Arsenic contamination of water sources remains one of the biggest concerns for arsenic poisoning worldwide. Existing naturally, arsenic can be found in mineral deposits primarily with sulfur and other metals. When the pH of groundwater increases, arsenic becomes less sorbed to the original minerals. In groundwater where the pH is between 6.5 and 8.5, arsenic dissociates and contaminates the aquifer. Wells that draw water from these contaminated aquifers results in arsenic exposure and poisoning.

**10 PPB** (parts per billion)  
Maximum standard for arsenic in drinking water recommended by the EPA and enforced by the World Health Organization

**130 million**  
People exposed to arsenic in drinking water exceeding the 10 ppb standard

**50 million**  
People exposed to arsenic levels exceeding 50 ppb

Arsenic Health Effects

- **Early Symptoms**
  - Stomach pain
  - Nausea
  - Vomiting
  - Diarrhea
  - Skin lesions

- **Increased Risk**
  - Heart & liver disease
  - Partial paralysis
  - Lung cancer
  - Skin cancer
  - Bladder cancer

Arsenic exposure is usually a result of drilling wells into contaminated aquifers. Bangladesh and India are notorious for high arsenic concentrations. Millions of people are poisoned as a result of drinking contaminated well water.