

Sustainable Development Goals and the Impact of Waste Disposal on Public Health

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Abstract

Although water surrounds us daily, issues of water pollution are often overlooked. The 'out of sight, out of mind' mentality contributes to our ongoing environmental crisis. Water pollution extends beyond visible litter, and it poses significant health risks to life in water and on land in various ways. It is becoming necessary to raise awareness about the indirect contributions individuals make to water pollution and encourage more responsible waste disposal practices. When people dispose of their trash, they may not be aware of where it goes or what effects it has on the environment. Many people know that trash goes to landfills, but they might not realize that trash can become dislocated on the way there. In the following paragraphs, different disposal methods, the Sustainable Development Goals involved, and the effects of pollution will be explored. Mitigating the effects of pollution aligns with key Sustainable Development Goals, which include "Clean Water and Sanitation," "Life Below Water," and "Life on Land." By fostering a deeper understanding of these goals, people are challenged to take responsibility for waste disposal to reverse life-harming effects.

Effects of Irresponsible Waste Disposal on Animals and Plants

A few different trash disposal methods include recycling, incinerating trash, and throwing trash in the garbage, where it ends up in a landfill (Savage, 2022). None of these options are perfect, and they still can produce pollution, affecting the ground, waterways, and air quality (Baptista, 2019). An abundance of nutrients in the water, as a result of fertilizers and litter, poses a threat to many ecosystems. Pollution and nutrients can lead to algae blooms, which can harm life in the water. Algae blooms have negative effects

on ecosystems, such as blocking sunlight from reaching life underwater and consuming large amounts of oxygen from the water (CDC, 2024). Superfund sites also contain toxic materials (Johnson, 2017). Superfund sites are areas that once had toxic materials dumped, which then can cause pollution, health problems, and other environmental issues (EPA, 2024). Investigations are sometimes performed when needed, such as when there are health effects in nearby residents (Seaman, 2010). Investigations help to show the root causes of environmental issues and health effects. In the case of a Superfund site in Schuylkill

County, Pennsylvania, a rare form of blood cancer, polycythemia vera, has been found in people nearby. Even though the investigation did not identify the cause of cancer, it still prioritized the cleanup of the polluted site (Seaman, 2010).

People should be concerned about cleaning up pollution for their health and the condition of the environment. To help guide people in a positive direction, the United Nations released goals with the intention of improving life. The United Nations (n.d.) created Sustainable Development Goals, which aim to be achieved by the year 2030. There are 17 Sustainable Development Goals. Many Sustainable Development Goals can overlap with pollution. I chose Goal 6, which is concerned with Clean Water and Sanitation, Goal 14, which is dedicated to Life Below Water, and Goal 15, which discusses Life on Land.

Actions for Responsible Disposal Behaviors and Conclusion

Some actions can be taken to try to mitigate the effects of pollution. Recycling is one of the easiest actions to help contribute to a litter-free world. Hazardous materials should be recycled at special recycling facilities and drop-offs. Reusing plastics and eliminating the use of single-use plastics can reduce the amount of accidental litter that pollutes the earth and water. Another way to take action is to spread awareness about the effects of pollution on your health, wildlife, and waterways.

Improper waste disposal negatively affects the health of humans, terrestrial ecosystems, waterways, and marine life. Pollution can cause major health issues in humans and many other living things. Life below water isn't safe from our pollution since it can directly and indirectly harm aquatic life. I hope that this sparked an interest in you to be conscious about where your trash can end up and how it affects the earth.

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