



Syndemic Approaches in Reaching Underserved Communities

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Outline

- Review the definition of a syndemic and rationale for syndemic approaches
- Review current support for syndemic approaches
- Describe a process for identifying a syndemic using local data
- Pathways to addressing a syndemic
- Closing thoughts
- Question to the board

Chicago Overview – Syndemic Infectious Diseases

- In Chicago, syndemic infectious diseases include HIV, STI, mpox, HBV, HCV, and TB.
- In 2022:
 - 27,382 new chlamydia (CT) diagnoses
 - 12,382 new gonorrhea (GC) diagnoses
 - 806 new primary & secondary syphilis (P&S) diagnoses
 - 1,116 new Mpox diagnoses
 - 111 new TB diagnoses
 - 632 new HIV diagnoses
 - 18,797 prevalent HIV cases
 - 956 new HCV diagnoses
 - 20,747 prevalent HCV cases

Defining a Syndemic

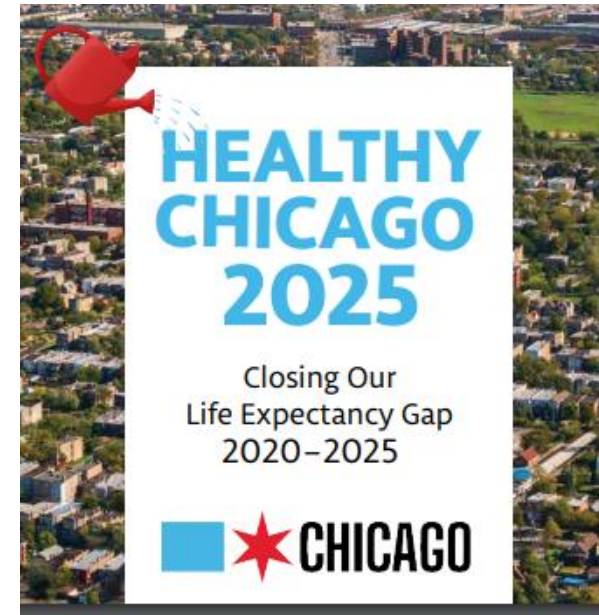
- Synergistically interacting epidemics/population-level clustering of social and health problems.
 - 2 or more **diseases** or **health conditions** cluster within a population.
 - **Contextual** and **social factors** create conditions for clustering.
 - Results in adverse disease/health condition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

Rationale for Syndemic Response

- Similar behaviors/conditions lead to vulnerability for SID.
- Diseases have reciprocal and interdependent factors:
 - HIV, STI, Mpox, HBV, and HCV share common risks/modes of transmission.
 - STI increase HIV infectiousness/susceptibility.
 - HIV is a risk factor to TB progression.
 - Advanced HIV disease increases risk for severe Mpox.
 - TB is an HIV opportunistic infection.
 - TB accelerates HIV disease progression.
 - HBV/HCV co-infection makes HIV management more challenging.
- Common vulnerabilities suggest common solutions.
- Disease conditions are often managed by the same institutions.
- **Health equity!**

Current Support for Syndemic Response

- Getting to Zero Illinois
- Health Chicago 2025



Identifying a Syndemic – SID Data (2022)

- In Chicago in 2022, cisgender males who engage in male-to-male sexual contact accounted for a plurality of:
 - New HIV diagnoses (60.7%),
 - Prevalent HIV cases (60.7%),
 - P&S cases (24.6%), and
 - Mpox cases (75%).

Identifying a Syndemic – SID Data (2022)

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
TB	111	20	18.0%	90.0%	55.0%
HCV (new)	956	59	6.2%	89.9%	70.0%
HCV (prevalent)	20,747	945	4.6%	78.3%	50.3%
Chlamydia	27,596	1,562	5.7%	93.2%	78.7%
Gonorrhea	12,382	1,550	12.5%	97.3%	82.3%
P&S Syphilis	806	203	25.2%	96.6%	85.7%
Mpox	1,116	488	43.7%	91.8%	88.1%

HIV/HBV co-infection data are not available. Research suggests 5-10% of PLWH are co-infected with HBV.

<https://www.ncbi.nlm.nih.gov/pubmed/20158604>

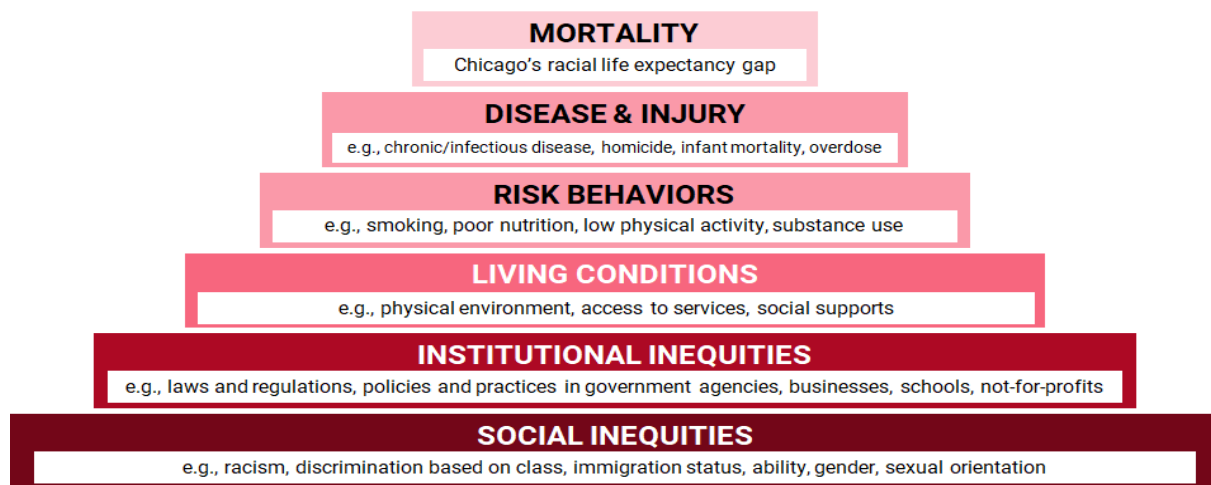
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Identifying a Syndemic – Other Conditions & Contexts



Identifying a Syndemic – People

- Populations
 - Cis gay, bi, and other same gender loving men of all races/ethnicities (with an emphasis on Black and Latino/é men given HIV epidemic burden)
 - Black and Latina/é women of transgender experience
 - Persons who inject drugs
 - Older persons with HIV

Pathways to Addressing Syndemic Priorities

- Data
 - Integrated Office of SID Surveillance
 - Integrated SID data reports (coming soon!)
- Partnerships
 - Relationships across sectors, including community, healthcare, researcher, and business
- Programs and services
 - Most SID-funded programs require services be provided for 2+ SID and/or associated health conditions (through RFP and contracts)
- Communication
 - Leverage regular opportunities for bi-directional and action-oriented conversations
 - Weekly LGBTQ+ Health Forum (since 2022)
 - Focused engagement around population-specific syndemic issues, like Chicago Methamphetamine Task Force.

Closing Thoughts

- Remember: a syndemic includes more than just SID. Consider other associated conditions and underlying factors that impact the lives of specific populations.
- Syndemic approaches support health equity.
- There's so much more to do...and syndemic approaches can help.

Question

- What are other opportunities to use a syndemic approach in public health response (beyond HIV, STI, Mpox, hepatitis, and TB)?

Thank You!



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