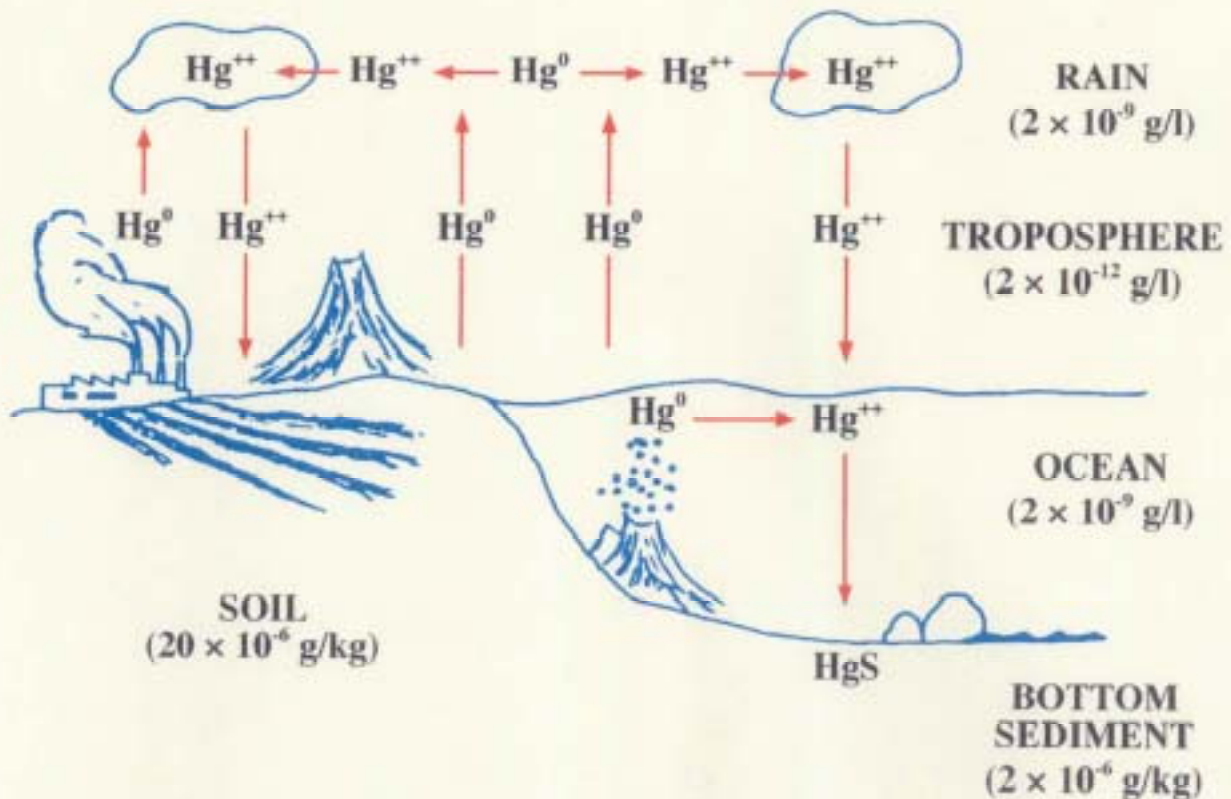


WHO

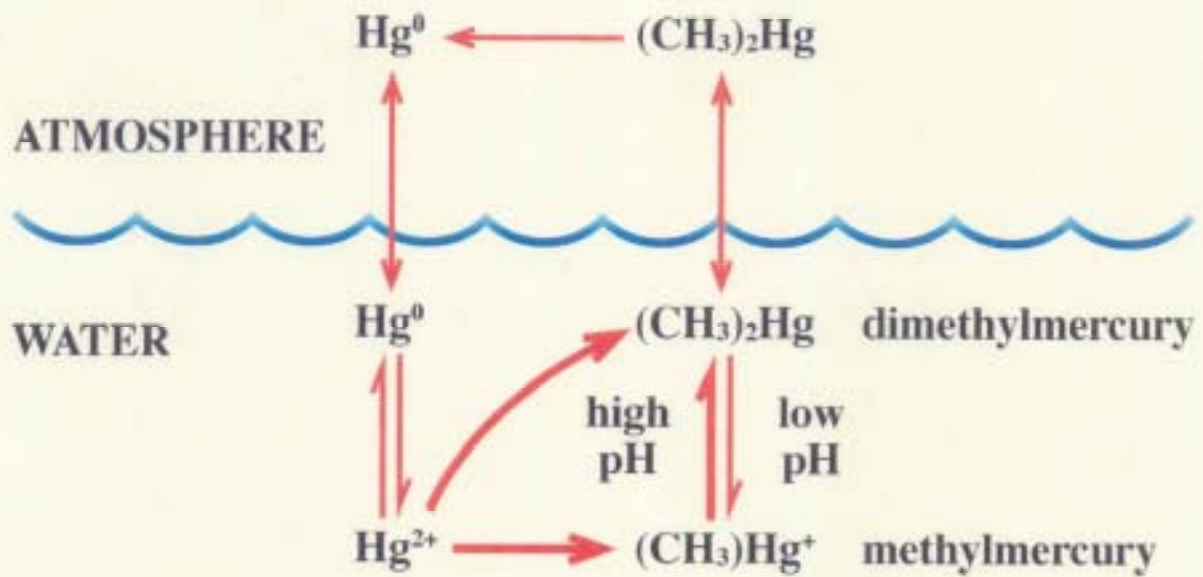
- The general population does not face a significant health risk from methylmercury. The fetus is at particular risk. A prudent interpretation of the Iraqi data implies that a 5% risk may be associated with a peak mercury level of 10-20 $\mu\text{g/g}$ in maternal hair (during pregnancy).

- 胎児がリスクに曝されている集団
- 妊娠中のピーク毛髪水銀濃度が 10-20 $\mu\text{g/g}$ で 5% のリスクがあると考えるのが妥当

(WHO/IPCS, 1990; Environmental Health Criteria 101 Methylmercury 1990)



Environmental cycles of mercury



Heavy arrows: biomethylation processes

食物連鎖 (エルトンのピラミッド)



Recent Epidemiological Studies

■ New Zealand

4 yr-old (maternal hair Hg > 6mg/kg)

Motor functions: Abnormal or questionable

6 yr-old (maternal hair Hg > 10mg/kg & 6-10mg/kg)

Poorer performance in WISC-R

■ Faroe islands

7 yr-old (maternal hair Hg median 4.5mg/g)

■ Seychelles islands

6, 19, 26, 66 months-old





水銀曝露の指標と神経心理学的検査得点との関係

		水銀濃度: 臍帯血 母親毛髪	
フィンガータッピング	利き手	*	*
	非利き手	n. s.	n. s.
手-眼協調運動	エラー得点	n. s.	n. s.
持続型反応時間 (ms)		***	***
Wechsler 知能検査得点	Digit spans	*	n. s.
	Similarities	n. s.	n. s.
	Square root block designs	n. s.	n. s.
Bender 視覚検査	Reproduction	n. s.	n. s.
Boston ネーミング検査	No cues	***	*
	With cues	***	*
California 言語学習検査	Short-term reproduction	*	*
	Long-term reproduction	*	n. s.
	Recognition	n. s.	n. s.

n. s. ; not significant.