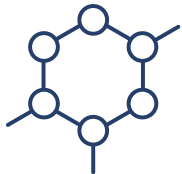


## 什么是多氯联苯 (PCB) ?



PCB 是一组人造化学物质。过去，PCB 被广泛应用于建筑材料和电气产品。填缝剂、油漆、胶、塑料、荧光灯镇流器、变压器和电容器等产品中均可能含有 PCB。

美国 1979 年，美国环境保护署 (EPA) 禁止生产和以某些方式使用 PCB。如建筑物在 1950 年至 1979 年间建造或翻新，则其建筑材料和电气产品中可能含有 PCB。

## 人们如何会接触到 PCB ?

由于过去对 PCB 的使用和处置，PCB 依然在我们的土壤、空气、水和食物中广泛存在。PCB 的分解速度非常缓慢，并且可以在环境中残留很长时间。由于 PCB 在环境中广泛存在，大多数人体内都有较低含量的 PCB。但是，总体而言，自从其被禁止以来，人体内的 PCB 含量一直在下降。

大多数人接触 PCB 的主要来源是食物，包括肉类、乳制品和鱼类（尤其是从受污染水域捕捞的鱼）。

近年来，在一些老建筑物中也发现了 PCB，包括纽约市、马萨诸塞州和康涅狄格州的学校。旧式荧光灯镇流器和填缝剂是学校建筑中 PCB 的主要来源。

旧式荧光灯镇流器可能含有 PCB 油，并随着镇流器老化泄漏到附近的表面或在空气中，产生蒸汽。

填缝剂是一种柔性材料，用于密封缝隙，增加建筑物和其他结构中窗户、砖石和接缝的水密性或气密性。1979 年前，PCB 一直被用作填缝剂的原料之一。

随着含有 PCB 的填缝剂老化，PCB 可能会释放于灰尘或空气中。

学校建筑物中的人可能会通过以下方式接触 PCB：

- 吸入含 PCB 的灰尘或蒸汽
- 手上不慎沾到含有 PCB 的灰尘，然后在进食或喝水时将其吞下
- 皮肤接触到含有 PCB 的材料

## 接触 **PCB** 可能会对健康产生哪些影响？

与其他化学物质一样，PCB 对健康的潜在影响取决于人体接触的程度、频率和时间。

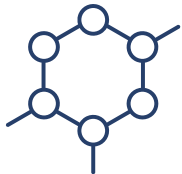
动物研究显示，PCB 可对免疫、生殖、神经和内分泌（激素）系统产生影响。研究还显示，PCB 可导致动物罹患癌症。人体研究显示，其对人体健康也可能产生上述影响。



## 存在问题？

如需了解 PCB 及其健康影响的更多信息，请拨打 802-863-7220 致电佛蒙特州卫生部。

## 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).