

What's Worth Knowing: Health and the Environment

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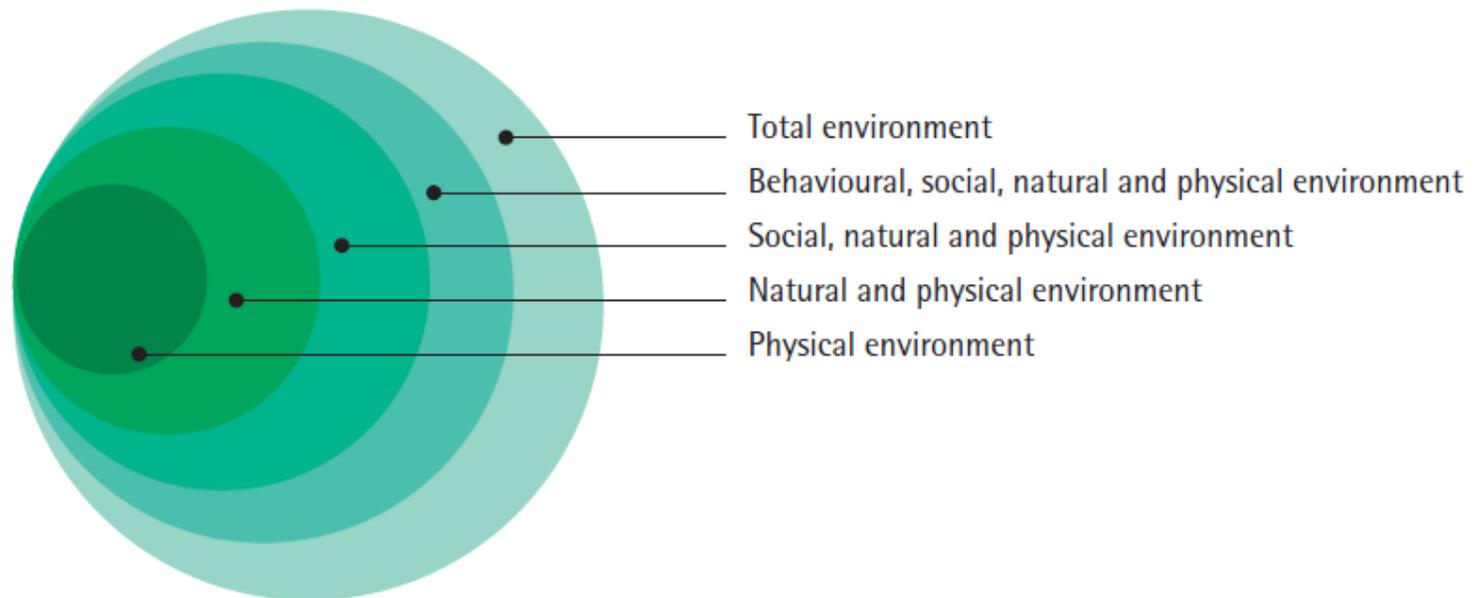


Presentation Overview

- Defining “Environment”
- What is Public Health?
- Health and the Natural Environment
- Determinants of Health
- Health and the Work Environment
- Health and the Socio-Economic Environment
- Health and the Built Environment
- Key Health Challenges
- What Next?

The Environment – Definitions

FIGURE 1 DEFINITION OF THE ENVIRONMENT ^a



^a (Adapted from Smith, Corvalàn and Kjellström, 1999; Source WHO's Preventing Disease through Healthy Environments)

What is Public Health?

- Public health is the **organized efforts of society** to prevent illness, disease, and injury through a **sustained combination of approaches**:
 - One-on-one “clinical” interventions (e.g., immunizations, maternal-infant and child health interventions, sexual health, travel health clinics, etc);
 - Health promotion (e.g., evidence-informed social marketing initiatives to promote better health through changes in lifestyle);
 - Health protection (e.g., legislation to prevent communicable disease transmission, reduce use of tobacco);
 - Healthy public policies – policies outside of the health sector that generate positive health benefits (eg, poverty reduction, early childhood development strategies, animal health, environmental protection, transportation and workplace policies) which does not have health as the main policy objective.

Health and the Natural Environment

- Protecting clean and safe air and water is essential to ensure healthy communities.

Water

- Link between water, sanitation and health has been known for centuries.
- Beginning of the last century - officials embraced the water/waste/health connection and began to actively pursue adequate sanitation and clean water systems.

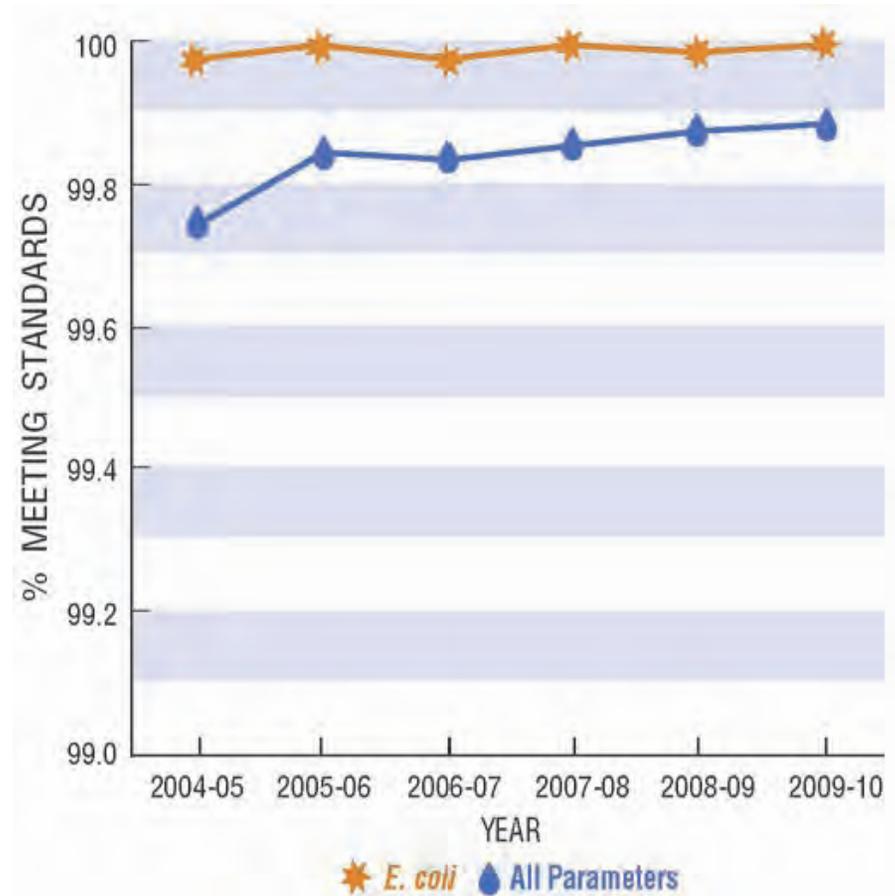


Health and the Natural Environment II

Water in Ontario

Municipal Residential Drinking Water Systems' Drinking Water Quality Tests Meeting **Ontario's** Drinking Water Quality Standards for All Parameters and *E. coli* Over Six Years.

(Source: Chief Drinking Water Inspector Annual Report 2009-2010)



Health and the Natural Environment III

Air

- The human health effects of poor air quality are far reaching, but principally affect the body's respiratory system and the cardiovascular system.
- Health effects caused by air pollutants may range from subtle biochemical and physiological changes to difficulty breathing, wheezing, coughing and aggravation of existing respiratory and cardiac conditions.



Determinants of Health

- Health is affected by more than just the natural environment.
- Affected by:
 - Socio-economic environments
 - Physical/built environments
 - Work environment
- Examples of social determinants of health.
- They dictate the extent to which we have health inequity, and health inequality, in our society.

Public Health and the Work Environment

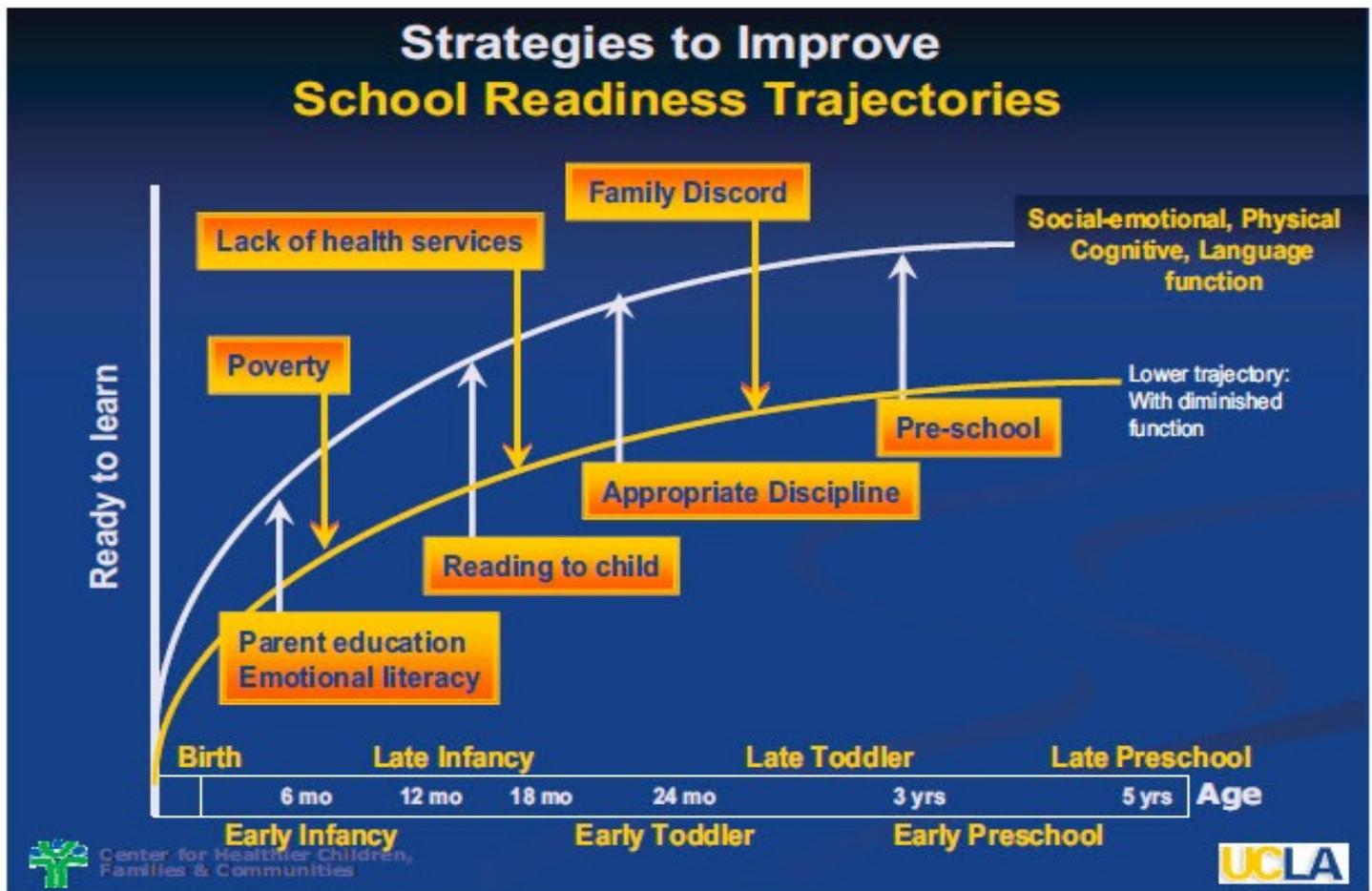
- We spend an enormous amount of time in our workplaces, and are consequently very vulnerable to any unhealthy factors – such as unsafe working conditions or stress – that may exist there.



Health and the Socio-economic Environment - Healthy Child Development

- In Canada, less than five per cent of children at every socio-economic level are born with clinically detectable limitations to their development.
- By school age, vulnerability in developmental health grows to over 26 per cent and profound socio-economic inequalities in development emerge.

Health and the Socio-economic Environment – Healthy Child Development II



Health and the Built Environment

- Has a profound impact on our health.
- Built environment is part of our physical surroundings and includes:
 - Buildings
 - Parks
 - Schools
 - Road systems



- Mixed land use; well-connected street networks; high residential density = more active residents.
- Proximity to recreation facilities = more recreation activity.
- Local food environment – access to supermarkets.

Key Health Challenges

- Every year in Canada, more than two-thirds of all deaths result from chronic diseases - cardiovascular disease, cancer, type 2 diabetes, and respiratory disease
- And the total cost of illness, disability and death resulting directly from these chronic diseases is estimated to be more than \$80 billion dollars annually
- Common risk factors – diet, activity, tobacco, excess alcohol
- If current health behaviour trends continue, the children of the next generation will have a lower life expectancy than their parents
- Injuries – both unintentional and intentional
- Health inequity

Where Do We Go From Here?

- Factors that influence health, and the ways through which we can improve health, lie for the most part outside the traditional health care and health promotion sectors.
- Good health starts long before we visit doctors. It starts in childhood, in our homes, in our schools, our workplaces and our communities.
- All three levels of government, community levels, the private sector, and all Ontarians have a role to play.
- Public health is everyone's business.

QUESTIONS?