Municipal Solid Wastes (MSW)

MSW is the urban waste generates where people live. It must be removed and disposed of to prevent serious environmental health problems. MSW includes glass, paper, metal, plastic, food waste, and other materials.

Current waste disposal methods involve sanitary landfills, source reduction, recycling, composting, and waste combustion.



Hazardous Wastes

Hazardous wastes are any discarded material that may pose a substantial threat or potential danger to human health or the environment when improperly handled.



Threats posed by careless disposal:

- Direct contact: skin irritation, initiation of chronic illness, acute poisoning, and death
- Fire and/or explosions
- Poison via the food chain, biomagnification
- Air pollution due to incomplete combustion
- Surface water contamination (accidental spills or deliberate dumping).
- Groundwater contamination: most common problem associated with poor hazardous waste management

Join the workforce as an Environmental Health Specialist

Environmental health specialists <u>educate</u>, <u>consult</u> clients, and <u>enforce</u> regulations governing the sanitation of food, milk, water, hazardous and infectious waste, sewage, institutional environments, and health hazards.



Prepared by: Department of Health Science & Human Ecology
California State University, San Bernardino
San Bernardino, CA
https://www.csusb.edu/health-science-human-ecology

Environmental Health



According to the U.S. Department of Health and Human Services, more than 12 million people around the world die every year because they live or work in unhealthy environments. Clean water, plants, food, air, and food supplies are essential for personal health. Since the relationship between the environment and humanity is one of interdependence, our actions and choices directly impact our own wellbeing, as well as our communities, families, and economies.



Housing & Institutional Health

- Inspections: dwelling, organized camps, mobile home parks
- Code enforcement
- Institutional sanitation: schools, hospitals



Recreational Health

- Beach sanitation
- Community swimming pool inspections
- Ski area inspection
- Playground safety



WHAT IS Health

According to the World Health Organization, health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Food Sanitation

- Permitted facility inspections
- Disease investigations
- Health education
- Plan checks



WHAT IS Environmental Health

A branch of public health that focuses on the preservation of natural resources and improvement of various environmental factors such as the quality of air, water, food, land, housing and other biological, chemical and physical elements that impact the health and safety of the community. More recently the effect on the quality of life is also included (WHO). The quality of life is directly related to the quality of the environment.

Occupational Health & Safety

- Facility inspections
- Workplace safety
- Area sampling & testing
- Risk assessment



Air Pollution

Air pollution is a reference to the release of pollutants in the air that is detrimental to human health and the planet. A person will inhale approximately 30 m3 (35 lbs) of air per day and exposure to air pollutants is continuous. Air pollution can lead to lung disease, which is the third leading cause of death in the United States, and can lead to asthma which is the most common chronic illness in children. Natural sources of air pollution include volcanic ash, pollen dust, radioactivity, and smoke fires. Man-made sources include combustion processes, hydrocarbons, and oxides of sulfur and nitrogen compounds.

CO2

Water Pollution

Water pollution occurs when harmful substances contaminate a stream, river, lake, ocean, aquifer, or other body of water, degrading water quality and rendering it toxic to humans or the environment. About 80% of the world's wastewater is dumped, largely untreated, back into the environment, polluting rivers, lakes, and oceans. According to US Environmental Protection Agency, nearly half of our rivers and streams and more than one-third of our lakes are polluted and unfit for swimming, fishing, and drinking. About 80% of ocean pollution originates on land where pollutants are carried from farms, factories, and cities by streams and rivers into bays and estuaries; from there they travel out to the sea.

