

Soil Health Risks

Soil pollution

This may occur due to agricultural, industrial or military release of pollutants. In addition, municipal sources are a major contribution of pollution. The sources of pollution may be either a. point sources or b. diffuse sources.

Soil contaminants

1. Heavy metals: arsenic, chromium, cadmium, mercury , nickel, lead
2. Cyanide
3. Persistent organic pollutants: pesticides, organic solvents, dioxins, polycyclic aromatic hydrocarbons
4. Asbestos

Health Issues of Children and Sand Pits

Sand pit may become unsuitable especially if children and or domestic animals are permitted to use them as toilet. An adequate habitat may be provided for Insects in damp areas which may therefore bite children. These situations can be prevented by ensuring that the sand pits are well drained and that they are covered (with chicken wire) to prevent animals from entry.

Infections:

1. Toxoplasmosis is caused by the sporozoan (*Toxoplasma gondii*) and it infects all vertebrate species. The cat acts as the definitive host. One mode of contracting the disease is by the accidental ingestion of cat faeces containing the oocytes of the pathogen.
2. Visceral larva migrans is caused by the nematode *Toxocara canis*. The disease is transmitted by the ingestion of eggs of dog faeces. The larvae mature in the intestine prior to migration to organs (such as liver, brain, eyes).

Health Issues of Natural Swimming Places and Swimming Pools

Infections

Schistosomiasis is caused by various species of the trematode of the genus *Schistosoma*. The intermediate host are snails that are present in rivers and lakes. Larvae infect humans by direct penetration through the skin prior to dissemination and residence in the vasculature where they mature, reproduce and lay eggs which are passed out in faeces or urine.

Concerning swimming pools, if they are not adequately disinfected, the assault of pathogens introduced is therefore not kept in check. The following is a list of infections and diseases that commonly occur as a result of inadequately maintained swimming pools:

1. Diarrhoea
2. Skin infections
3. Respiratory infections
4. Ear infections

Links

Related Articles

Bibliography

1. Richard A. Harvey: Microbiology second ed._ Lippincott William and Wilkins
2. Julia Smedley: Oxford Handbook of Occupational Health_ Oxford medical publications