

# Syndemics and Illinois

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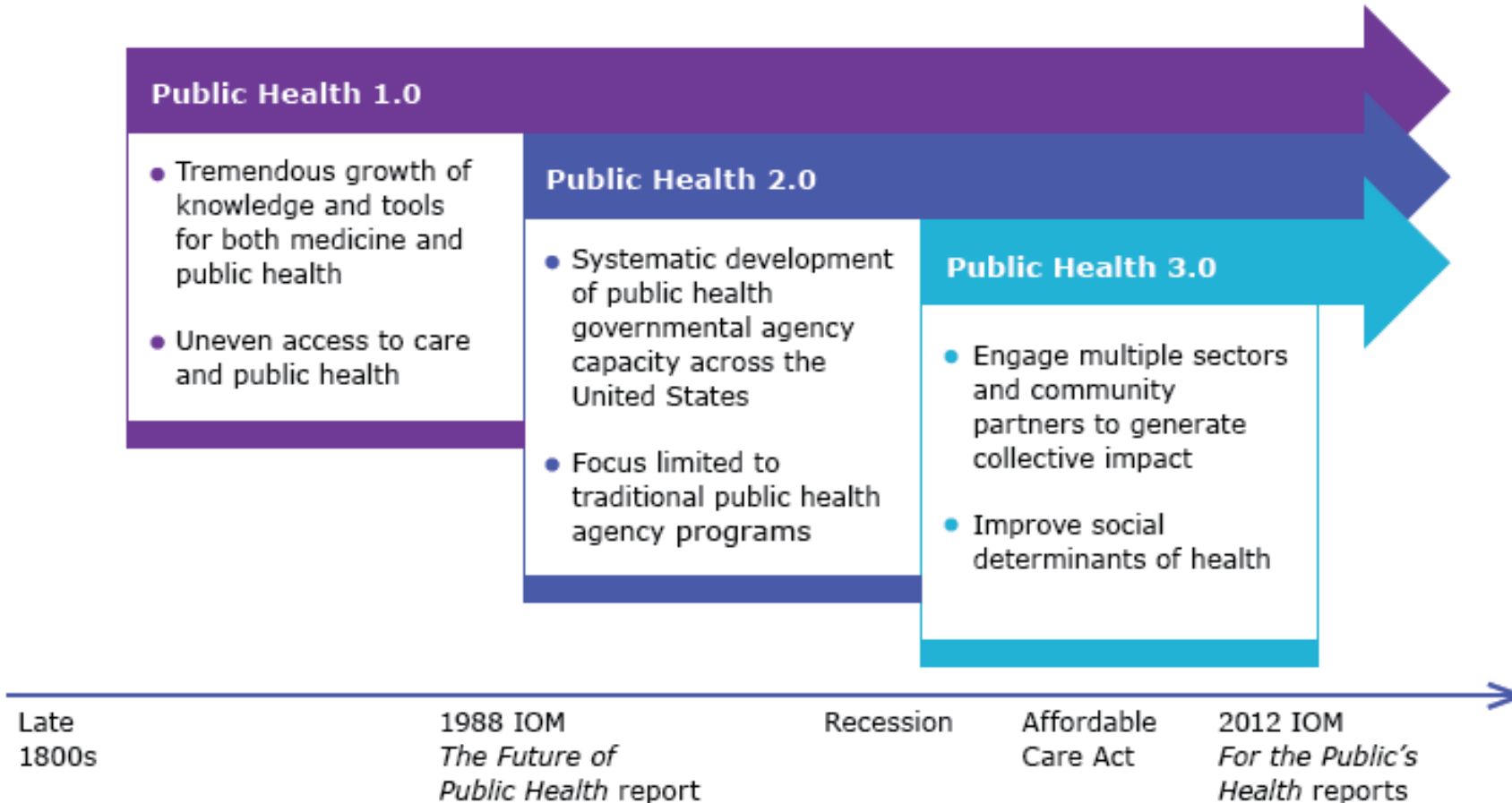
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## Disclosure

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# A 21<sup>st</sup> Century Approach to Public Health



- Public Health should understand community level health issues and coordinate strategies with appropriate partners and the community
- Structured cross-sector partnerships to foster shared funding, services, and collective action
- Timely, actionable, measurable data shared routinely with partners and the community

## Impact Social Determinants of Health

# What is a syndemic?

*A term invented to describe a set of linked health problems; two or more afflictions or epidemics interacting simultaneously and synergistically (together having a greater effect than would be expected by adding the effects of each); epidemic synergy contributing to excess burden of disease in a population - CDC*

# HIV and Tuberculosis Co-Infection

HIV infection changes the epidemiology of TB transmission and morbidity

About 10% of people infected with TB will ever develop symptoms and become infectious

For those infected with TB and HIV there is a 10% risk annually

- Much higher rate of infectivity in co-infected communities

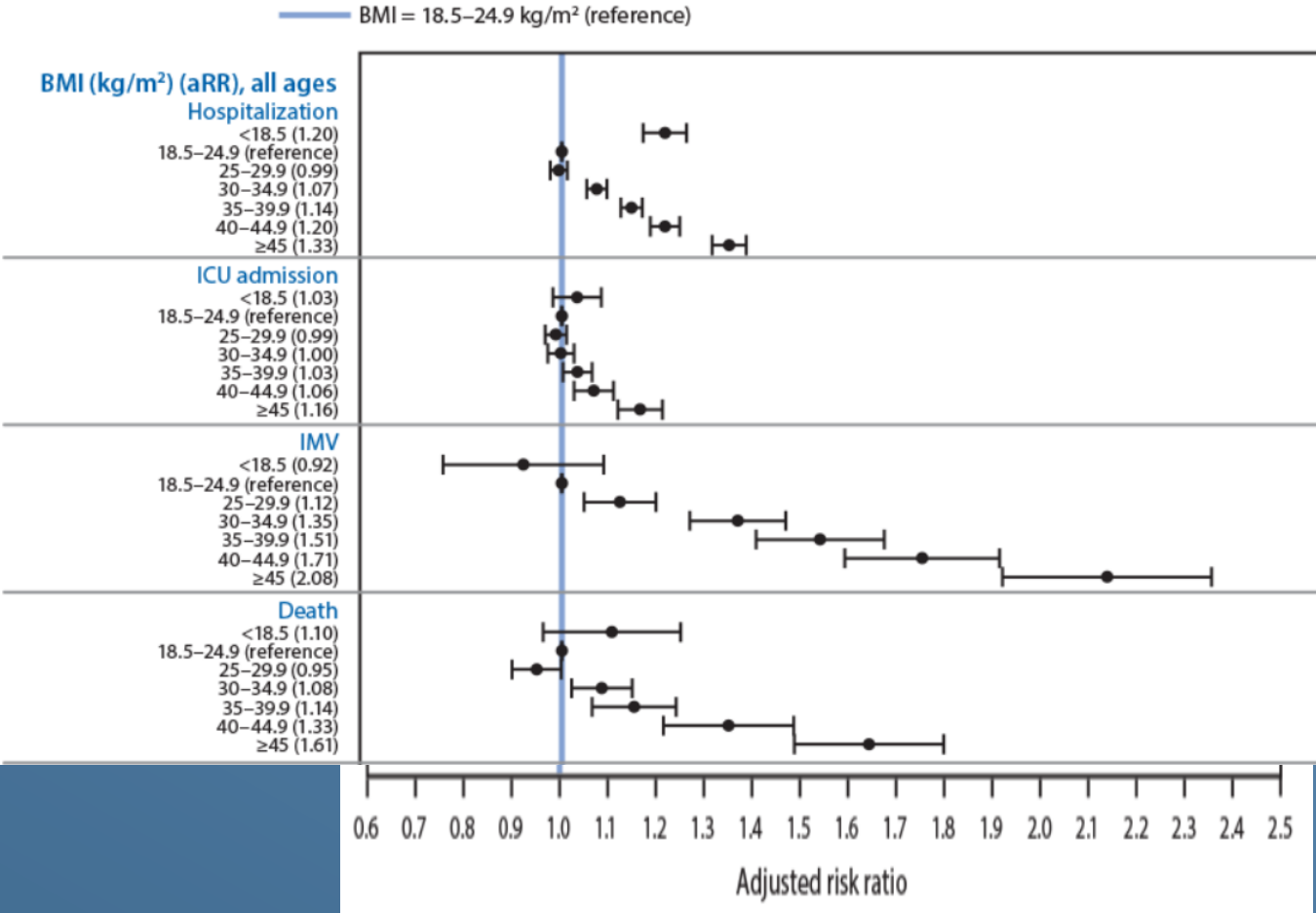
Treatment and tolerance/toxicity

Increased HIV load



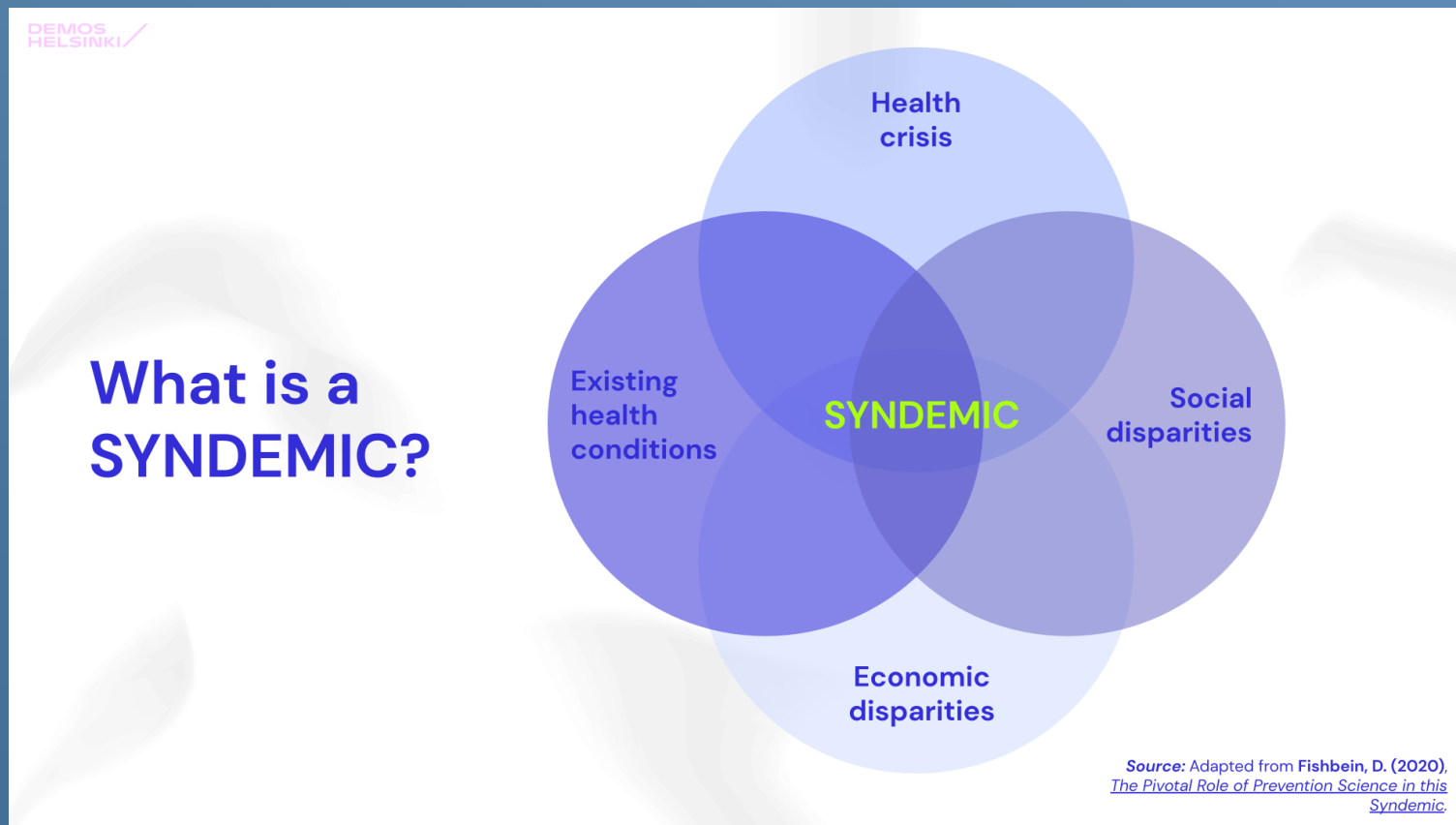
# COVID-19 and Obesity

FIGURE 1. Association between body mass index (BMI) and severe COVID-19-associated illness\* among adults aged ≥18 years, by age group — Premier Healthcare Special COVID-19 Release (PHD-SR),<sup>†</sup> United States, March–December 2020<sup>§</sup>



Taken from MMWR: 3/12/21

# A Syndemic is More Than Just Concurrent Infections





# A Collaborative Approach to Health

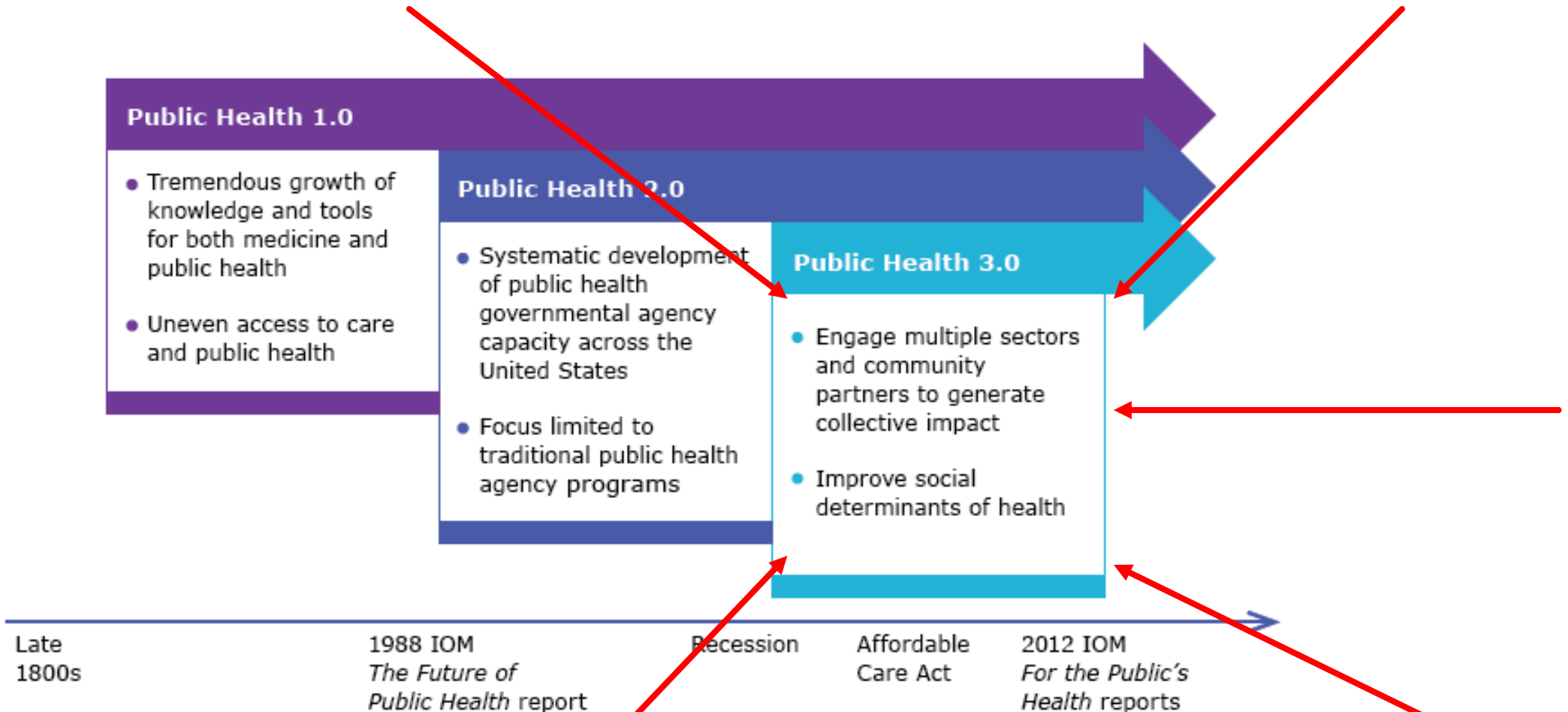
Health is multi-factoral

Stable housing, education level, income, race, zip code are examples of social drivers of health and contributors to syndemics

Addressing access, environment, and equity can reduce synergistic risk in communities

This type of strategy requires a coordinated approach to remove risk for individuals and wider communities

# A 21<sup>st</sup> Century Approach to Public Health





*It Takes a Village To Provide Access to Health For All*



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