.

School Advisory: Talking Points for Teachers and Daycare Staff

Should you be worried about PCBs in caulk?

Although this is a serious issue, the potential presence of PCBs in schools and buildings alone should not be a cause for alarm. If your school or building was built or renovated between 1950 and 1979, there are several steps schools can take to reduce potential exposure until it can be determined with certainty if PCBs are present in caulk used in the building and any contaminated caulk can be removed.

Can PCBs be found in and around my school or daycare center?

PCBs are harmful chemicals sometimes found in schools and other buildings built or remodeled before 1979, and are found in and around building joints and other places, including:

- Caulk
- Contaminated soil
- Masonry adjacent to windows
- Indoor air that has been exposed to PCBs
- Paint, electrical transformers, and light ballasts.

PCBs were not added to caulk after 1979. Therefore, in general, schools built after 1979 do not contain PCBs in caulk.

Am I or the children in my school or daycare center at risk for PCB exposure?

PCBs accumulate in the body in high levels only after prolonged exposure to the chemical. PCBs may be released to the air from intact, undisturbed caulk through off-gassing, and people may inhale the released PCBs.

Follow the recommended procedures to reduce exposure. Restricting children from areas where PCB-containing caulk is located, promoting safe work practices during renovation activities in schools, and removing caulk safely as part of a PCB removal or renovation project reduces the potential for exposure.

How can you prevent PCB exposure?

- Keep children from touching caulk or surfaces near caulk
- Keep children away from soil that may contain PCBs
- Clean the floor, walls, and window sills regularly with wet cloths
- Wash children's hands and toys often
- When conditions permit, open windows to increase ventilation

Contact

Call EPA's Toxic Substance Control Act Hotline: 888-835-5372 to learn more about PCBs in caulk and to get information on PCB specialist professionals in your area.



EPA-747-F-09-003