

ONT AGENCY OF NATURAL RESOURCES DEPARTMENT OF HEALTH



## Waa maxay Polychlorinated Biphenyls (PCBs)?

PCBs waxaa weeye koox kiimiko aadanuhu sameeyay. PCBs waxa si wayn loogu isticmaali jiray agabka dhismaha iyo agabyada laydhka wakhtigii hore. Awdaha, ranjiga, xabagta, caagaga, laambadaha dhaadheer ee laydhka, tiraanisfoormarrada, iyo badiyayaasha dabka ayaa kamid ah waxyaabaha ay ku jiri karto PCBs.

Hay'adda Maraykanka Ee Ilaalinta Deegaanka (U.S. Environmental Protection Agency, EPA) waxay mamnuucday warshadaynta iyo isticmaalka qaar kamid ah ee PCBs 1979 kii. Dhismayaasha la dhisay ama la dayactiray intii u dhaxaysay 1950 kii iyo 1979 kii waxaa dhici karta inay leeyihiin qalab dhisme iyo agab laydh oo wata PCBs.

#### Sidee ayay dadka usoo gaadhaa PCBs?

PCBs waxay weli si balaadhan ugu jirtaa ciiddeena, hawadeena, biyaheena, iyo cuntadeena maadaama oo hore loo isticmaali jiray oo loo daadin jiray. PCBs waxay u burburtaa si aayar ah oo waxa ay deegaanka ku jiri kartaa mudo dheer. Badanaa dadku waxay leeyihiin PCBs aad u hooseysa oo jidhkooda ku jirta maadaama oo ay PCBs si balaadhan ugu jirto deegaankeena. Guud ahaan, si walba ha noqotee, heerarka PCB ee dadku way sii yaraanaysay ilaa intii la mamnuucay.

Cuntada – oo ay ku jiraan hilibka, waxyaabaha caanaha laga sameeyo iyo kaluunka (gaar ahaan kaluunka laga soo qabtay biyaha wasakhaysan) - ayaa ah isha koowaad ee ay uga timaado PCBs badanaa dadka.

Sanadihii u dambeeyey, PCBs waxaa laga heleyay dhismayaasha qadiimiga ah qaar ka mid ah, oo ay ku jiraan dugsiyada Magaalada New York, Massachusetts iyo Connecticut. Guluubyada laydhadhka dhaadheer ee ku xidhan laambadaha dhaadheer ee qadiimiga ah iyo awdaha ayaa ah ilaha ugu muhiimsan ee PCBs ta laga helo dhismayaasha dugsiga.

Laambadaheena laydhka waxaa dhici karta inay ku jiraan saliida PCB oo, marka ay baaliyoobaan laambaduhu, saliida PCB ayaa ku liigi karta oogooyinka ku dhaw ama ku soo saari karta uumiyo hawada.

Awduhu waa walax dabacsan oo loo adeegsado in lagu dhejiyo daloolada si looga dhigo daaqadaha, shubka iyo angalada dhismaha iyo qaababka dhismeed ee kale qaar aanay biyaha iyo hawadu soo geli karin. PCBs waxaa lagu dari jiray awdaha illaa 1979 kii. Marka xabagta leh PCBs ay xumaato, waxaa dhici karta in PCBs lagu sii daayo dhaska ama hawada.

Dadka jooga dhismayaasha dugsiga gudihiisa ayay dhici kartaa inay soo gaadho PCBs marka:

- Ay neefsadaan dhaska ama uumiga ay la socoto PCBs
- Gacmahooda uu ka maro dhaska leh PCBs oo ay kadibna liqaan marka ay wax cunayaan ama cabayaan
- Maqaarka ay taabtaan waxyaabaha ay PCBs ku jirto

# Waa maxay saamaynta caafimaad ee ka iman karta in ay qofka soo gaadho PCBs?

Saamaynta caafimaad ee suuragalka ah ee ka iman karta PCBs, sida kiimikooyinka kale, waxa ay ku xidhan tahay xadiga, inta jeer, iyo mudada uu qofku u baylahay.

PCBs waxa lagu arkay inay saamayn ku leedahay difaaca jidhka, taranka, neerfaha iyo nidaamyada dheecaanada (hormone) daraasadaha xayawaanka. PCBs waxaa sidoo kale la ogaaday inay kansar ku sababto xayawaanka. Daraasado lagu sameeyay aadanaha ayaa muujinaya in aadanuhuna uu yeelan karo saamayntan caafimaad.

## Su'aalo?

Wixii macluumaad dheeraad ah ee ku saabsan PCBs iyo saamaynta caafimaad, kala xidhiidh Waaxda Caafimaadka Vermont 802-863-7220 or 800-439-8550 (waa bilaash Vermont gadaheeda).



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# What are Polychlorinated Biphenyls (PCBs)?

PCBs are a group of human-made chemicals. PCBs were widely used in building materials and electrical products in the past. Caulk, paint, glues, plastics, fluorescent lighting ballasts, transformers and capacitors are examples of products that may contain PCBs.

The U.S. Environmental Protection Agency (EPA) banned manufacturing and certain uses of PCBs in 1979. Buildings constructed or renovated between 1950 and 1979 may have building materials and electrical products that contain PCBs.

#### How do people come in contact with PCBs?

PCBs continue to be widespread in our soil, air, water and food because of past use and disposal. PCBs break down very slowly and can remain in the environment for a long time. Most people have low levels of PCBs in their bodies because of the widespread presence of PCBs in the environment. In general, however, PCB levels in people have been going down since they were banned.

Food – including meat, dairy products and fish (especially fish caught in polluted waters) – is the main source of exposure to PCBs for most people.

In recent years, PCBs have been found in some older buildings, including schools in New York City, Massachusetts and Connecticut. Lighting ballasts in older fluorescent lighting fixtures and caulk are the main sources of PCBs in school buildings.

Old lighting ballasts may contain PCB oil and, as the ballasts age, the PCB oil can leak onto nearby surfaces or produce vapors in the air.

Caulk is a flexible material used to seal gaps to make windows, masonry and joints in buildings and other structures watertight or airtight. PCBs were used as a component of caulk until 1979. As caulk containing PCBs deteriorates, PCBs may be released in the dust or air.

People inside school buildings may be exposed to PCBs by:

- Breathing in dust or vapors that contain PCBs
- Getting dust containing PCBs on their hands and then swallowing it while eating or drinking
- Skin contact with materials that contain PCBs

# What are possible health effects from coming in contact with PCBs?

The potential for health effects from PCBs, as with other chemicals, depends on how much, how often, and how long someone is exposed.

PCBs have been shown to have effects on the immune, reproductive, nervous and endocrine (hormone) systems in animal studies. PCBs have also been shown to cause cancer in animals. Studies in humans show that humans could also have these health effects.



### **Questions?**

For more information about PCBs and health effects, contact the Vermont Department of Health at 802-863-7220 or 800-439-8550 (toll-free in Vermont).