

# Understanding the health risk from exposure to low levels of 1,4-dioxane in drinking water

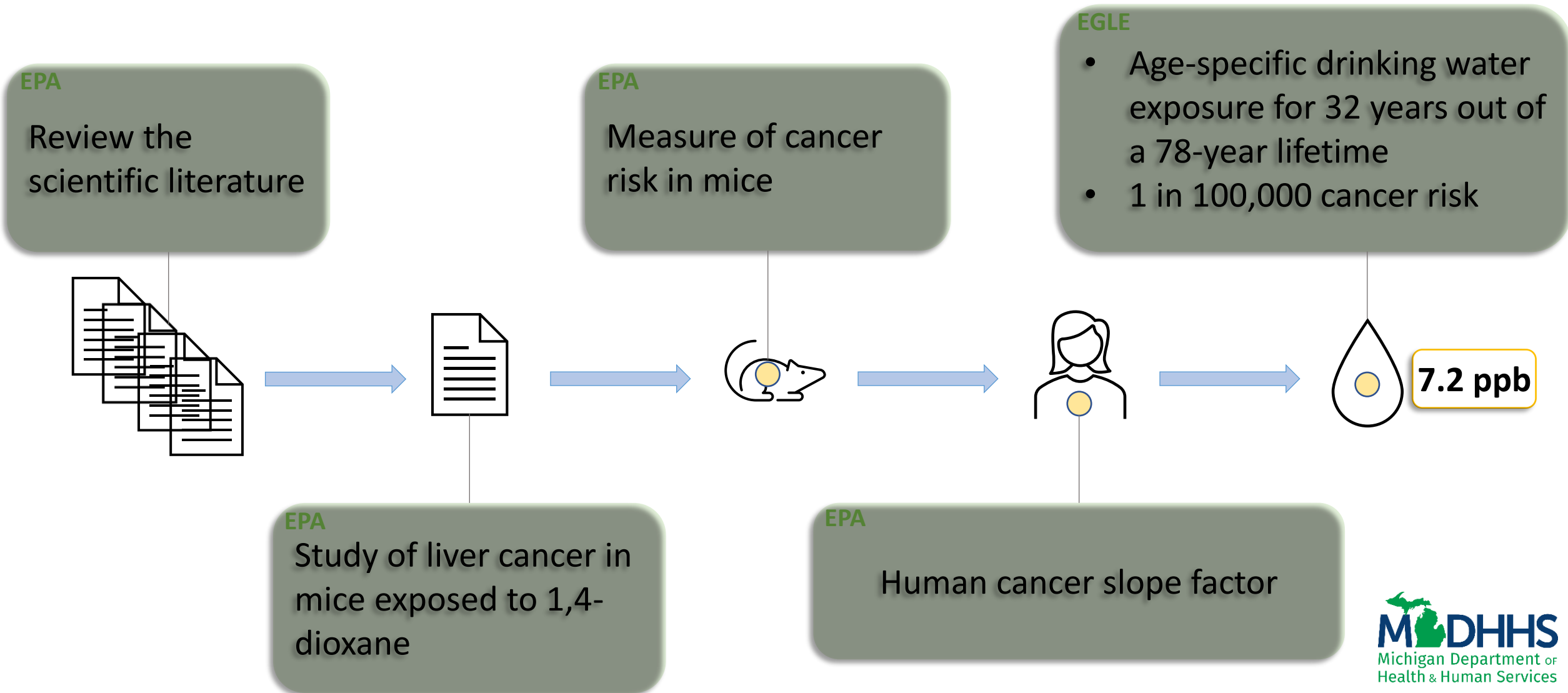
Michigan Department of Health and Human Services (MDHHS)

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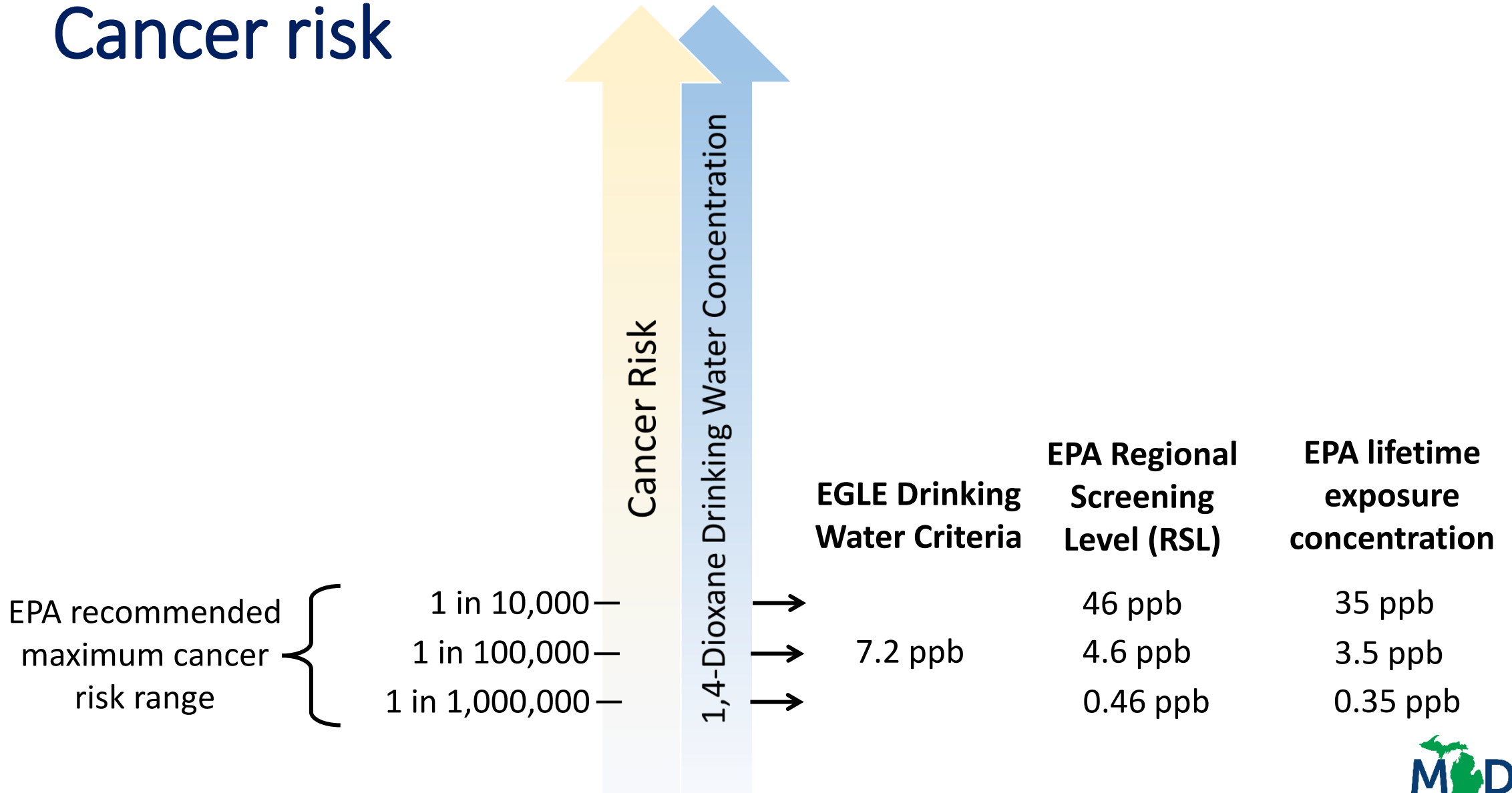
# What are screening levels?

- Conservative values used to determine whether exposure poses a potential risk, and whether any follow up actions are needed
- EGLE drinking water criteria are regulatory values used for enforcement purposes.
- Exposure above a screening level/criteria does not necessarily mean that a person will experience health effects
  - Based on conservative exposure assumptions
  - Protective of the whole population, including sensitive individuals

# 1,4-Dioxane EGLE drinking water criteria

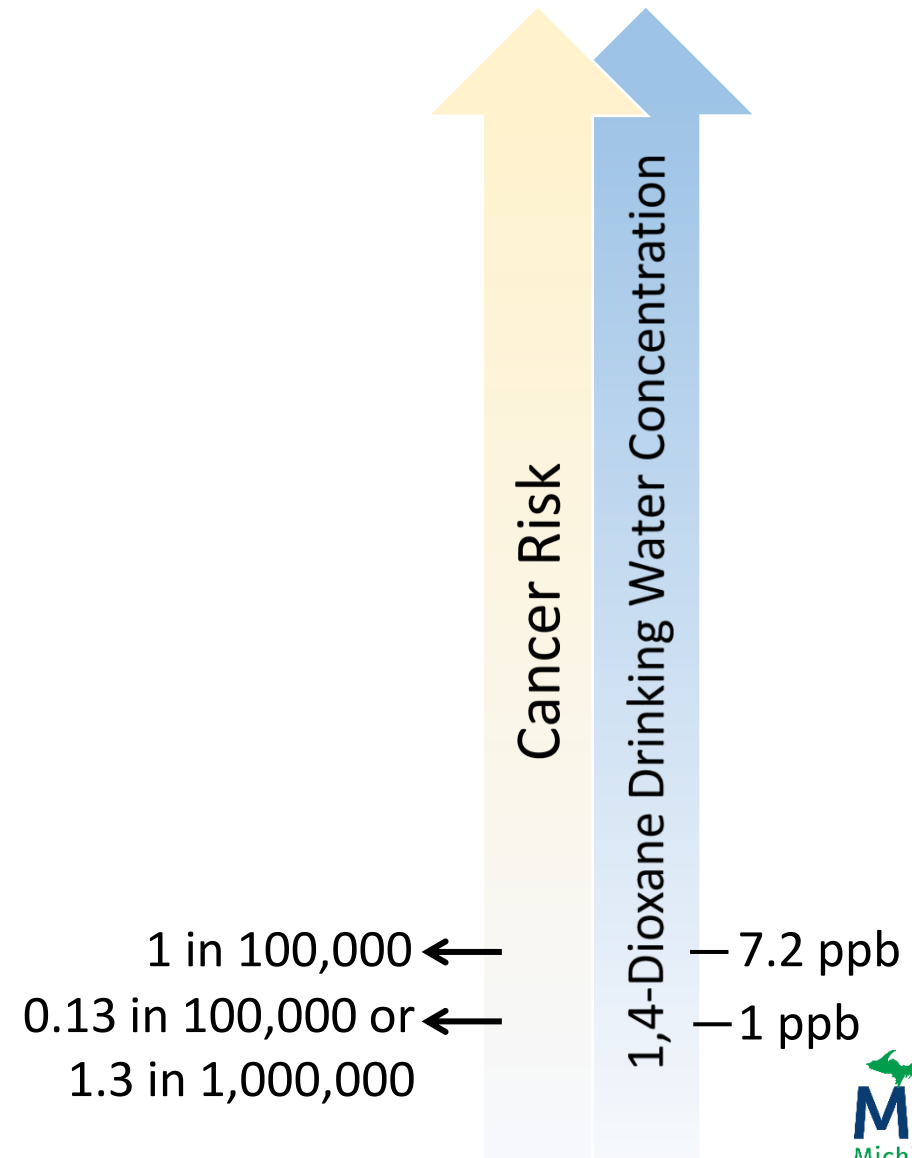


# Cancer risk



# Exposure to low levels of 1,4-dioxane in drinking water

- Noncancer health effects
  - EPA noncarcinogenic screening level = 57 ppb
  - Threshold below which noncancer health effects are not expected
- Cancer
  - No threshold, just lower levels of risk as exposure concentration decreases
- Exposure below 7.2 ppb would pose a cancer risk of less than 1 in 100,000
  - Not intended to represent actual risk to the community



# Questions?

- Please feel free to contact us if you have any questions related to 1,4-dioxane and health.

MDHHS Division of Environmental Health (DEH)

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