What are PCBs?

Polychlorinated biphenyls (PCBs) are a class of manufactured chlorinated organic chemicals that may be present in electrical equipment such as transformers and capacitors.

They pose a risk to health and the environment and have therefore been listed by the Stockholm Convention as Persistent Organic Pollutants (POPs).

CHARACTERISTICS

Once PCBs are released into the environment, they can travel long distances and remain for a long time in the air, water and soil.

PCBs can accumulate in the fatty tissue of animals, such as small fish. The fact that small animals are consumed by larger animals causes PCBs to accumulate with higher concentrations in top predators.

Because PCB are very toxic, can accumulate in animals and can be widely distributed in the environment, we must prevent their further spread to the environment to protect ourselves.

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PCB PLATFORM

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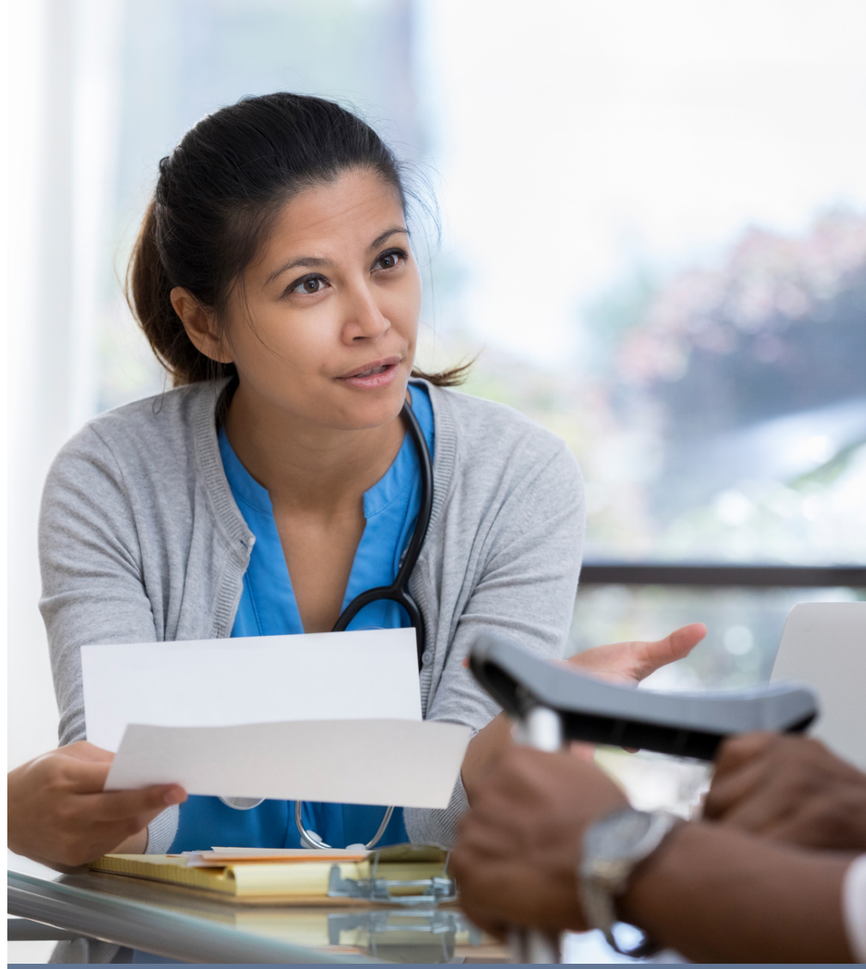
https://www.pcb.unitar.org/pcb-elearn



PCB

HEALTH IMPACT

PCB exposure

EXPOSURE ROUTES

Through animal fats such as fish, meat and dairy products, or contaminated water.

PCBs can also be taken up by the skin, inhalation of contaminated vapors and through breastfeeding.

TYPES OF EXPOSURE

- Non-occupational exposure:

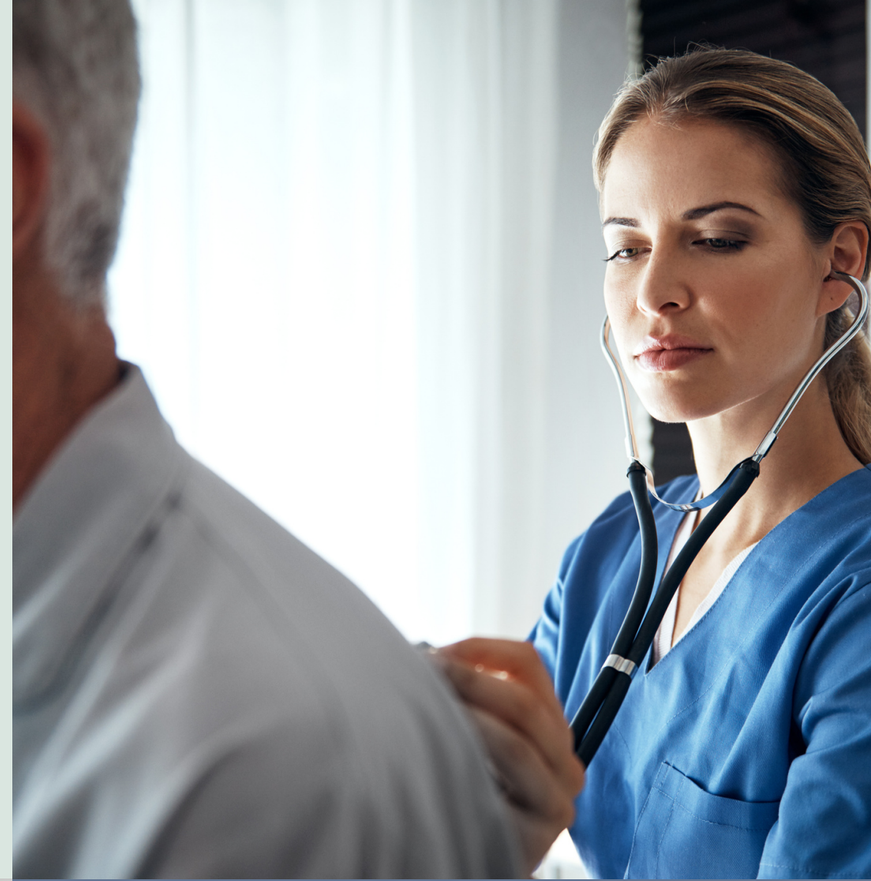
  It occurs through the consumption of animal fats, as PCBs tend to accumulate in animals, especially fish and some predators.

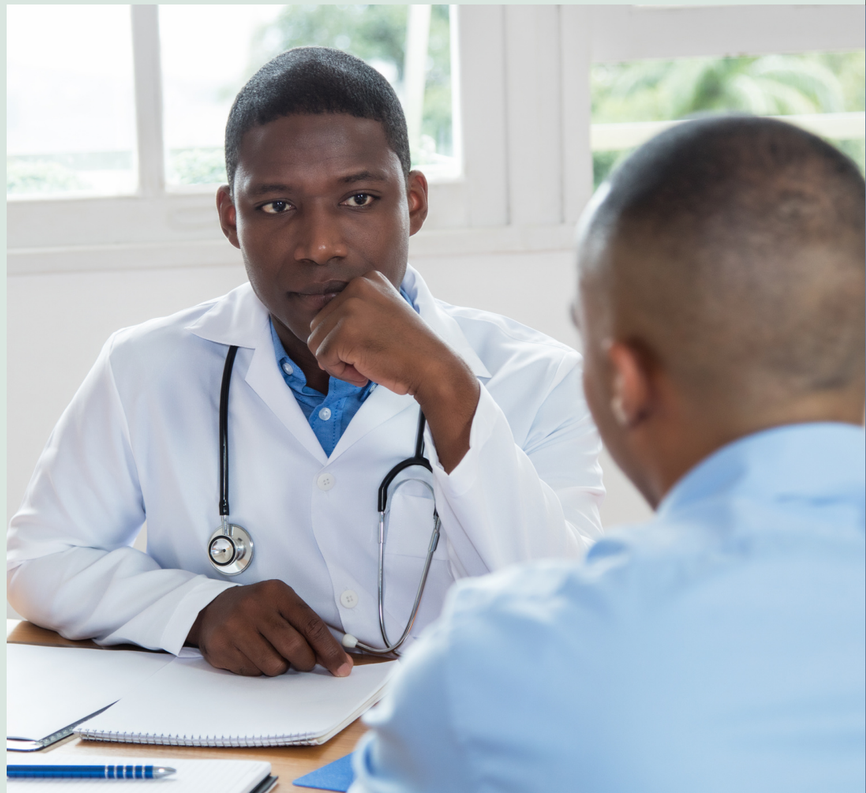
  People who do repairs involving the removal of old building materials (plaster, paint and caulking may contain PCBs) might be exposed.

- Occupational exposure

  People who work in the electric sector might be more exposed to PCBs because they can be found in dielectric oils inside of transformers and capacitors, for example. This exposure occurs mainly through the skin and inhalation. In high temperatures, the risk of inhaling PCB vapors increases. Additionally, PCBs can be absorbed through the skin when in contact with contaminated equipment, water or soil.

  However, the health effects of PCB exposure will depend on the dose, duration, manner of exposure, personal characteristics and habits, and whether the person has been exposed to other chemicals.





Health effects

Some diseases and health effects that have been associated with PCB exposure include the following:

- Cancer
- Chloracne
- Liver damage
- Disruption of menstrual cycles and/or the endocrine system
- Damage to the lymphatic and reproductive system
- Hyperpigmentation of skin and nails
- Suppression of the immune system, which may increase the risk of developing diseases.