# **Environmental Racism and the Health of BIPOC Communities**

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## How Environmental Pollution Disproportionately Affects BIPOC Populations

#### **Water Pollution**

- Sources include chemical leaks, pesticides, leaking fuel from machinery, improperly treated sewage, household drainage (FN & MF, 2017)
- Can cause cholera,
   dysentery, Hepatitis
   (Denchak, 2019)
- Associated with cancer, respiratory diseases, cardiovascular diseases (Ong, 2020)

#### Air Pollution

- Sources include
   transportation, power
   generating facilities,
   trash disposal (Turrentine
   & Mackenzie, 2021)
- Can increase severity of allergies, asthma, bronchitis (Maantay, 2007)
- Linked to immune, nervous, circulatory, and endocrine system damage; can impact fetal development, IQ, and learning (Turrentine & Mackenzie, 2021)

#### **Environmental Racism**

- "...the disproportionate impact of environmental hazards on people of color" (Energy Justice Network, n.d.)
- History of toxic waste sites, highways, etc. being placed in or near BIPOC communities because they do not have the resources or power to fight them
- 1942, New Mexico: U.S. government tested first nuclear weapon without regard for severe negative health effects on nearby Mexican-Americans (Peña-Parr, 2020)
- 1955, NYC: Cross-Bronx Expwy designed, would later expose
   BIPOC communities to higher levels of pollution (Ndoro, 2021)

#### Research Methods

- Informational search for sources and effects of four types of pollution: water, air, biological, and noise
- Research for statistical evidence of unequal effects of pollution on BIPOC populations
- Exploration of anecdotal experiences of environmental injustice
- Sources: journal articles, empirical studies, websites of environmental organizations, reputable news sources
- Search term examples: "environmental racism," "people of color," "BIPOC communities," "health inequities," "pollution," "disease," "hazards"

#### Findings

- Communities primarily made up of BIPOC people are more likely to be affected by exposure to unsafe levels of pollution, which can have adverse effects on physical, mental, and developmental health.
- A 2017 study found that communities with 75% black residents had noise levels that were higher than communities with 0% black residents (Casey, et. al., 2017)
- o In 1986 researchers found that 3:5 Black and Hispanic, ½ of all Asian/Pacific Islanders, and ½ of all Native Americans live in communities with uncontrolled hazardous waste sites (UCC Commission For Racial Justice, 1987)
- Environmental pollution contributes to health inequities experienced by BIPOC communities
- A 2006 study found that in racially segregated urban areas cancer risk caused by air pollution increased as the level of segregation grew (Morello-Frosch & Jesdale, 2006)
- Risk of death associated with exposure to fine particle air pollution was found to be three times higher for Black persons than for the general population (Di et. al., (2017)
- Significantly higher COVID-19 death rates within BIPOC communities, which has been linked to exposure to higher levels of air pollution (Friedman & Schlanger, 2020)

#### **Call To Action**

- "Environmental justice occurs when all people equally experience high levels of environmental protection and no group or community...is affected by a disproportionate impact from environmental hazards." (Committee on Social Work Education, 2015)
- Social workers recognize the fundamental need of all people to live in an environment that supports their health and well-being
- Social workers have a duty to ensure the fundamental human rights of all persons to safety and an adequate standard of living. (National Association of Social Workers, 2021)
- Social workers must collaborate with affected BIPOC individuals, families, and communities to work for policy change on local, state, and national levels

#### References



#### **Noise Pollution**

- Sources include heavy machinery, construction, manufacturing processes (Abbaspour et al., 2015)
- Leading source in urban areas is transportation (Israel, 2017)
- Linked to hypertension, sleep problems, hearing loss, developmental delays, psychiatric disorders, and loss of memory (Casey et al., 2017)

### **Biological Pollution**

- Sources include mold, mildew, pollen, animal droppings, bacteria, viruses, body parts from insects (United States Environmental Protection Agency, 2018)
- Can release toxins
   harmful to the body's
   organs and tissues (EPA,
   2018)
- May cause allergic
  reactions (coughing,
  congestion, skin rashes),
  and severe,
  life-threatening asthma
  attacks (EPA, 2018)

