Water-Borne Diseases: Issues and Strategies

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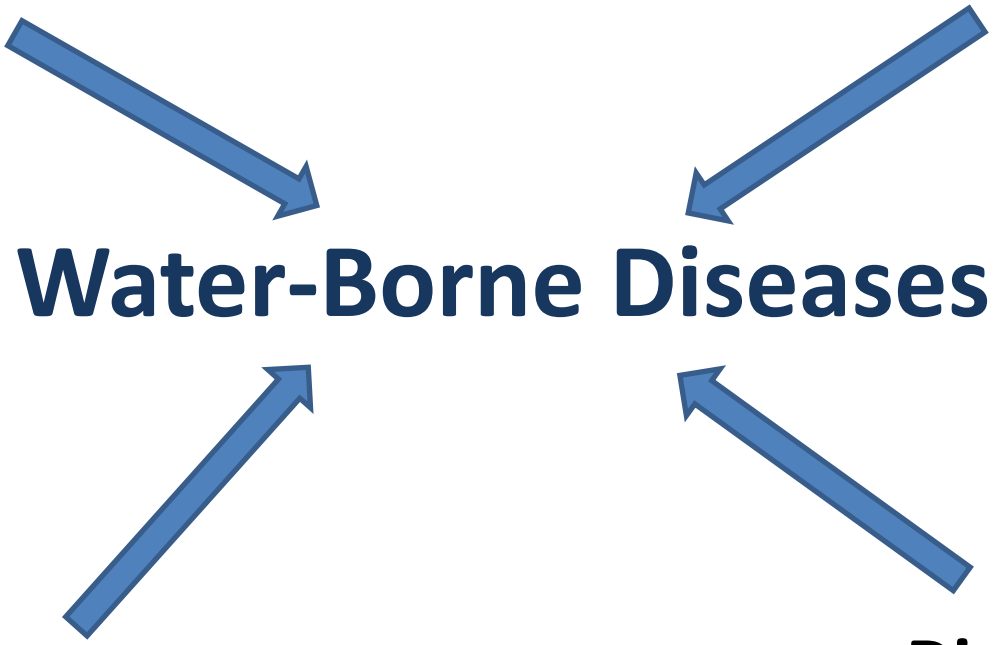
Definition of WBD

Diseases of an infectious or toxic nature caused by agents that enter the body through the consumption of water

- Diseases
- injuries

Recreational

Food & Drinks



Water-Borne Diseases

Environment

- Climate change
- Pollution
- Pathogens' lifecycle

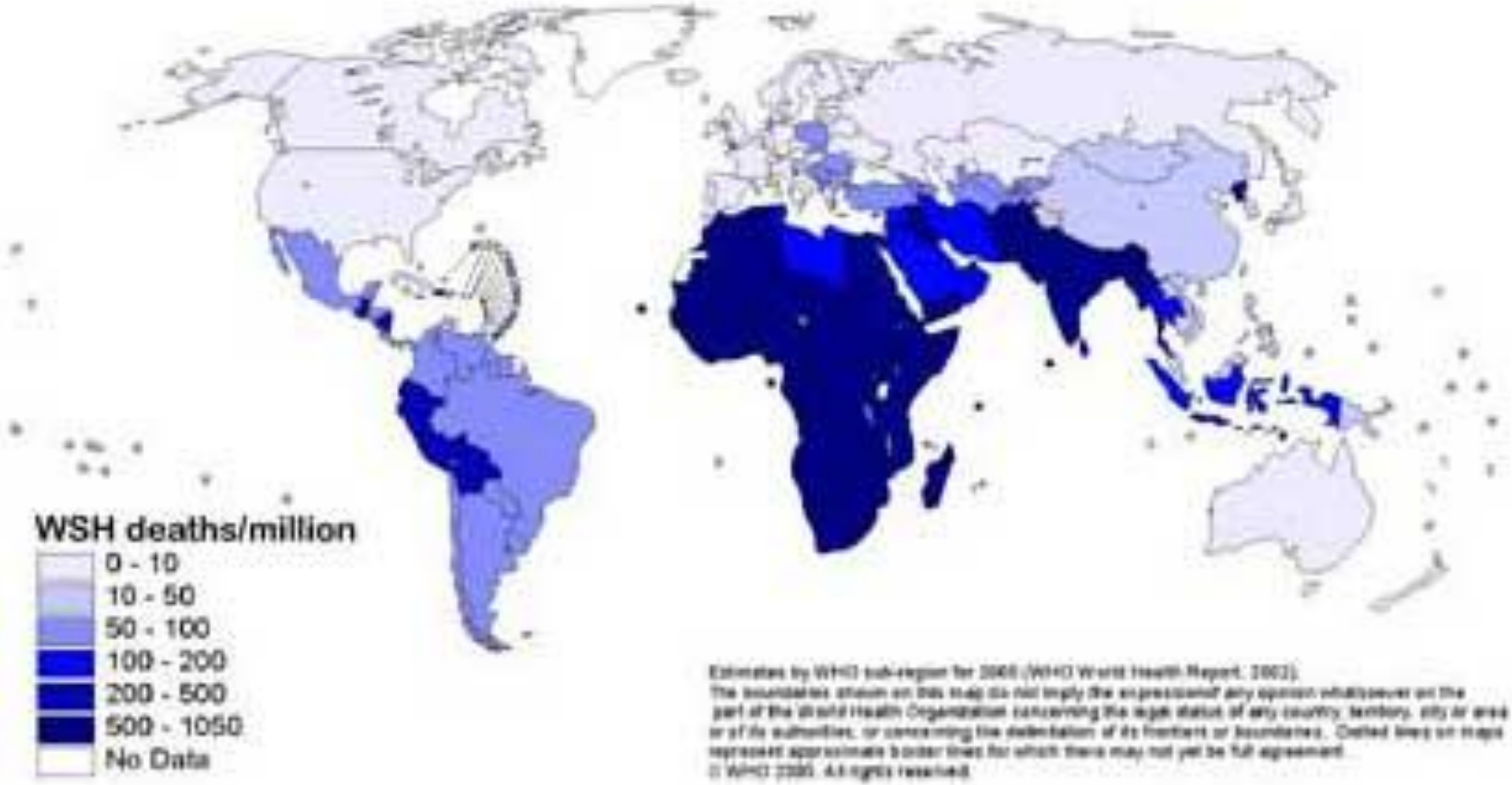
Disaster

- Flood
- Tsunami

Facts on Water Quality and Health

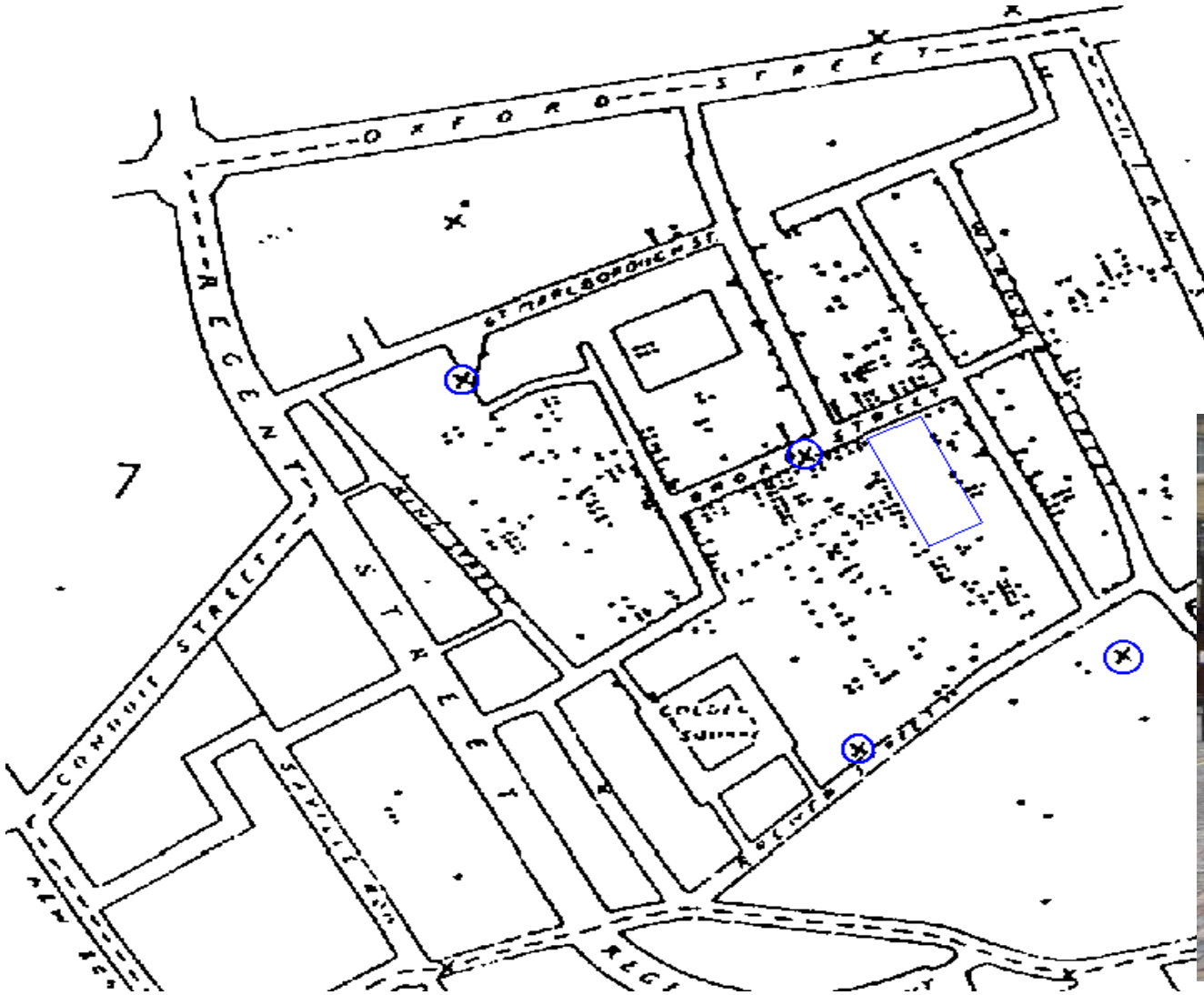
- No safe drinking-water: almost 1 billion people lack access to an improved supply
- Diarrhoeal disease: 1.8 million annual deaths attributable to unsafe water, sanitation and hygiene
- Cholera: more than 50 countries still report cholera to WHO
- Cancer and tooth/skeletal damage: millions exposed to unsafe levels of naturally-occurring arsenic and fluoride
- Schistosomiasis: an estimated 260 million infected
- Emerging challenges: increasing use of wastewater in agriculture is important for livelihood opportunities, but also associated with serious public health risks

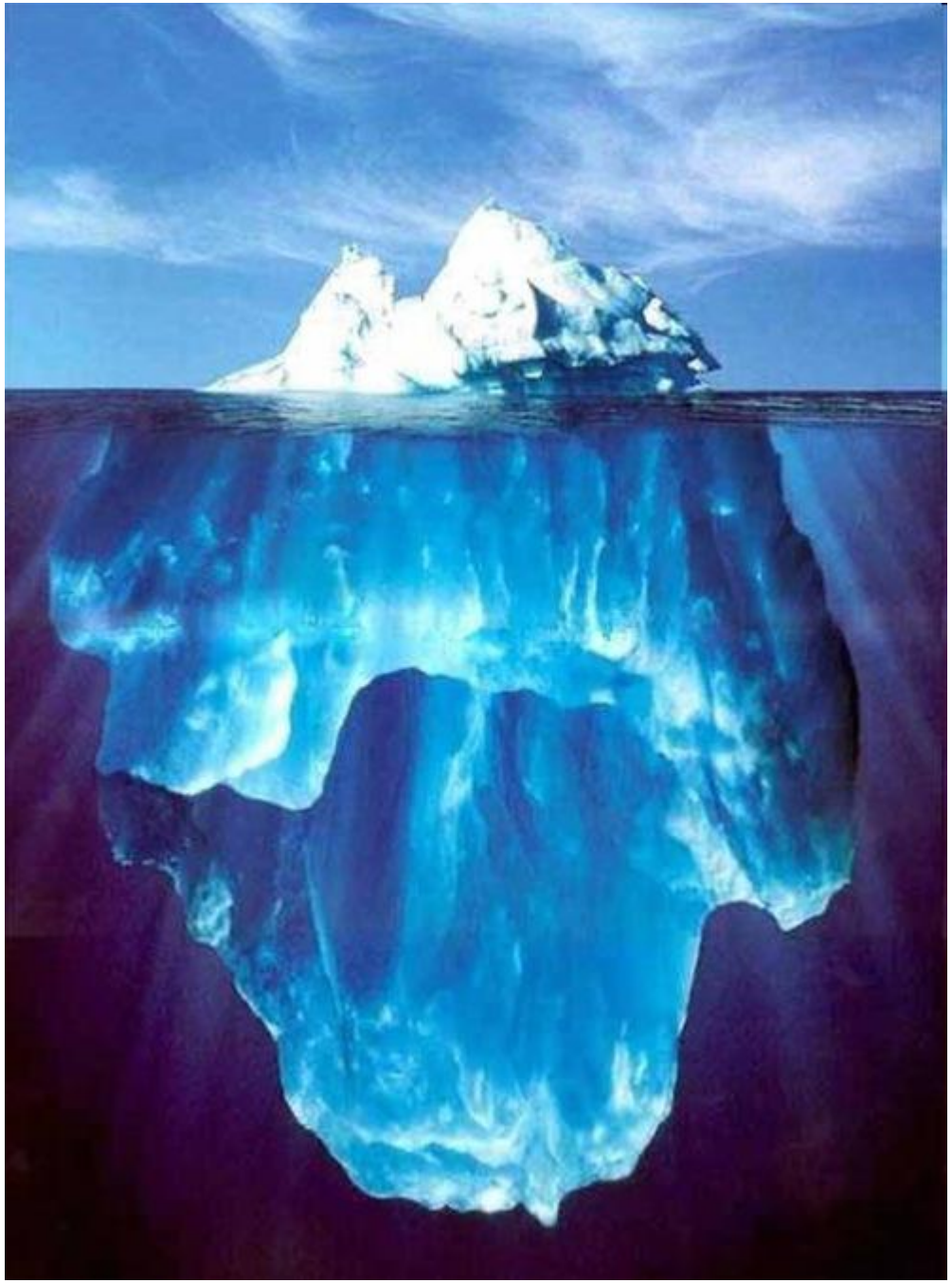
Deaths from unsafe water, sanitation and hygiene



Estimates by WHO sub-region for 2000 (WHO World Health Report, 2002).
The boundaries shown on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Cholera in Broad Street, Soho

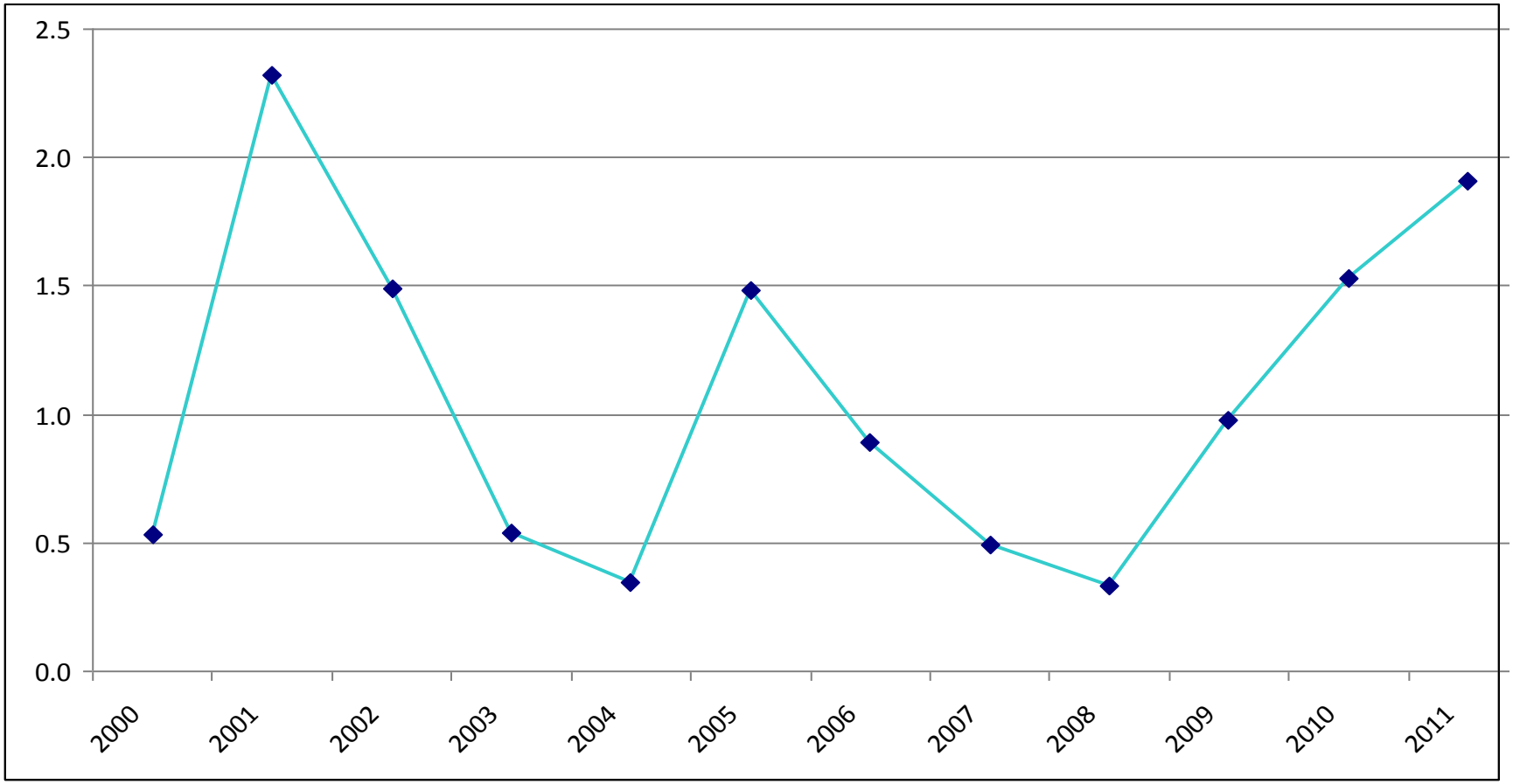




WBD

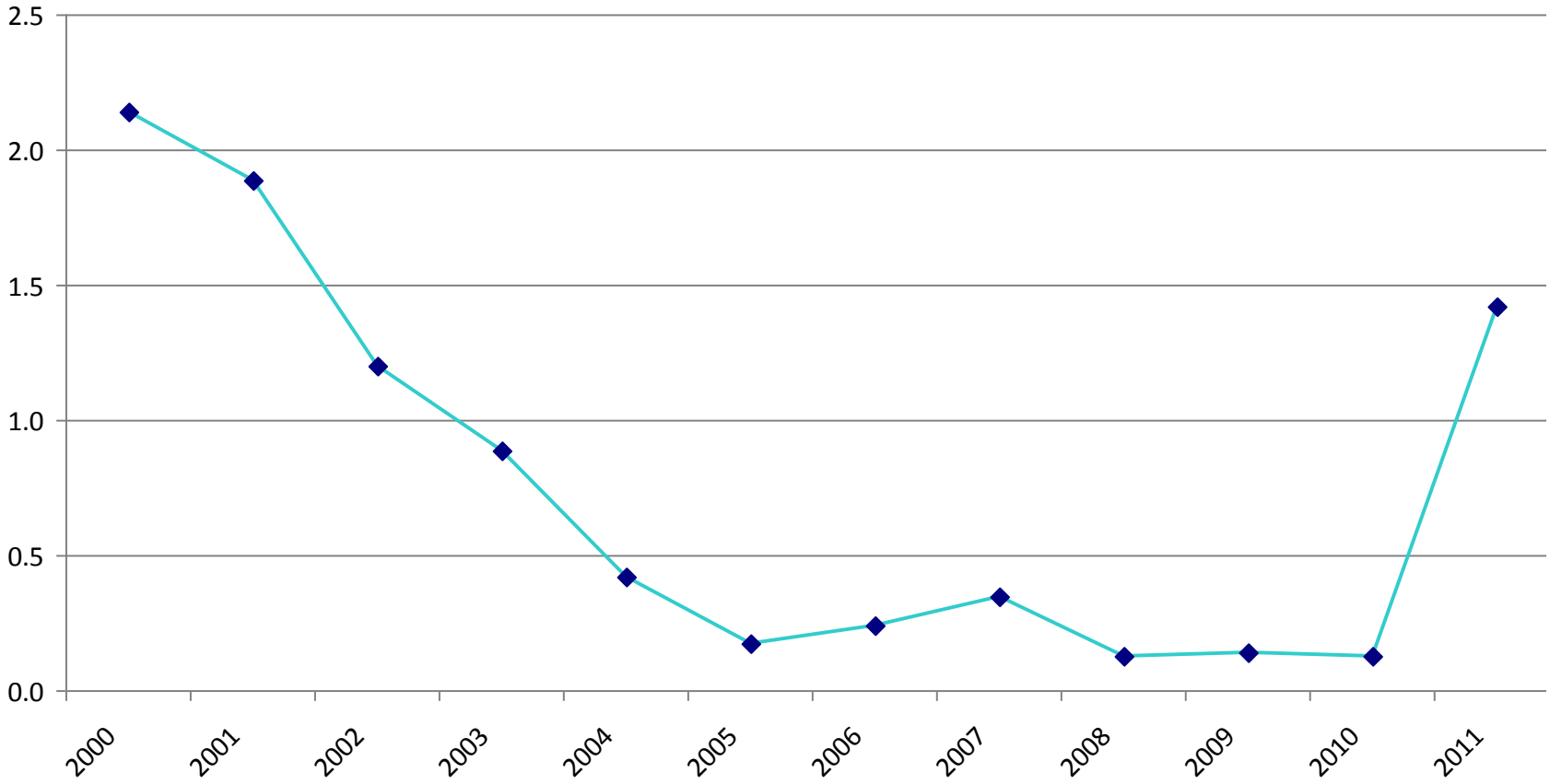
- many unreported

Incidence Rate of Cholera in Malaysia 2000-2011 (per 100,000 population)



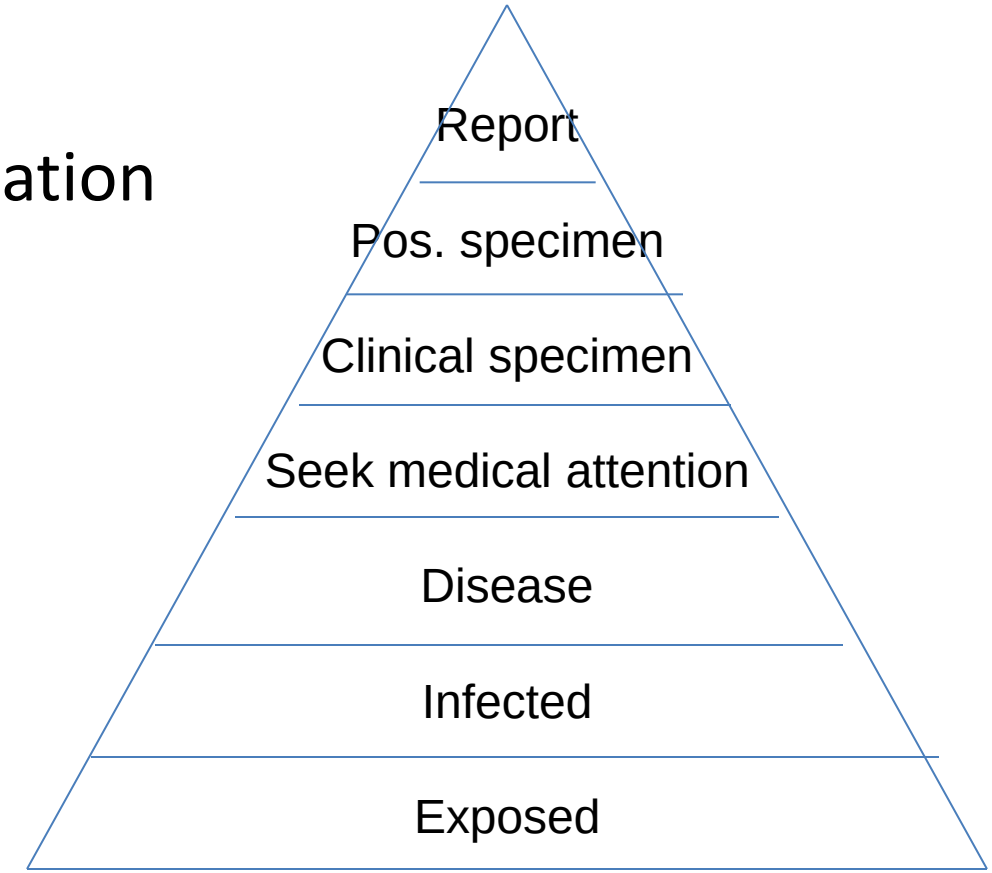
Rumah Atas Air, Sabah

Incidence Rate of Hepatitis A in Malaysia 2000-2011 (per 100,000 population)



Hepatitis A

- Common among OA
  - Hygiene
  - Water contamination



Incidence Rate of Typhoid in Malaysia 2000-2011 (per 100,000 population)

Typhoid have shown significant improvement but there are still pockets of endemic districts in the country

“Typhoid Well” Bachok
2003

Mamut Copper Mine - Ranau Sabah

History Of Mamut Copper Mine

Challenges

1. Lifestyle of certain groups
   - “Rumah atas air”
   - Mobile population
   - Immigrants
   - Hygiene

2. Contamination of catchment area
   - Plantation
   - Agriculture

3. Sharing of information
   - For remedial action
   - Enhanced disease surveillance

Prevention

- Measures of protection against pathogens:
  - prevention of contamination of water
  - prevention of growth and spread of pathogens

- Vaccination

Strategies

1. Health education
   - Boil water
   - Sanitary
   - Early treatment

2. Safe water supply for all

3. To strengthen the collaborative and coordinative activities of the various agencies

Conclusion

Water-borne diseases still a PH problem in Malaysia.

Safe water supply is the best strategy to overcome it.

Thank you