Understanding the Links between WASH & Child Nutrition - Part III

Tuesday, December 6, 2022 | 8:00-9:00 am ET

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PRO-WASH
Practices, Research and Operations in Water, Sanitation and Hygiene

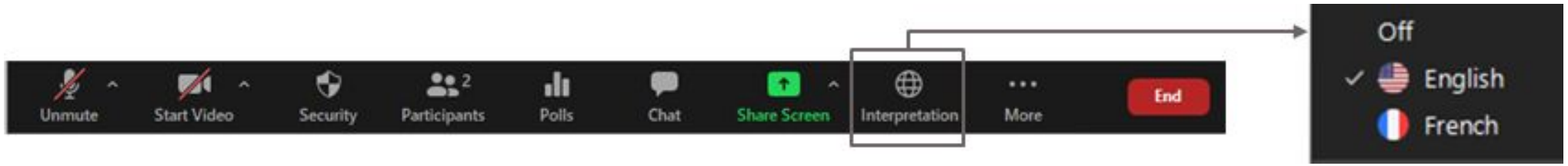
BEFORE WE BEGIN...

Everyone must select a language!

Click “interpretation” at the bottom of your Zoom window and select English or French.

Chacun doit choisir une langue !

Cliquez sur « interprétation » au bas de votre écran Zoom et sélectionnez anglais ou français.



Post your questions in the chat box at the bottom of your screen.

MODERATOR & PRESENTERS

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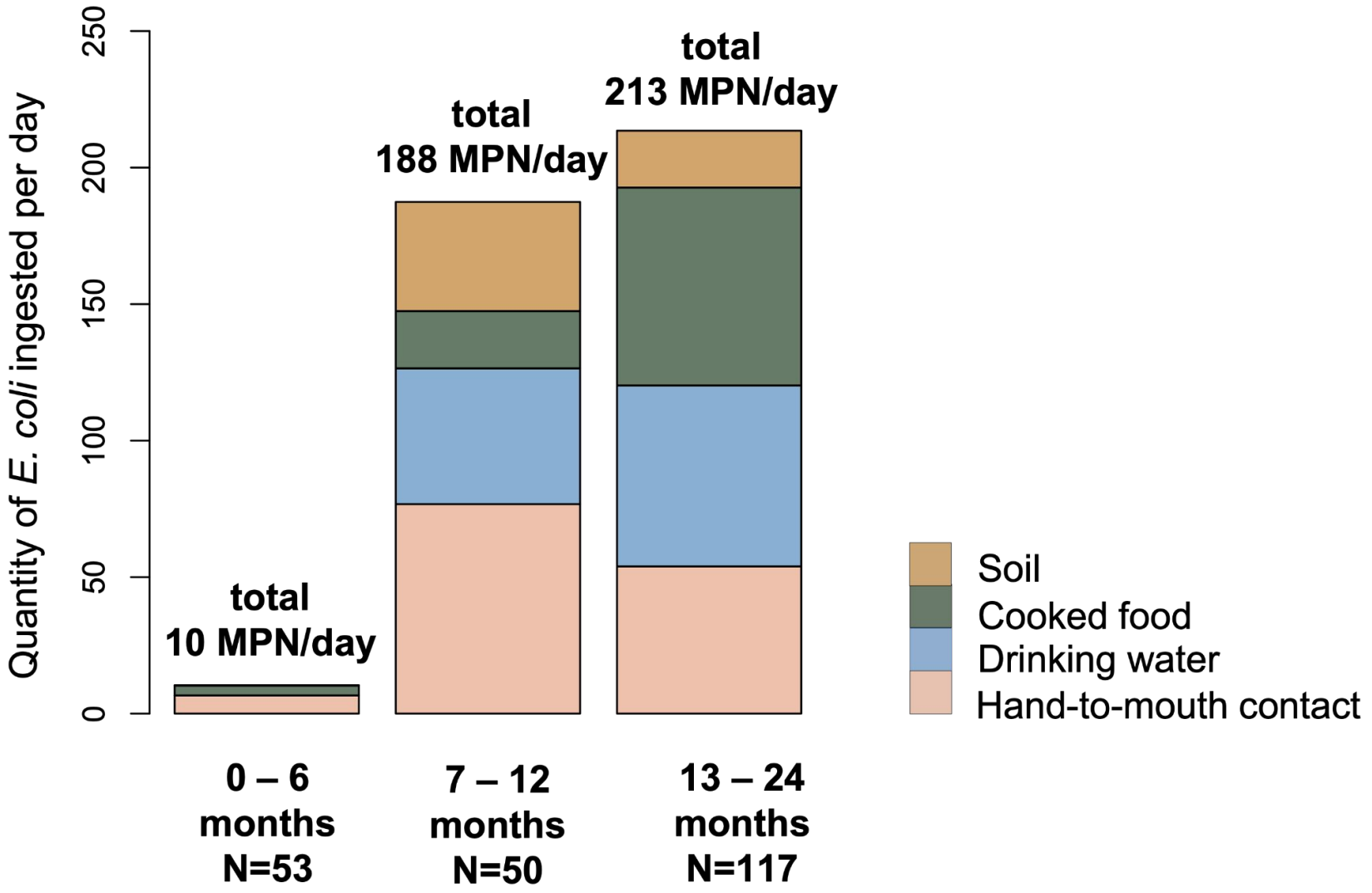
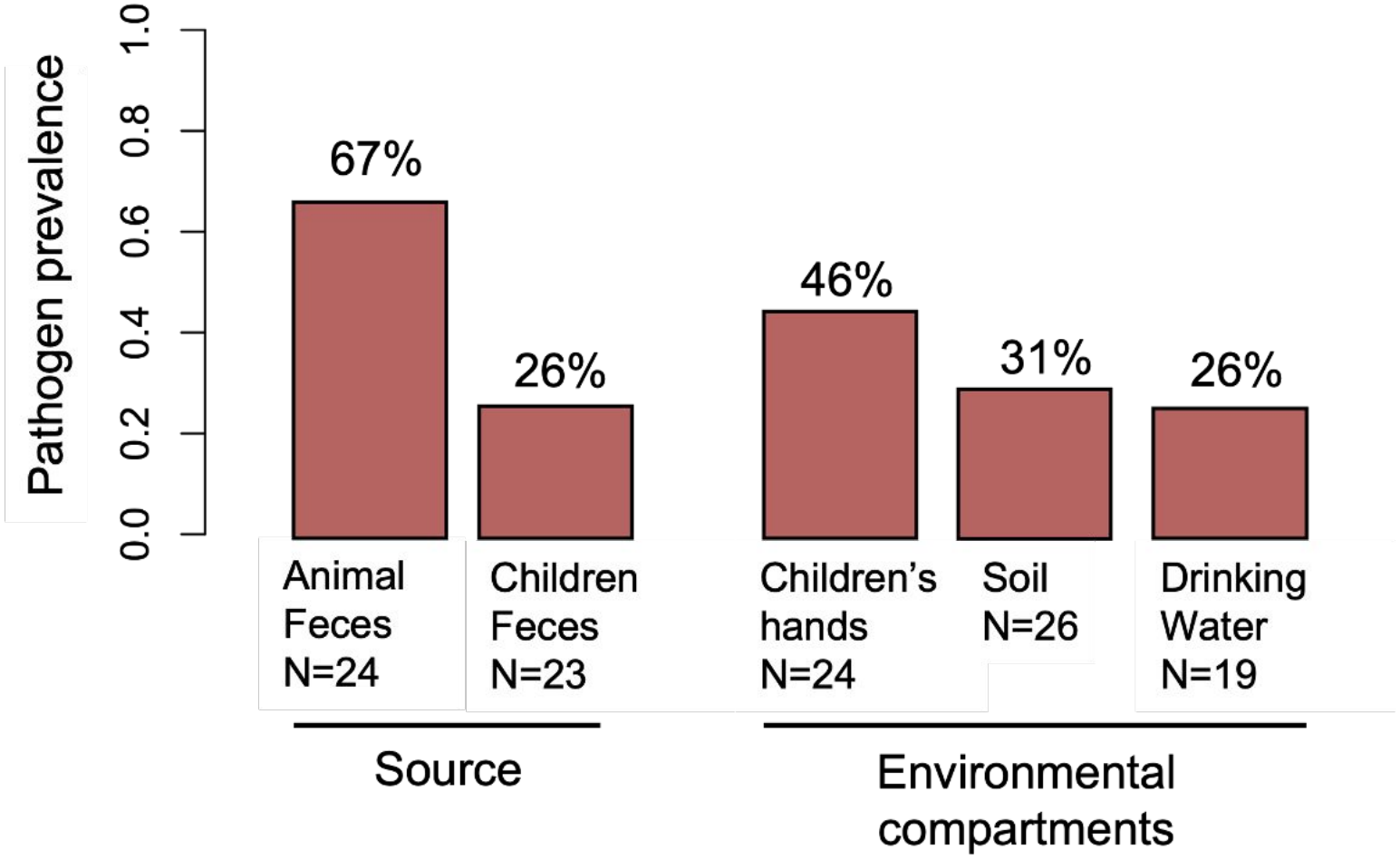
Madagascar Results

Children 7-24 months old ingest the most fecal matter, coming from all studied compartments



Pathogen analysis suggests that animal feces and hand-to-mouth contact are important infection pathways



Kenya Results

Pathogen transmission to children under two in Turkana South and Samburu North, Kenya

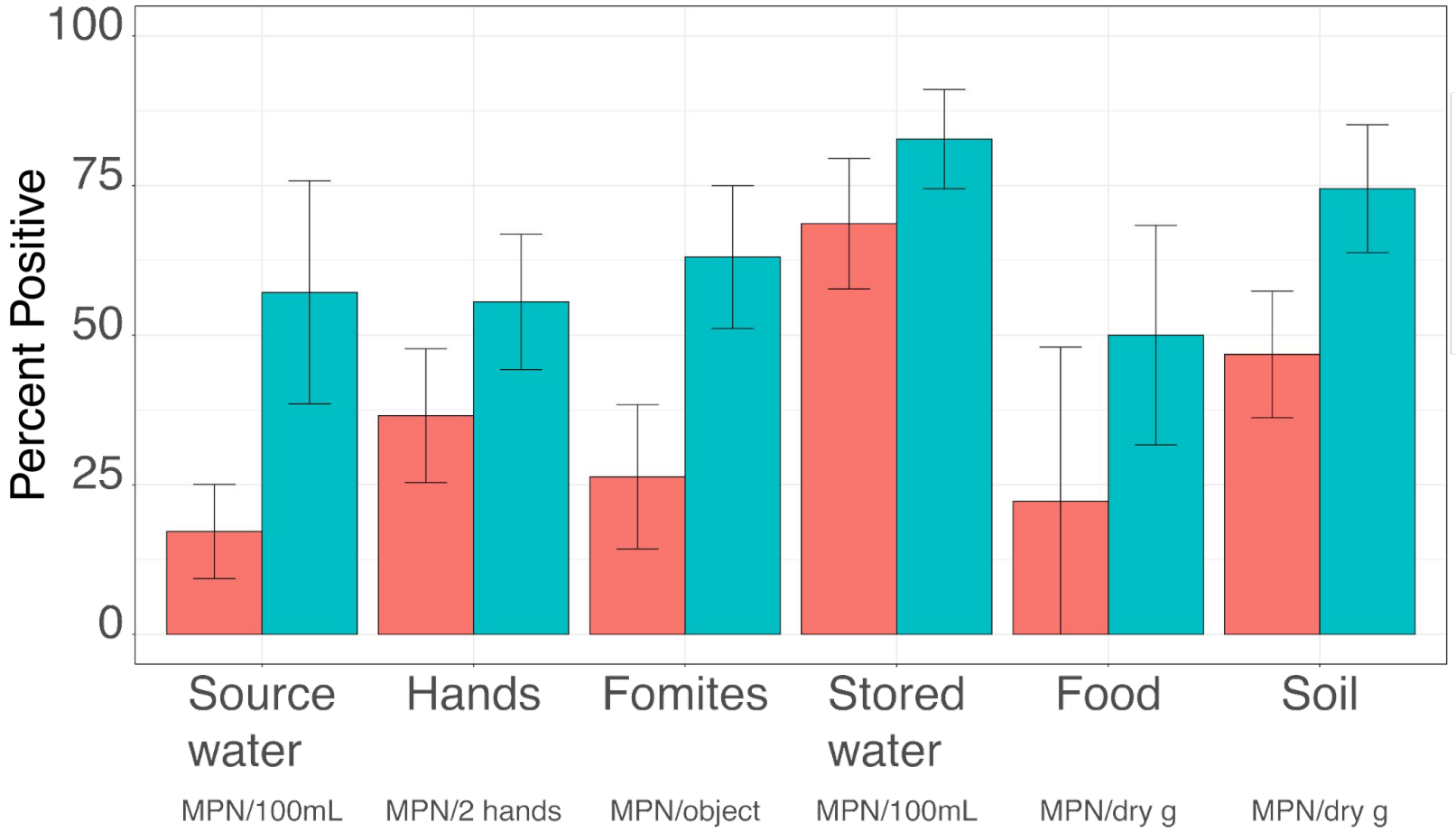
Presented by:

Abby Harvey, UC Berkeley

John Mboya, UC Berkeley & IPA

Principal Investigators: Amy Pickering, Angela Harris, Sammy Njenga

E. coli (proportion contaminated) in household environmental reservoirs



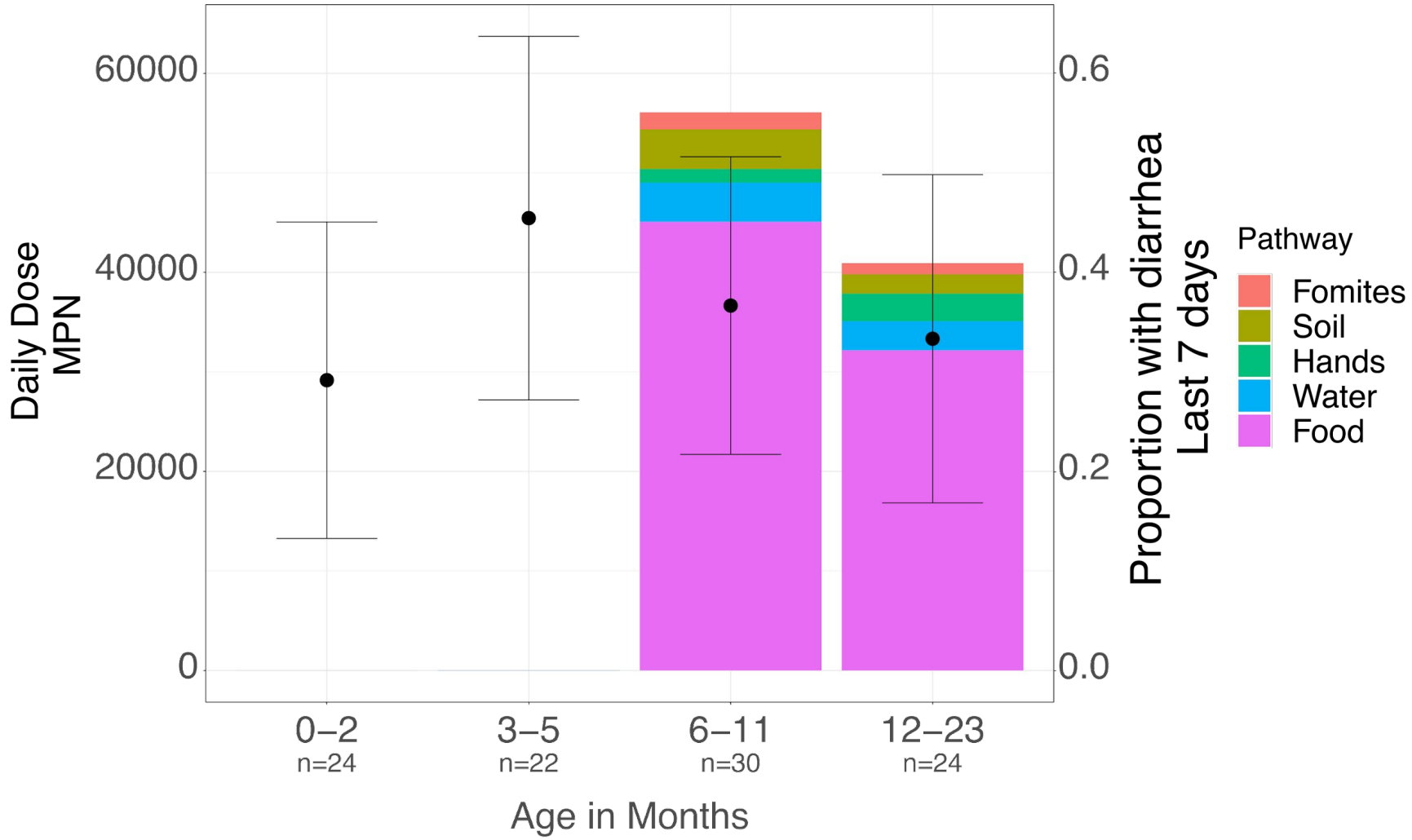
N=100 (Samburu=50, Turkana=50

Higher prevalence in Samburu North

Stored water more likely to be contaminated than source water.

High levels in food

Diarrheal prevalence high even in age groups with low *E. coli* doses

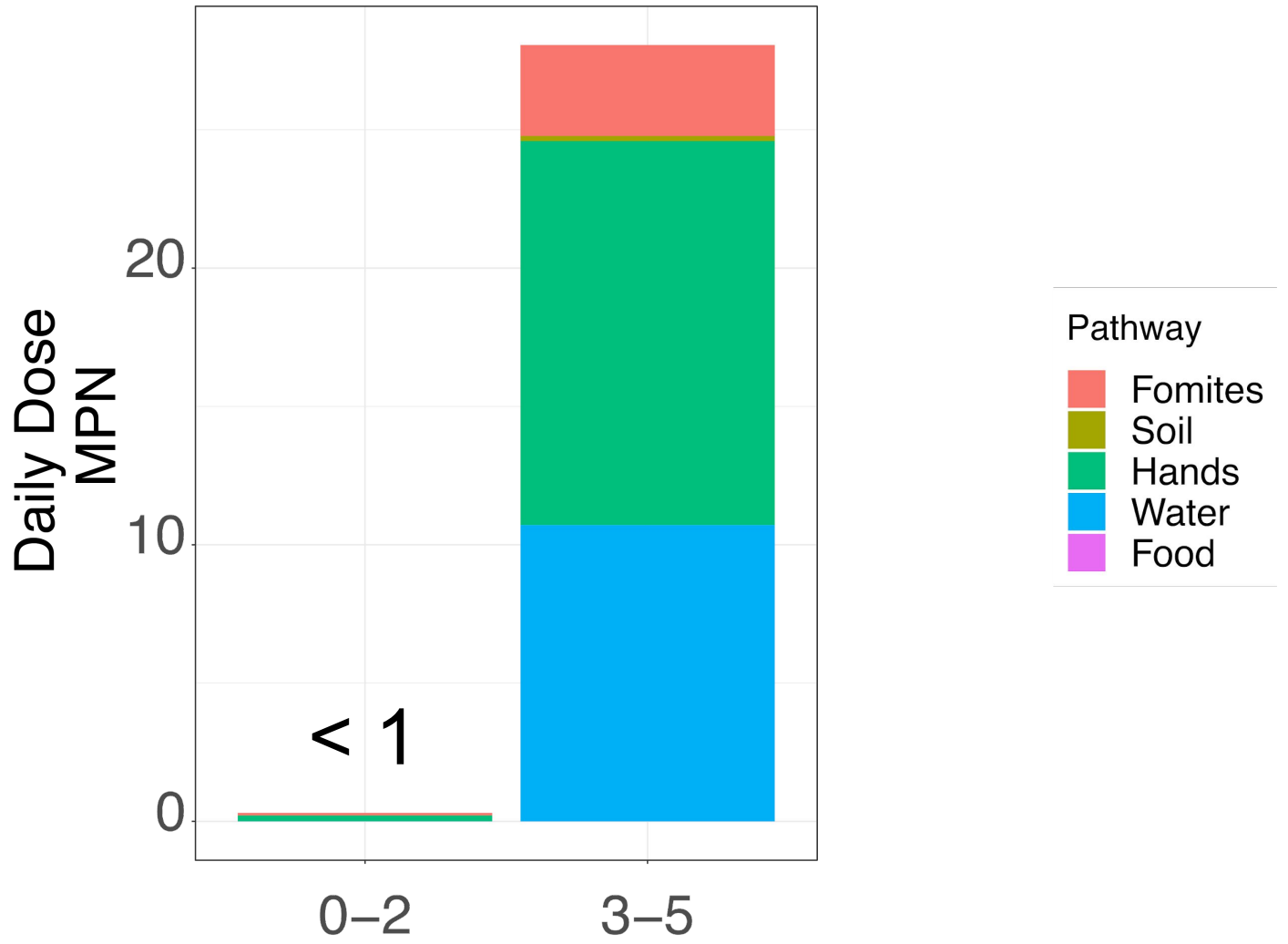


Infectious Dose is plausible for many pathogens

EHEC: <100 cells
O157:H7 <100 cells
Shigella: <100 organisms
Campylobacter: 500 organisms

Giardia: 25-100 cysts
Cryptosporidium: ~100 oocysts
Norovirus: 18 cells

QMRA: Food, hands, and water are dominant exposure pathways



Children over 6 months are exposed to highest *E. coli* levels.
Food dominant pathway for children who consume food

Multiple pathways are important for exposure to *E. coli*
Kids are mouthing household objects, often picked up from the ground

Q&A Session

Thank you!

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