

## **Syndemic Infectious Disease Bureau Provider Conference**

## Syndemics: Intersecting Challenges and Integrated Solutions

Dave Kern, Deputy Commissioner (he/him) June 27, 2024

# **Defining Syndemic**

- Synergistically interacting epidemics / population-level clustering of social and health problems.
  - 2 or more diseases or health conditions cluster within a population.
  - Contextual and social factors create conditions for clustering, like those associated with SDoH.
  - Results in adverse disease / health condition interactions biological, social, or behavioral – increasing health burden of the affected population.



### Disclosure:

Presenter has no financial interest to disclose. This continuing education activity is managed by The St. Louis STI/HIV Prevention Training Center and accredited by Missouri State Medical Association (MSMA) in cooperation with the Chicago Department of Public Health.

# Data / Epi Context – People Matter

- In Chicago, cisgender males who engage in male-to-male sexual contact accounted for a plurality of new HIV diagnoses (56.5%), prevalent HIV cases (60.3%), and P&S cases (33.4%) in 2021, and of mpox cases (75%) in 2022.
- National data suggest persons who inject drugs account for most new acute HCV diagnoses and a large proportion of HBV diagnoses.

## Data / Epi Context – HIV Co-infection, Chicago, 2021

Syndemic ID	# of Cases	# Co-I with HIV	% Co-I with HIV	% Co-I with HIV who are cis male	% Co-I with HIV who are cis MSM
ТВ	97	4	4.1%	N/A	N/A
HCV (new)	960	60	6.3%	96.7%	68.3%
HCV (prevalent)	21,498	1,006	4.7%	77.7%	35.0%
Chlamydia	27,404	1,524	5.6%	93.1%	82.1%
Gonorrhea	13,451	1,671	12.4%	96.2%	83.7%
P&S Syphilis	794	239	30.1%	97.1%	84.5%
Мрох	1,116	488	43.7%	93.0%	78.0%

HIV/HBV co-infection data are not available. Research suggests 5-10% of PLWH are co-infected with HBV. <u>https://www.ncbi.nlm.nih.gov/pubmed/20158604</u>

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## Data / Epi Context – Other Conditions/Contexts





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Healthy Chicago **databook** 

Lesbian, Gay, Bisexual & Transgender Health

MORTALITY

Chicago's racial life expectancy gap

#### **DISEASE & INJURY**

e.g., chronic/infectious disease, homicide, infant mortality, overdose

#### **RISK BEHAVIORS**

e.g., smoking, poor nutrition, low physical activity, substance use

#### LIVING CONDITIONS

e.g., physical environment, access to services, social supports

### INSTITUTIONAL INEQUITIES

e.g., laws and regulations, policies and practices in government agencies, businesses, schools, not-for-profits

#### SOCIAL INEQUITIES

e.g., racism, discrimination based on class, immigration status, ability, gender, sexual orientation

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# **Thank You!**





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