

# Contamination of Soil and its Quality

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## Perspective

Soil pollution is defined as the presence of hazardous compounds (pollutants or contaminants) in soil at concentrations high enough to endanger human health and/or the environment. Even if the levels of contaminants found naturally in soil are not high enough to pose a risk, soil pollution is defined as when the levels of contaminants in soil exceed the levels that should be present naturally. Plants, animals, and humans are all affected by soil contamination. While anyone can be affected by soil pollution, the effects vary depending on age, general health, and other factors like the type of pollutant or contaminant inhaled or swallowed. Children, on the other hand, are more sensitive to contamination because they play in the dirt and come into close contact with the soil; this, combined with lower disease thresholds, results in higher risks than for adults. As a result, it's always a good idea to test the soil before letting your kids play in it, especially if you live in a heavily industrialised area.

By accumulating and occasionally concentrating toxins that wind up in soil from numerous sources, soil acts as a natural sink for contaminants. Tiny amounts of contaminants accumulate in the soil and, depending on environmental factors (including soil types) and the degradability of the released contaminant, can reach high levels in the soil and pollute it. Homegrown veggies and fruits may get tainted if the soil is contaminated. This occurs because the plants remove the majority of the soil contaminants present in the soil along with water every time they feed. As a result, it's usually a good idea to examine the soil before planting anything edible. This is especially crucial if your garden is within 1 mile of an industrial or mining location.

All the soils contain compounds that are harmful to human beings and other living organisms. However, the concentration of such substances in unpolluted soil is so low that they do not pose any threat to the surroundings but when the concentration of such toxic substances becomes high enough to cause damage to living organisms, the soil is said to be contaminated. Soil

contamination can occur because of human activities or because of natural processes. However, mostly it is due to human activities. It occurs due to many different activities such as overuse of pesticides the soil will lose its fertility and the presence of excess chemicals will increase the acidity or alkalinity of soil and hence degrading the quality of the soil. Compounds that are toxic to humans and other living organisms can be found in all soils. However, the concentration of such substances in unpolluted soil is so low that they represent no hazard to the environment, but the soil is said to be contaminated when the concentration of such poisonous substances becomes high enough to harm living beings. However, it is primarily owing to human activity. It occurs as a result of a variety of activities, such as the abuse of pesticides, in which the soil loses its fertility and the presence of excess chemicals increases the acidity or alkalinity of the soil, so decreasing its quality [1-5].

## References

1. Maurya, Swati, Jeeva Susan Abraham, Sripoorna Somasundaram and Ravi Toteja, et al. "Indicators for assessment of soil quality: a mini-review." *Environ Monitoring Assess* 192 (2020): 1-22.
2. Zeng, Siyan, Jing Ma, Yongjun Yang and Shaoliang Zhang, et al. "Spatial assessment of farmland soil pollution and its potential human health risks in China." *Sci Total Environ* 687 (2019): 642-653.
3. Li, Changfeng, Kehai Zhou, Wenqiang Qin and Changjiu Tian, et al. "A review on heavy metals contamination in soil: effects, sources, and remediation techniques." *Soil Sediment Cont Int J* 28 (2019): 380-394.
4. Mitter, Eduardo K, James J Germida and J Renato de Freitas. "Impact of diesel and biodiesel contamination on soil microbial community activity and structure." *Sci Rep* 11 (2021): 1-14.
5. She, Jingye, Juan Liu, Hongping He and Qiong Zhang, et al. "Microbial response and adaption to thallium contamination in soil profiles." *J Hazardous Materials* 423 (2022): 127080.

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