

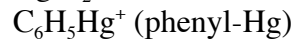
D) Specific metals

1) Arsenic (As)

2) Mercury (Hg)

Uses and sources

Oxidation states and health effects



MeHg is produced by bacteria in sediments, algae too

Subject to photodegradation

Methylation occurs faster at lower pH

Accumulates in fish, transferred to humans (Fig. 11-1)

Long half-life ($t_{0.5}$)

Crosses the blood/brain barrier (article)

Work out problem 11-6

3) Lead (Pb)

Uses and sources

Oxidation states and health effects



Pb⁴⁺

PbO₂

Pb(CH₃)₄ - tetravalent, like C

Other

Not magnified in the food chain

4) Cadmium (Cd)

Uses and sources

Oxidation states and health effects

