

# National Toxicological Program (NTP) Board of Scientific Counselors (BSC)

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For

The Preventative Dental Health Association

# (NTP) Board of Scientific Counselors (BSC)

- First PDHA members would like to express their appreciation for the tenacity you have displayed on this difficult job and your willingness to follow the science

# (NTP) Board of Scientific Counselors (BSC)

- Paradigms are not easy things to change: for example
  - Asbestos was linked to cancer in the 1930's
  - Asbestos was removed from intra oral bandages in 1980
  - Lead was introduced for the model A Ford in 1929
  - Lead was removed from automobile fuels in 1980
  - Lead remains in Aviation fuels and
- Baby foods, drinking fountains, spices and housing

# (NTP) Board of Scientific Counselors (BSC)

- Toxicology has changed
  - The old toxicology before lead was a “lot of a toxin may kill you but a little bit is harmless”
  - The human body is marvelous at removing poisons
  - 1972 Needleman by measuring IQ outcome found the young adults exposed to 50 PPB lead in home drinking water had significantly lower IQ than those drinking 20 PPB
- I tiny bit of data will destroy a perfectly good theory
- It should not take 50 years to discover a toxin is toxic
  - But it does and the reasons are obvious
  - Change takes thought and planning
  - Money is always involved

# The Preventive Dental Health Association

- Risk Assessment for Ingested Fluoride 1997
  - 3 day of expert review testimony
  - 1997 The same year the poison control centers reported 10,000 calls annually from ingested fluoride and put a warning on toothpaste

# The Preventive Dental Health Association

- Risk Assessment for Ingested Fluoride
  - **Conclusion: Increased health risks with increasing fluoride intake**

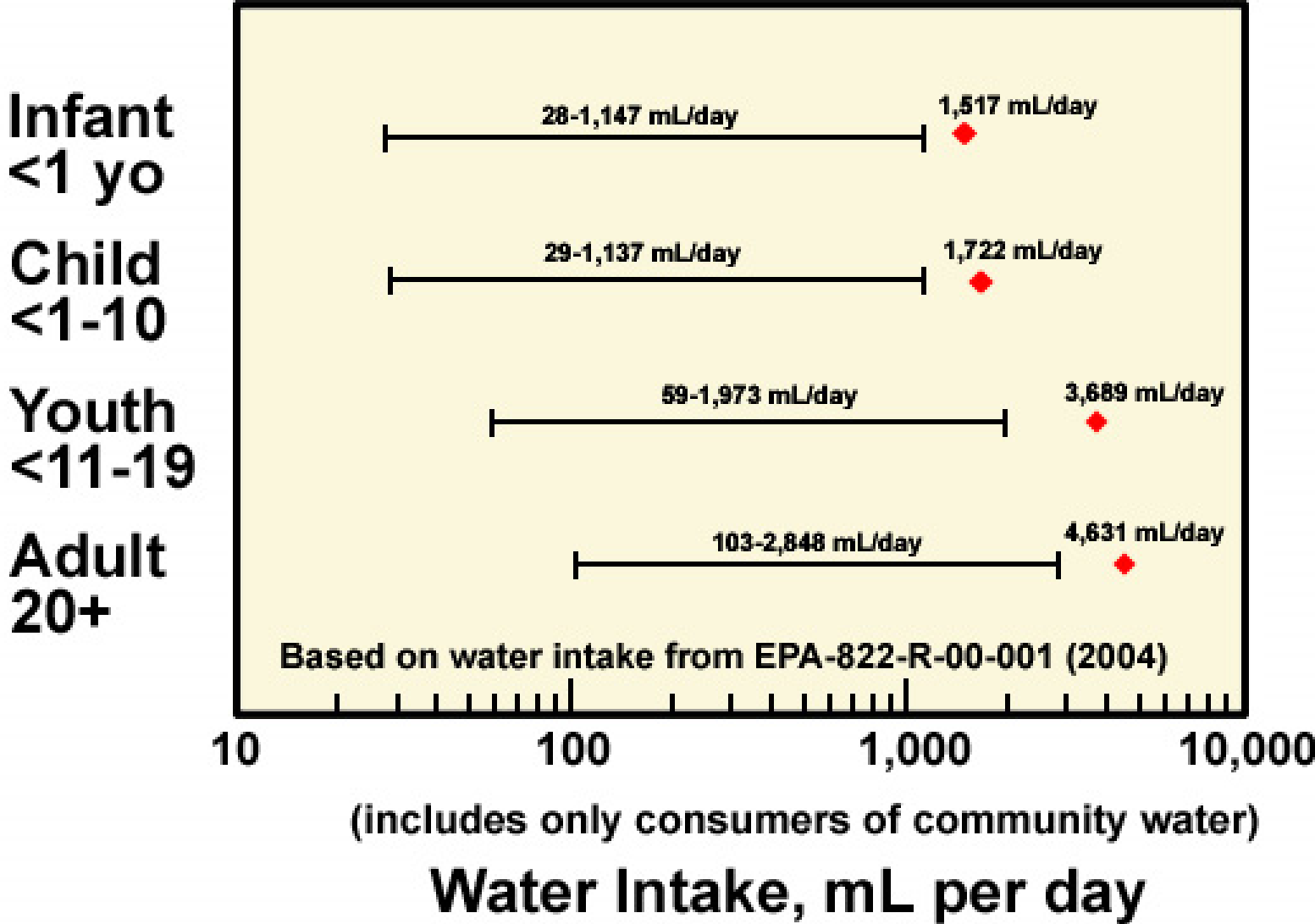
# **Adverse Health Effects from Fluoride in Drinking Water**

**Metropolitan Water District  
Public Hearing**

**Los Angeles, California  
August 20, 2007**

**Kathleen M. Thiessen, Ph.D.  
SENES Oak Ridge, Inc., Center for Risk Analysis**

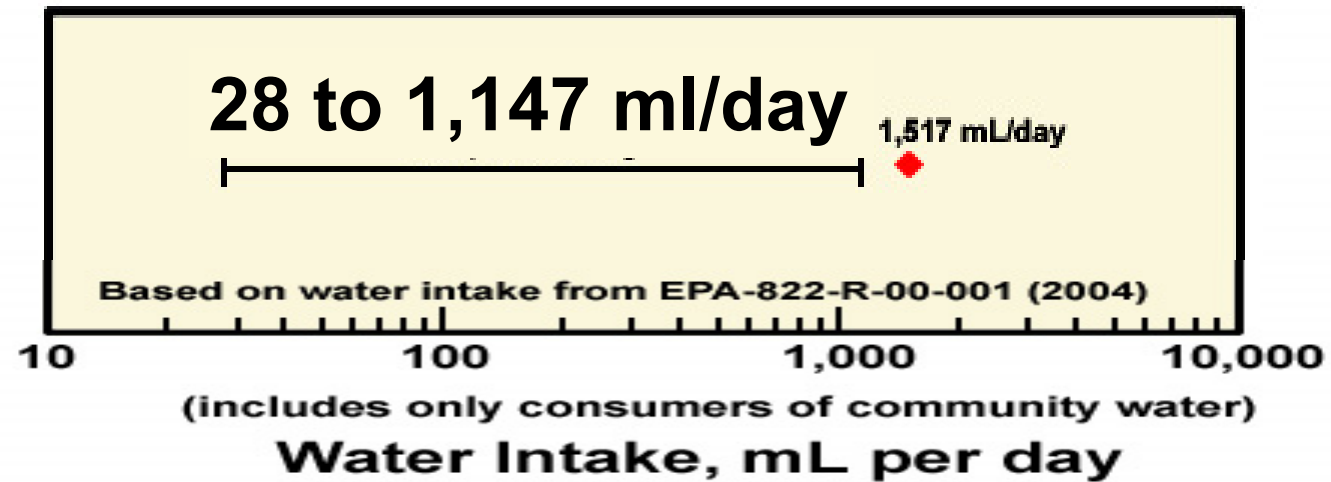
# Range of intake of community water





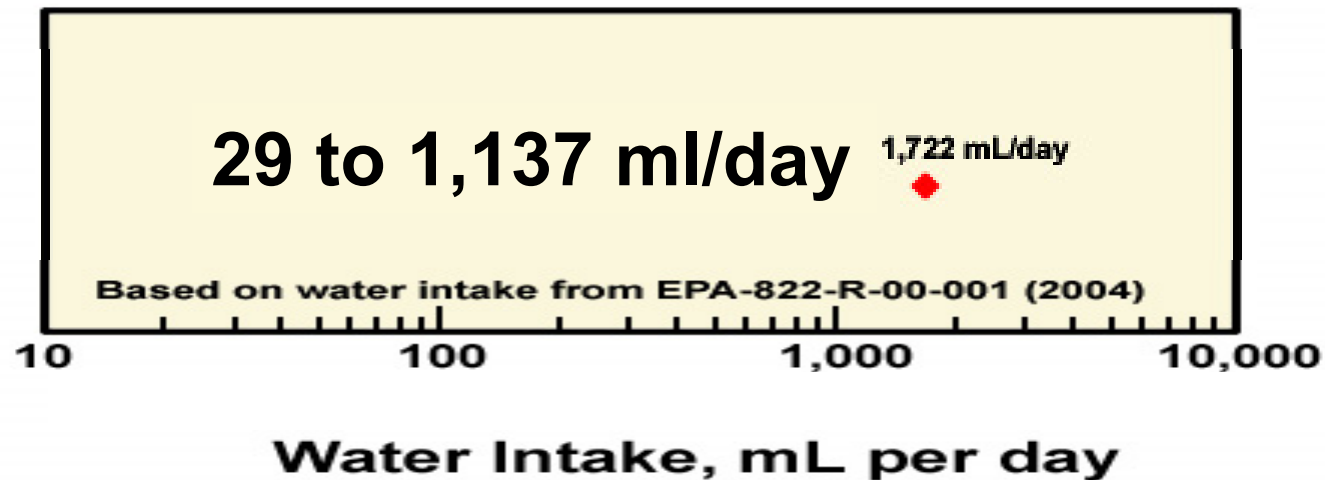
# Range of Intake Community Water

## Infants up to 1 year old



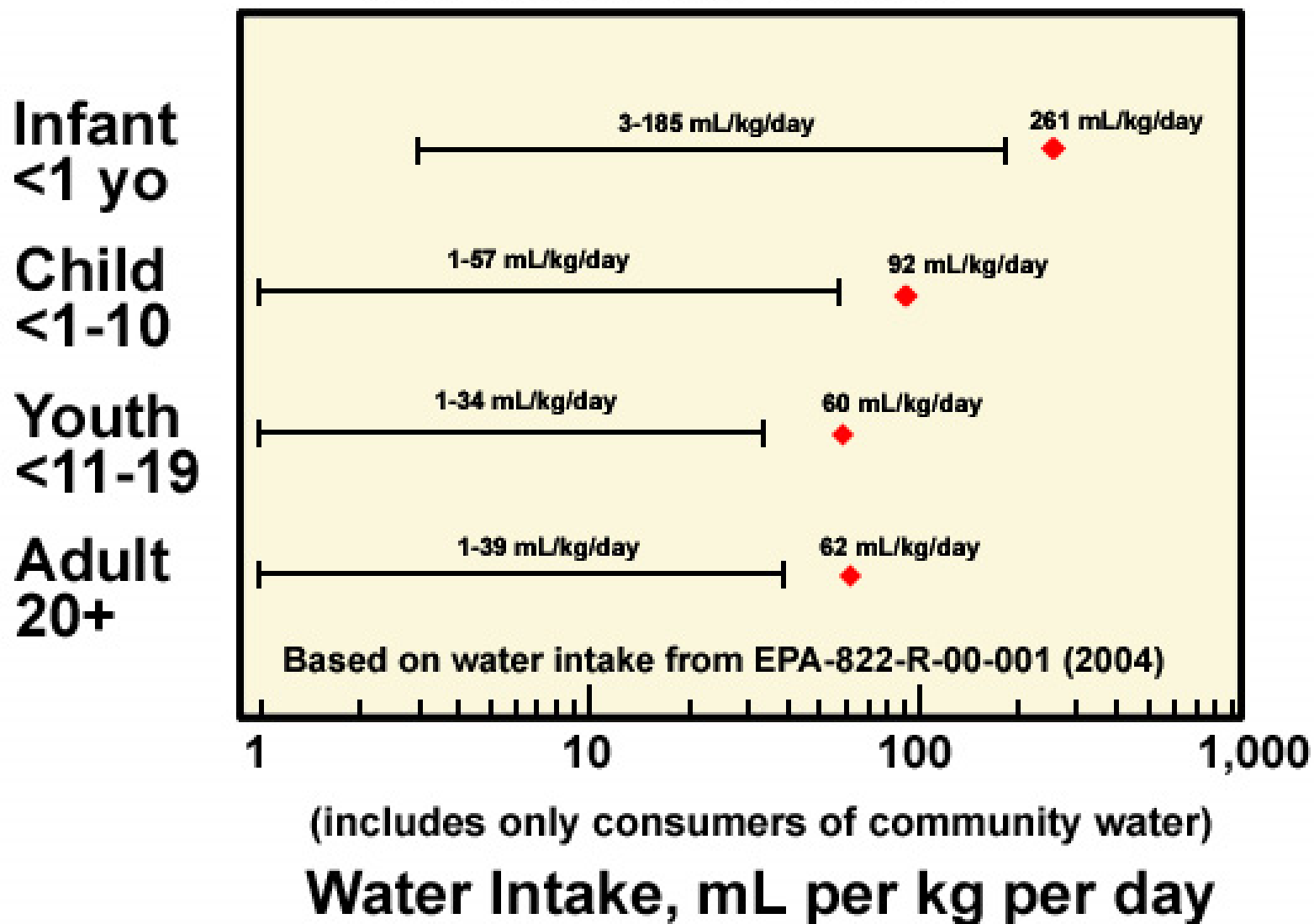
# Range of Intake of Community Water

## 1-10 years old

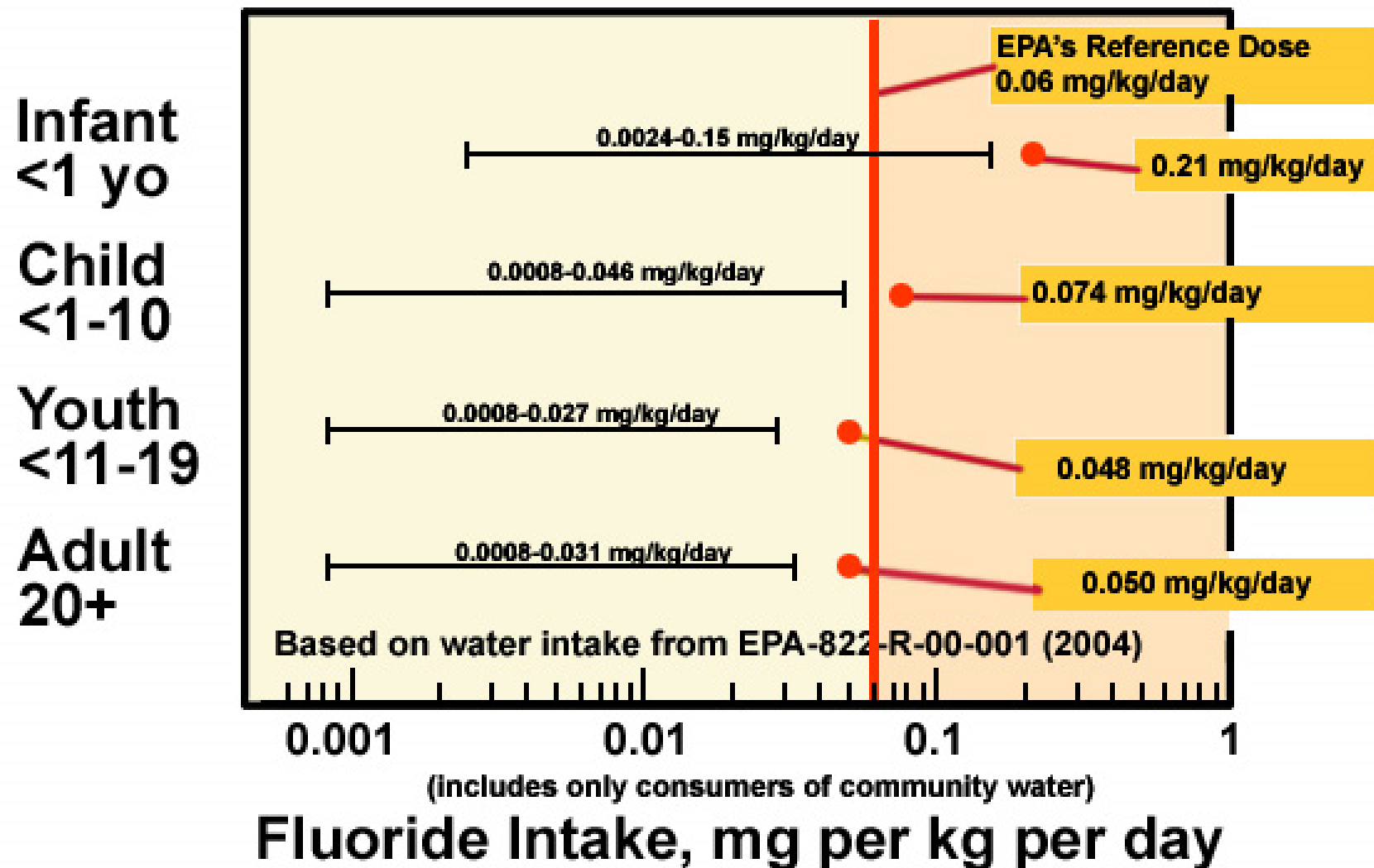


**Data includes only consumers of  
community water**

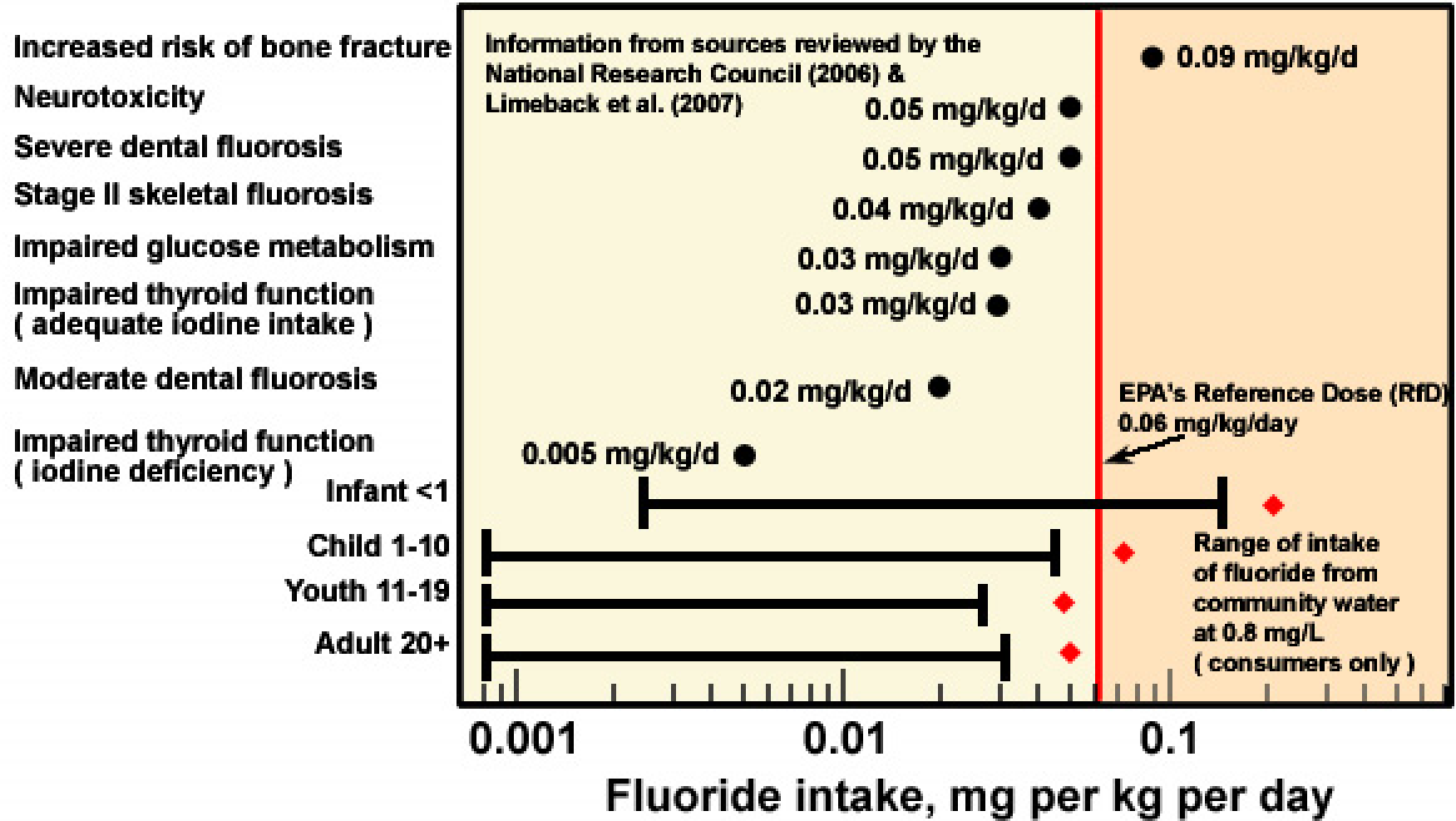
## Range of intake of community water, per unit body weight



# Range of fluoride intake from community water, assuming 0.8 ppm fluoride in the water



# Estimated “No-effect” levels in humans



Note also that most of these “no-effect” levels are exceeded by many members of the population, of all ages, just from fluoride at 0.8 ppm in community drinking water.

Note also that most of these “no-effect” levels are lower than EPA’s reference dose for fluoride.

In other words, EPA’s reference dose is not protective for most of these health endpoints.

When other fluoride sources are included, even more people are expected to exceed the “no-effect” levels.



This list of adverse health effects does not include cancer. A carcinogenic (cancer-causing) effect of fluoride cannot be ruled out from the available data, and at the very least, a cancer-promoting effect is likely.

For carcinogenic substances, the risk of cancer increases with the amount of exposure, such that even a very low exposure carries with it some cancer risk.

Director of Laboratories,  
Department of Water Supply,  
Gas and Electric  
City of New York  
Presentation made in 1956 but  
still relevant today:

It is obvious from the knowledge of fluoride toxicity that such factor of safety cannot be established when fluoride is added to the public water supply at the level recommended by the proponents of fluoridation.



It must be concluded that the fluoridation of public water supplies is a hazardous procedure, people are bound to get hurt, it remains to find out how many and when.