

# Botswana and Pollution

## Health Impact, Economic Impact, Injustice, and Solutions



*The Lancet* Commission on pollution and health provides data related to the health and economic costs of pollution for 190 countries. It also gives specifics on the inequity of pollution’s impact, and provides an overview of solutions implemented or possible to reduce the burden of pollution.

The Commission’s lead authors have prepared this brief summary of pollution’s impact specifically in Botswana.

### Health Impact

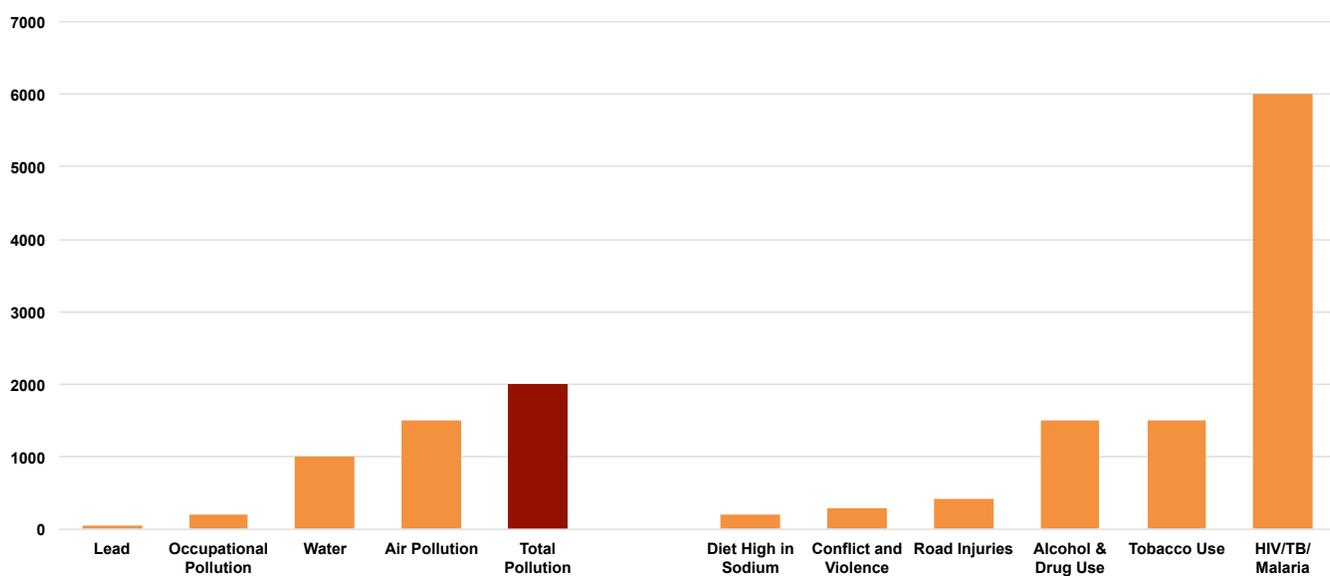
In 2015, the report indicates that 2,000 in Botswana died from pollution-related disease. That is seven times more than all deaths from conflict and violence.

Pollution in the air, water and soil was responsible for **9.3%** of all deaths in Botswana.

### Average % of Deaths from Pollution

High-Income Countries	7.3%
Upper-Middle-Income Countries	10.3%
Lower-Middle-Income Countries	14.7%
Low-Income Countries	19.2%

### Causes of Death — Botswana



Source | *The Lancet* Commission on Pollution and Health, October 2017

## Economic Impact

The economic cost of pollution to Botswana is calculated in two ways:

- The costs of lost productivity from pollution-related diseases are estimated to be between 0.25% and 0.31% of gross domestic product (GDP)
- When the willingness-to-pay method is used to estimate the amount that people would be willing to pay to avoid premature death due to pollution-related disease, the total is estimated to be US\$ 1.5 billion, which is approximately 9.9% of the country's economic output.

## Environmental Injustice

Pollution disproportionately kills the poor and the vulnerable. Nearly 92% of pollution-related deaths occur in low-income and middle-income countries and, in countries at every income level, disease caused by pollution is most prevalent among minorities and the marginalised. Children are at high risk of pollution-related disease and even extremely low-dose exposures to pollutants during windows of vulnerability in utero and in early infancy can result in disease, disability, and death in childhood and across their lifespan.

## Pollution Solutions

Like many developing nations, Botswana has experienced a significant amount of pollution due to rapid growth in its urban population, industrialization and rising demands for energy and motor vehicles. New industries, such as metal processing have recently been introduced. Sources of air pollution include industrial manufacturing, smelters, stone/sand crushers, traffic emissions, waste and household fires. Household burning of biofuels remains one of the major energy sources used for cooking, heating and power generation.

A valuable strategy recommended at the national and state level is to undertake a review of pollution impact and potential. The Health and Pollution Planning process involves multiple national or state government agencies (environment, health, industry, transport, finance, etc) meeting to identify, evaluate and prioritize pollution issues based on health impacts. Existing programs are reviewed, priorities for further action decided, and concrete interventions designed. The process is driven by national governments, with support and facilitation by GAHP members.

Botswana can also make use of [www.pollution.org](http://www.pollution.org) to review specific pollution data related to air, water and soil in their own neighborhoods, and post new data for pollution issues that deserve recognition by the international community.

## The Global Alliance on Health + Pollution (GAHP)

GAHP was formed in 2012 in response to the growing crises posed by toxic pollution. With more than 50 members from multilateral development banks, bilateral donors, UN agencies, low- and middle-income country government agencies, and others, GAHP aims to provide low-and middle-income countries with the tools to tackle toxic pollution and alleviate its impacts on human health.

GAHP has served as a coordination mechanism for defining highly polluted sites globally, for advocacy related to the SDGs and inclusion therein of all aspects of pollution, and most recently for the Lancet Commission on pollution and health. GAHP's secretariat is Pure Earth, an NGO based in New York, with operations in 40 countries globally.