

Heavy Metal Pollution



Heavy Metal Pollution

A diagram illustrating the pathways of heavy metal pollution. The title 'Heavy Metal Pollution' is at the top. Three blue arrows point downwards from the title to the words 'Land', 'Water', and 'Air', which are arranged in a triangular pattern below. The background is a close-up of colorful, iridescent fish scales.

Land

Water

Air

Reasons for Heavy Metal Pollution at land



Industrial sewage &
waste disposal sites

Mining & smelting

Soil acidification

Reason(s) for Heavy Metal Pollution in the air



Combustion of fossil fuel



Heavy Metals can be toxic...



Destruction of
Proteins (e.g.
Enzymes) (Cu)



Cardiac Arrhythmia (Tl)



Severe organ damage
(e.g. liver, kidney, central
nervous system) (Cd,Pb...)

...but they are also essential!



Cofactors of
important
proteins/enzymes
(without them
there would be no
live as we know it)



Hemoglobin
(Fe)



Photosystem II (Mn)



Urease (Ni)

The problem with heavy metals lies in their accumulation

