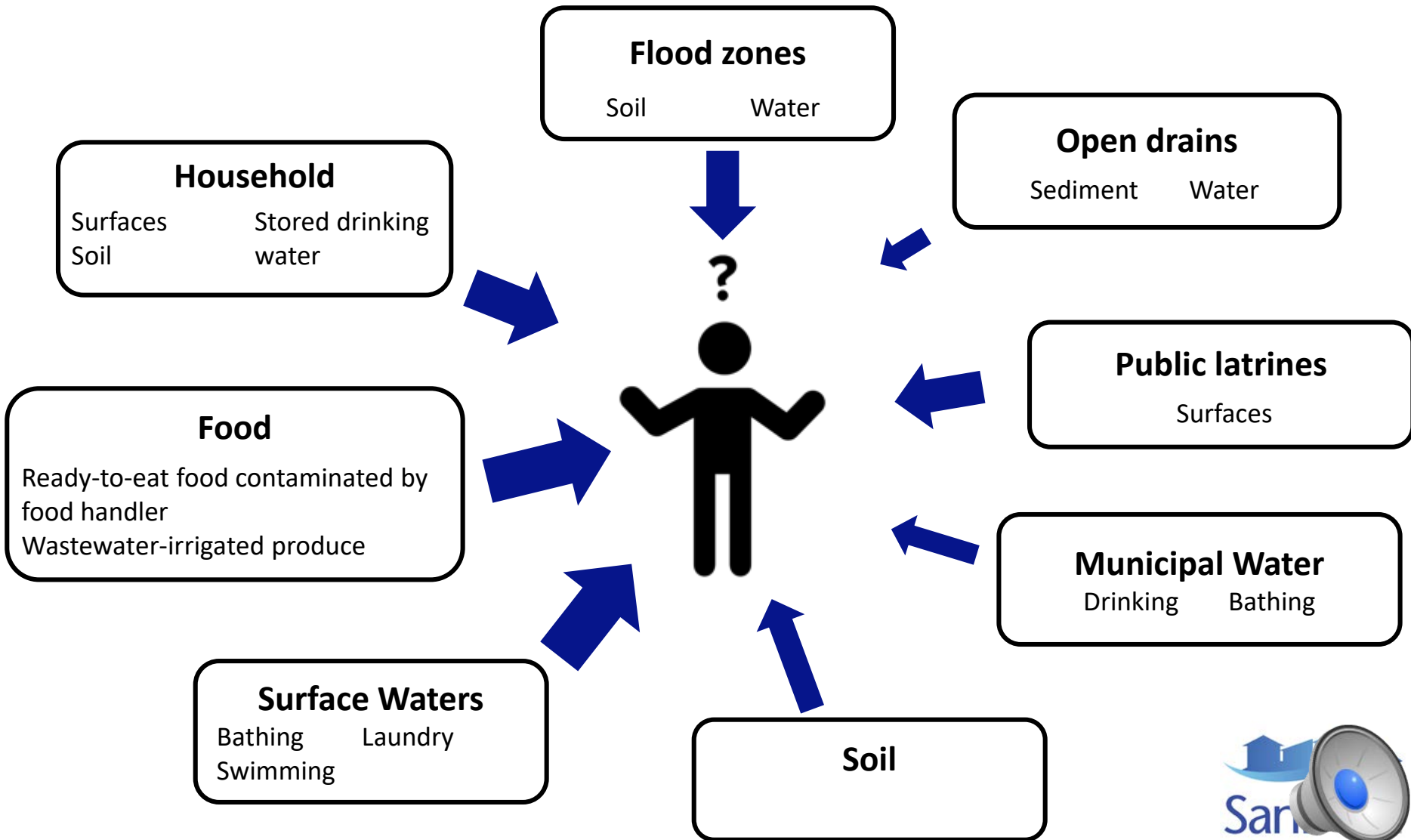


What is the risk of exposure to fecal contamination in the urban environment? Which pathways pose the greatest risk?



The SaniPath Tool Assesses Risk of Exposure to Fecal Contamination in the Urban Environment

Primary Data Collection

- **Exposure Behavior**

- Reported frequency of behavior of adults and children that may lead to exposure to fecal contamination



- **Fecal Contamination**

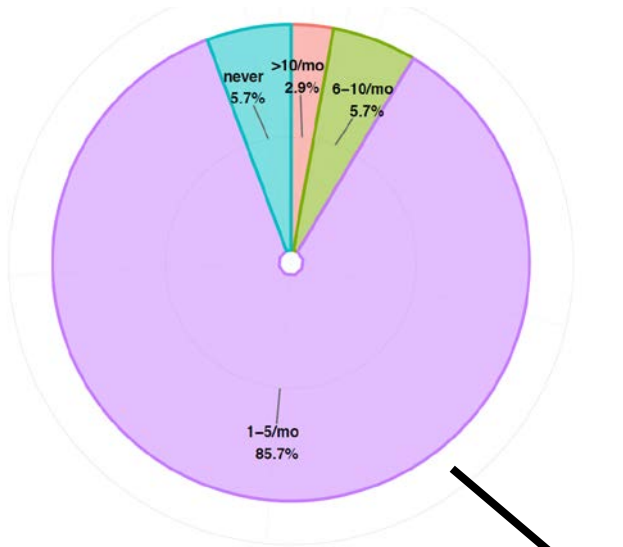
- Collect environmental samples from relevant exposure pathways
- Analyze for *E. coli* as an indicator of fecal contamination



SaniPath Approach for Estimating Exposure to Fecal Contamination

Behavior Frequency

Frequency of produce ingestion (Children)



Tool uses Bayesian analysis to estimate the distribution of environmental contamination and frequency of exposure.

Other parameters:
intake volumes,
duration of
exposure, etc.

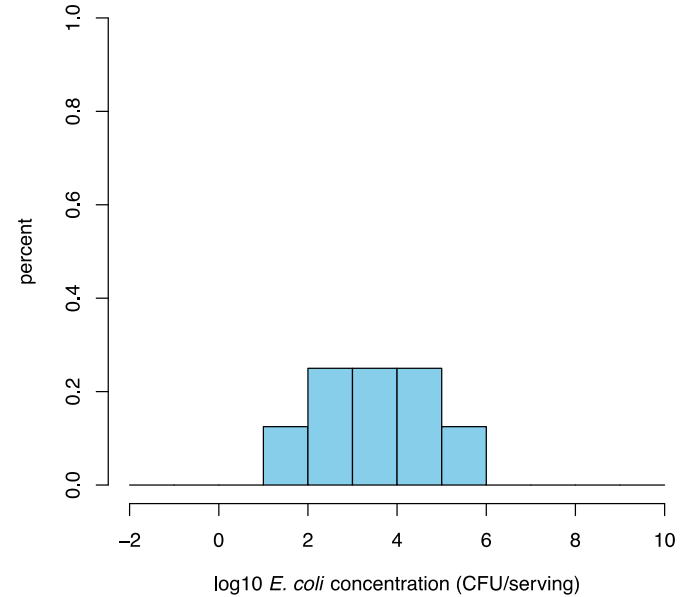


Produce (Children)
Percent Exposed = 95%
Log10 Dose 7.1



Environmental Contamination

Produce samples



The mean dose and proportion of the population exposed are summarized from simulated distributions and displayed as risk profiles



SaniPath Risk Profiles: Results for 3 pathways in 3 cities

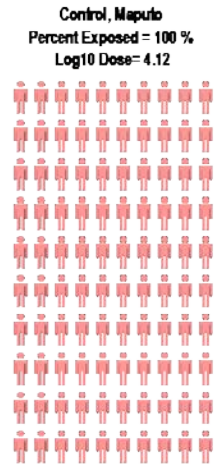
Greatest differences between the 3 cities in the magnitude of fecal contamination and exposure to open drains

Open Drains



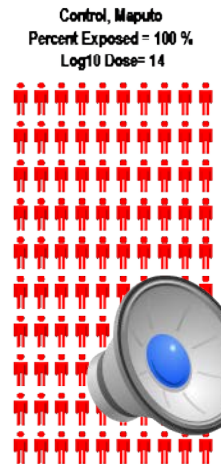
Moderate fecal contamination of drinking water, but high proportion of population exposed

Drinking Water



Produce was highly contaminated in all 3 cities, but proportion of the exposed population varies by city due to cultural differences in diet

Uncooked Produce





SaniPath

Thank You

For more information visit
SaniPath.org



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