



Community of Practice



3rd IWA Development Congress & Exhibition

CATALYSING URBAN WATER TRANSITIONS

14 - 17 October 2013 • NAIROBI, KENYA



# The Convening Power of Risk:

## A Community of Practice event on Urban Sanitation and Sanitation Safety Planning

### GROUP WORK

15 October 2013  
09:15 - 10:45



**Water Supply & Sanitation Collaborative Council**  
*Inform. Engage. Enable.*



**World Health Organization**

**Household domain – disease transmission related to toilet facilities, water supply and hygiene behaviour (WASH)**

**Public domain – disease transmission related to environmental sanitation (excreta and wastewater management, solid waste collection and drainage)**



**Disease transmission routes associated with sanitation**



**Disease transmission related to contamination of water supply systems, and water bodies used as sources of drinking water, other domestic, and recreational uses**

**Disease transmission related to 'wastewater' reuse leading to microbial contamination of the food cycle**

# Sanitation system risk assessment and sanitation safety planning

**Common elements of sanitation system risk assessment :**

- 1) Sanitation systems analysis to identify hazards**
- 2) What triggers are there that result in hazardous events ?**
- 3) How often do they happen and how long do they last ?**
- 4) During a hazardous event, who is affected ?**
- 5) What step can be undertaken to reduce risks ?**
- 6) Who is responsible for implementation and monitoring ?**

# Group activity

Consider the following situations and discuss :

1. What do you see in this picture? What is the link with sanitation?
2. What health hazards do you perceive to be related to this practice?
3. Who is affected and how frequently?
4. What option(s) do we have to reduce the health risks?

# Situation 1



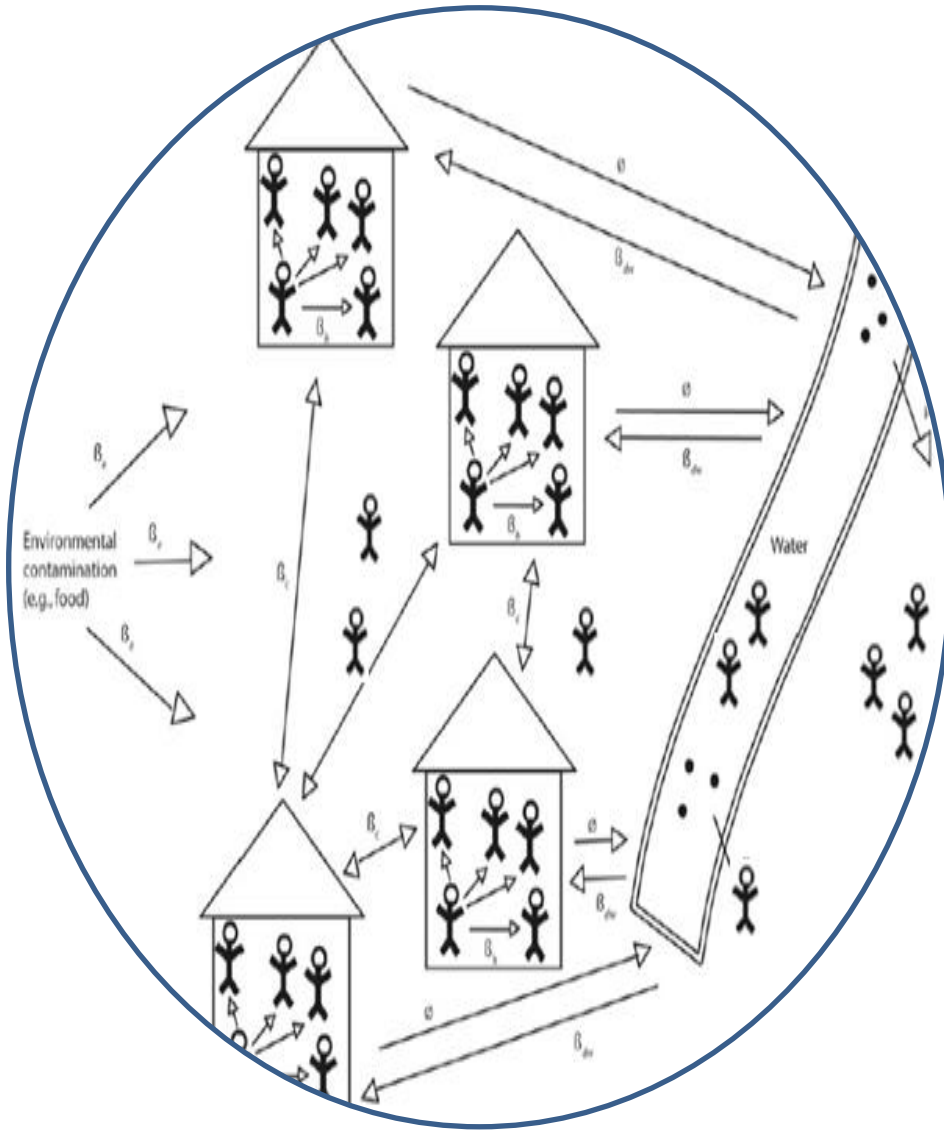
# Situation 2



# Situation 3



# Who is affected ?



**User** - who uses the technology on a regular basis.

**Community** anyone living near to, or downstream from the technology, and may be indirectly affected.

**Worker** - responsible for maintaining, cleaning, operating or emptying part of the sanitation system

**Farm worker** - who applies uses products generated from sanitation systems

**Consumer** anyone who consumes crops or fish that are produced using sanitation products.

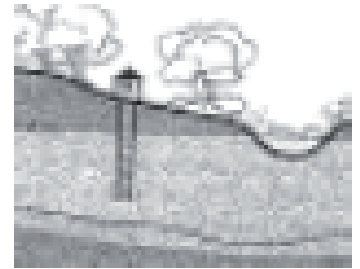


# How are they affected? key exposure/transmission pathways

Ingestion of excreta



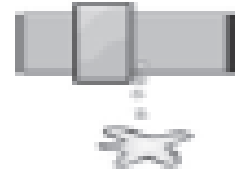
Contaminated ground-water/surface water



Dermal contact



Contact with overflowing/leaking contents



Contact with flies/mosquitoes



Falling into pit/container/escavation



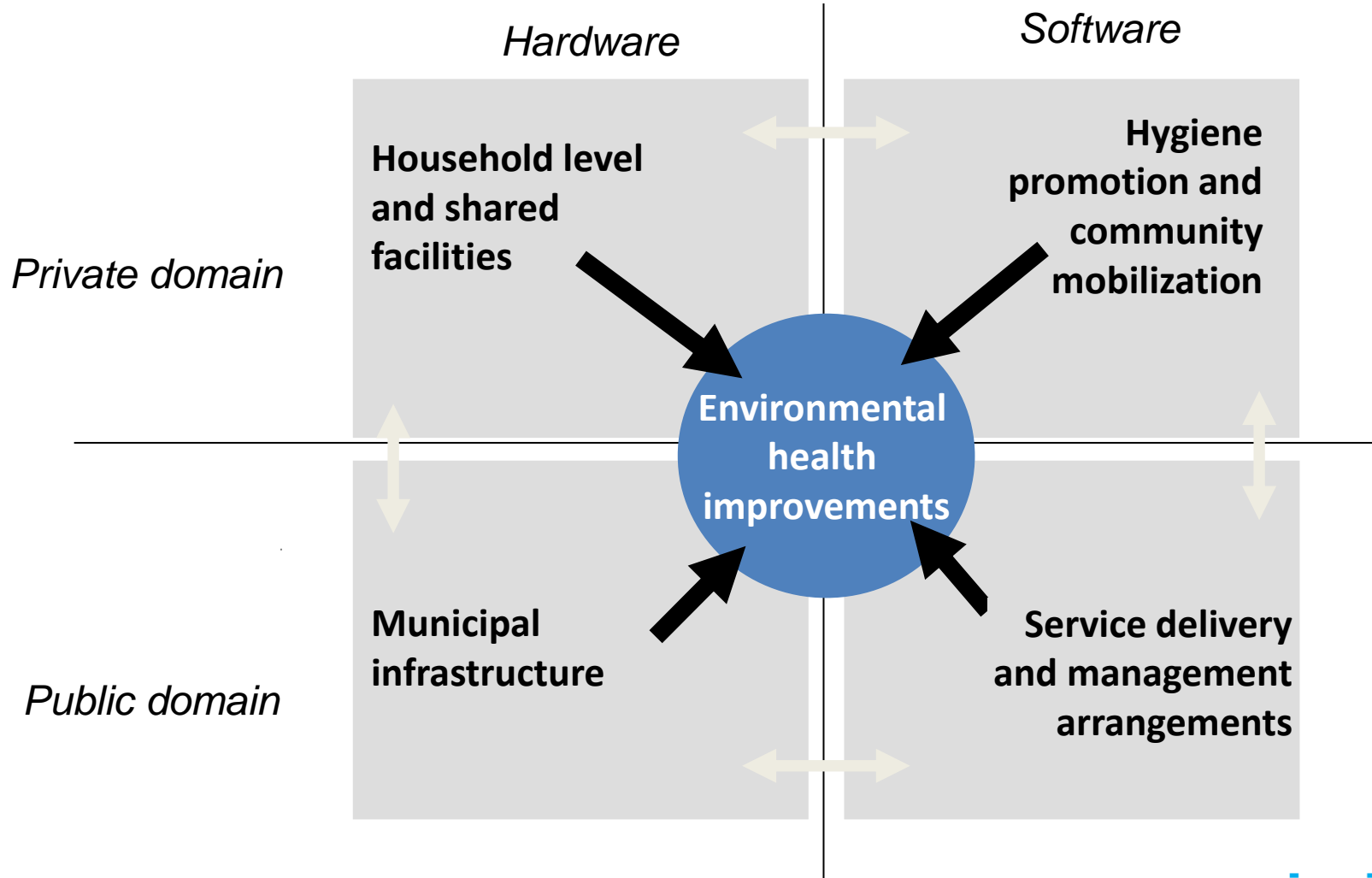
Inhalation of aerosols and particles



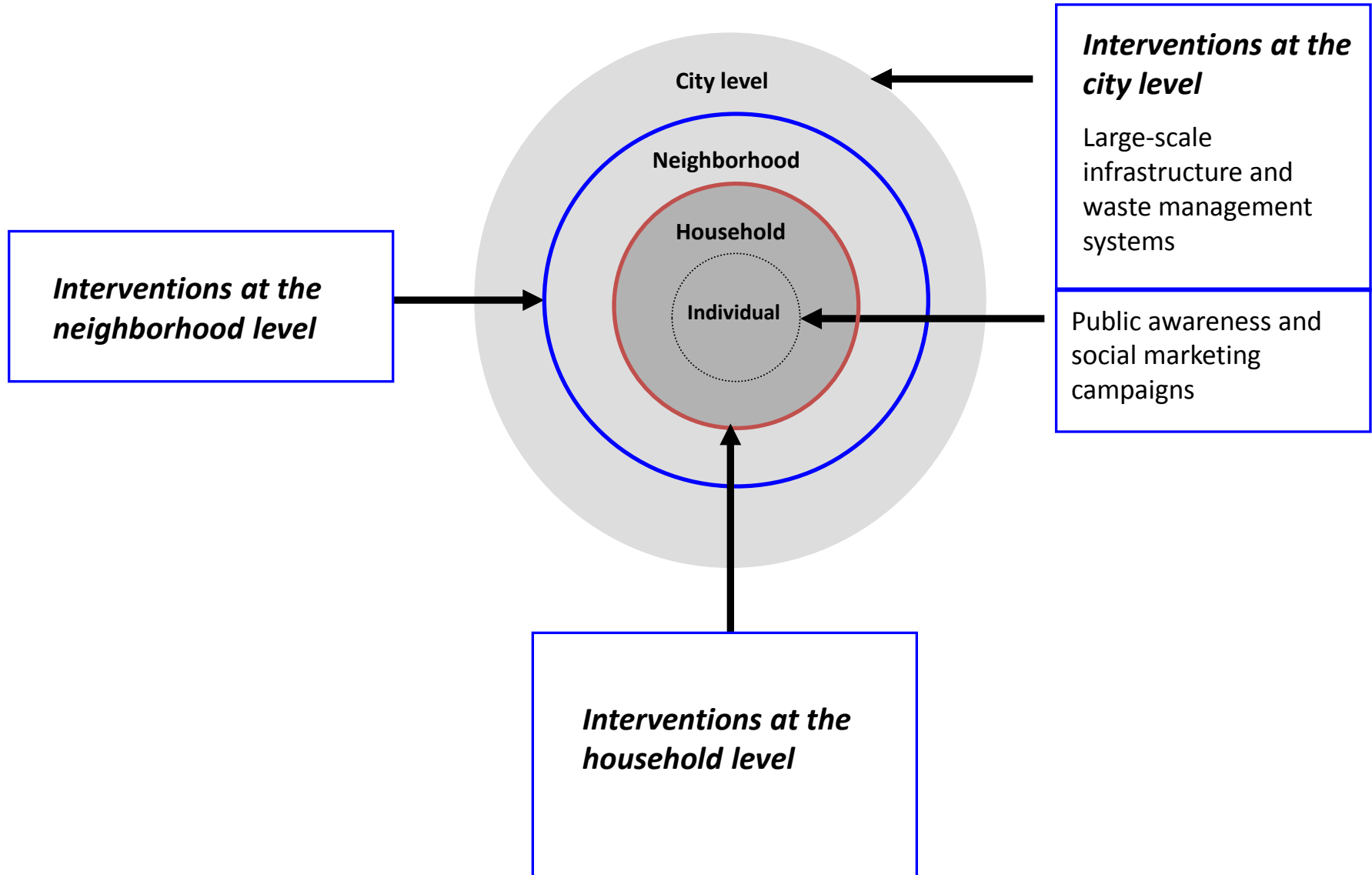
Consumption of contaminated produce (vegetables)



# Risk reduction strategies



# Level of intervention



# Cost effectiveness of risk mitigation strategies

