Epidemiologic Profile
St. Louis TGA – 2025

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No Conflicts of Interest

Today's Objectives

- *State the limitations that can affect the accuracy and completeness of reporting HIV/AIDS-related data within the St. Louis Transitional Grant Area (STL-TGA)*

- *Define each of the terms used to describe the Epidemiologic Profile*

- *Describe the distribution of HIV/AIDS within STL-TGA and the population subgroups affected*

- *Compare the trends and patterns of People Living with HIV or AIDS (PLWHA) within the STL-TGA by year, area, and subgroup*

Data Limitations & Disclosures

Data Limitations & Disclosures
National Public Health Agencies

- *CDC*

  - *HIV data retrieved from National HIV Surveillance System (NHSS)*

    - *State & US Territory laws/regulations require confidential reporting by name for PLWHA ≥ 13 years of age*

      - *Data submitted to CDC after PHI removed*

      - *Dependent on confirmed HIV diagnosis, may not represent all PLWHA*

      - *Anonymous testing NOT reported to confidential name-based HIV registries*

  - **Latest HIV Care Continuum & Surveillance data released on 4/30/25 (incomplete)**

    - *Full HIV Surveillance Reports still delayed as of June 2025*

Data Limitations & Disclosures
National Public Health Agencies

- *CDC (cont.)*
  - *Data for 2023 & 2024 considered preliminary*
    - *Subject to 12-month reporting delay*
    - *Inclusion of such data in trends discouraged*
  - *COVID-19*
    - *Pandemic interrupted healthcare-related data 2020-2021*
    - *Counts <12 and/or from the Pandemic should be interpreted with caution*
  - *Since 1/20/25*
    - *Many websites under modification to comply with "executive orders"*

Data Limitations & Disclosures
State Health Departments

- *MO-DHSS*
  - *Data is typically "frozen" (finalized) in February for the prior year*
    - *WebSurv/Show Me World Care + Vital Records data frozen by June*
    - *2023 data not finalized until 2025*
    - *Epi Profile reports now done **every five years***
  - *Provided 2019 – 2023 data*
    - *Received Unmet Needs data in February 2025*
      - **Supplemental info available via online HIV dashboard + eHARS**

Data Limitations & Disclosures
State Health Departments

- *IL-DPH*
  - *Data frozen in July for the prior year*
    - *Epi Profile reports now done **every five years***
  - *Provided 2019 – 2023 data*
    - *Received Unmet Needs data in March 2025*
      - **Supplemental info available online via HIV Surveillance Reports**
  - *Different definitions*
    - *St. Louis EMA (Eligible Metropolitan Area)*
    - *Late HIV diagnosis: AIDS dx. within 1 year of HIV dx.*
    - *Suppression rules: cell sizes <10, cells ≥ 10 that can provide back calculation*

Data Limitations & Disclosures
City of St. Louis DOH

- *Main focus on secondary data analysis (ie. Pre-existing data)*
    - *Primary data collected & entered by case investigators, case managers, etc.*

- *Access to SCOUT and eHARS databases*
    - *Different data organization, programming code, and user learning requirements*
    - *Case information not always consistent or shared*
    - *Databases updated at different intervals*

- *COVID-19*
   - *Pandemic interrupted healthcare-related data 2020-2021*

Data Limitations & Disclosures
City of St. Louis DOH

- *Most recent data (2023, 2024) considered "provisional" and subject to changes from:*
  - *Reporting delays*
  - *PLWHA moving between jurisdictions*
  - *Resolving incorrect or missing data*
- *Small case counts → poor reliability*
- *Data suppression rules*
  - *Necessary to safeguard protected health info (PHI) & confidentiality*
  - *Aid in preventing identification of individuals in small groups and/or unique characteristics*

RWHAP Terminology

Credit: "Nothing Ahead," https://www.pexels.com/photo/words-in-dictionary-4440720/
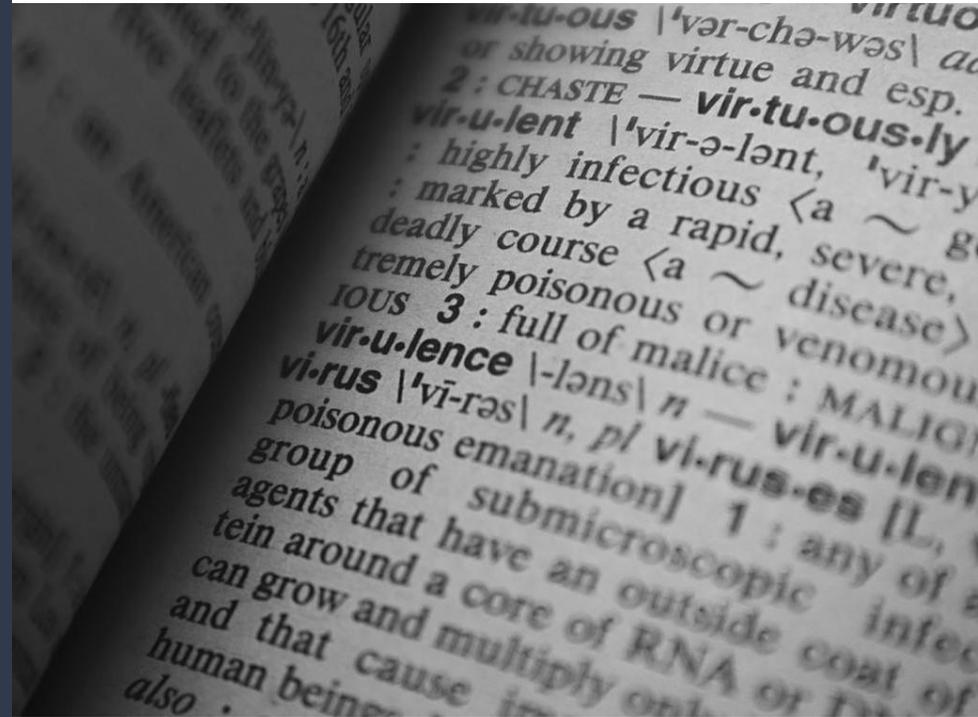
RWHAP Terminology
Population

- *Population Size: Number of people living with diagnosed HIV infection in the jurisdiction based on most recent known address who had an HIV diagnosis or any other HIV-related lab data (e.g., CD4, VL, genotype, or HIV test even if already diagnosed) reported to the HIV surveillance program during the most recent five calendar year period*
  - *HIV Prevalence: All living and diagnosed cases of HIV as of a certain date within a certain geographic area*
  - *HIV Mortality: Deaths among people diagnosed with HIV disease, regardless of cause of death, during a calendar year*

RWHAP Terminology
Diagnostic Status

- *HIV Incidence: All newly diagnosed cases of HIV in a given year*

  - *New Diagnoses: Number of people in the jurisdiction with HIV diagnosed in a calendar year based on residence at time of diagnosis*

  - *Late diagnoses: Number of people with late diagnosed HIV in a calendar year in the jurisdiction based on residence at time of diagnosis. Late diagnosed HIV is based on the first CD4 test result (<200 cells/mL or a CD4 percentage of total lymphocytes of <14) or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection*

RWHAP Terminology
Care Patterns

- *Linked to Care: Number of people newly diagnosed with HIV who visited an HIV healthcare provider (HCP) within 30 days of diagnosis*

- *Receipt of Care: Number of people with diagnosed HIV who had ≥1 CD4 or viral load (VL) test*

- *Retained in Care: Number of people with diagnosed HIV who had ≥2 CD4 or VL tests, performed ≥3 months apart*

RWHAP Terminology
Care Patterns

- *Met need (In care): Number of people living with diagnosed HIV infection in the jurisdiction based on most recent known address with a CD4 test or VL test in a calendar year*

- *Unmet need: Number of people living with diagnosed HIV infection in the jurisdiction based on most recent known address without any CD4 or VL test in a calendar year*

RWHAP Terminology
Viral Suppression

- *Virally suppressed: Number of people living with diagnosed HIV infection in the jurisdiction who are in care and whose most recent viral load test result was <200 copies/mL in a calendar year*

- *Not virally suppressed: Number of people living with diagnosed HIV infection in the jurisdiction who are in care and whose most recent viral load test result was ≥200 copies/mL in a calendar year*

RWHAP Terminology

## Concept Cohesion

HIV CARE CONTINUUM

HIV PREVALENCE / POPULATION SIZE

DIAGNOSED WITH HIV (INCIDENCE)

UNMET NEED

RECEIVED HIV MEDICAL CARE

UNSUPPRESSED HIV

ACHIEVED AND MAINTAINED VIRAL SUPPRESSION

NEW DIAGNOSIS

LINKED TO CARE

RETAINED IN CARE

LATE DIAGNOSIS

MET NEED (IN CARE)

SUPPRESSED / UNDETECTABLE HIV
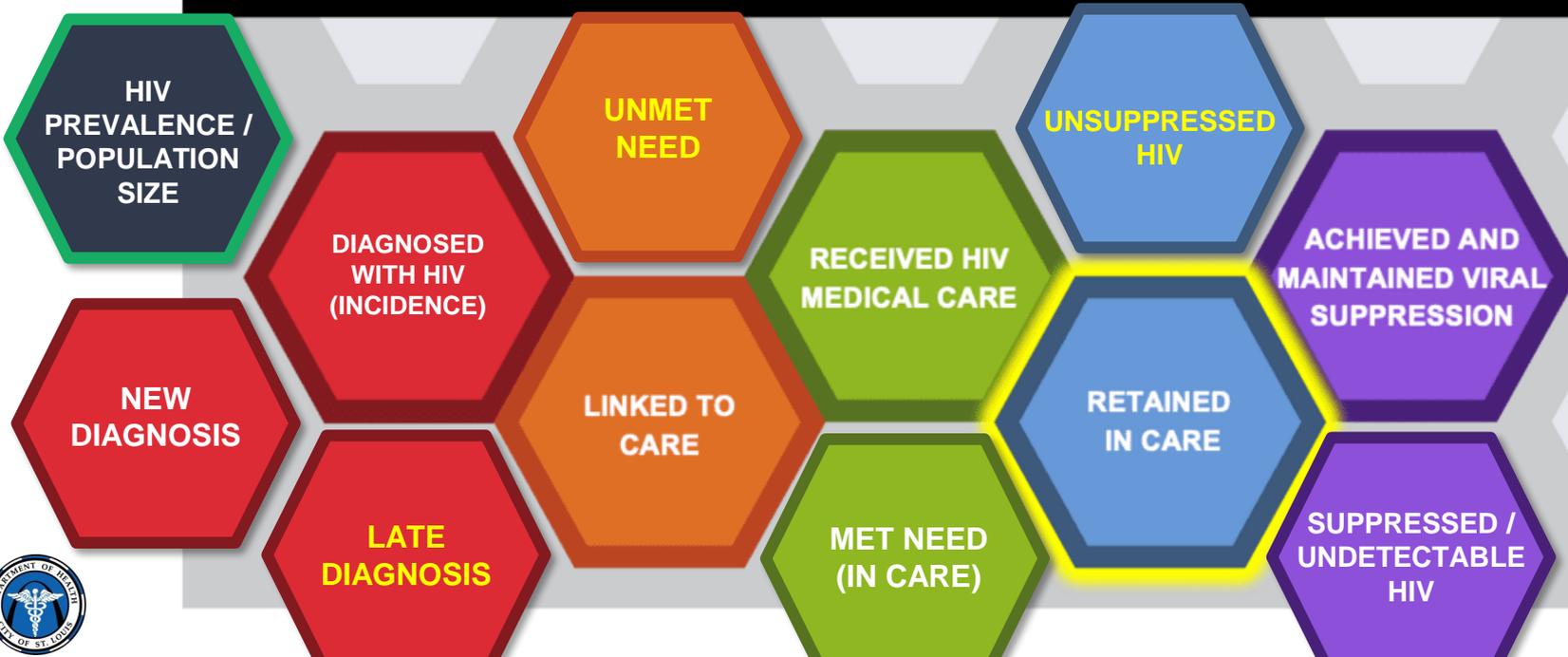
# HIV Epidemiology

HIV Epidemiology
National & State Prevalence, 2023

HIV prevalence | 2023 | Ages 13 years and older | All races/ethnicities | Both sexes | All transmission categories | United States

COVID-19 Pandemic

Data from 2010 to present based on most recent known address

USA: 1,116,600 cases (+2.2%)
393.2 per 100k (+1.7%)

MO: 13,580 cases (+2.3%)
259.5 per 100k (+2.0%)

IL: 37,185 cases (+2.7%)
348.3 per 100k (+2.8%)
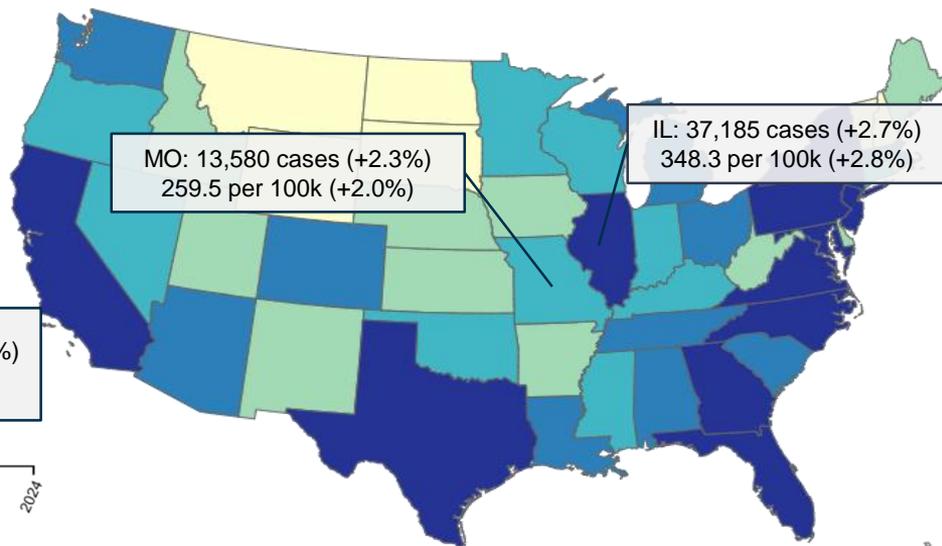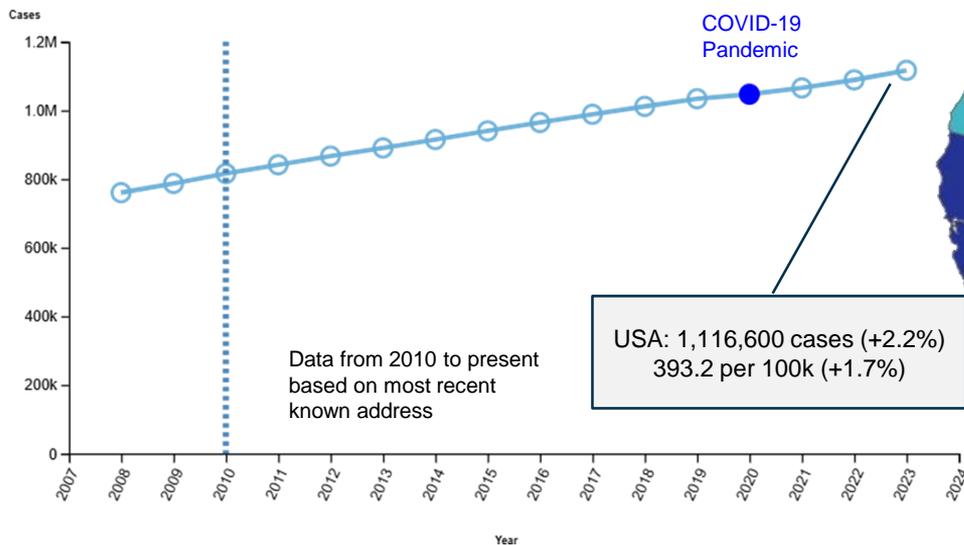
HIV Epidemiology
National & State Incidence, 2023

HIV diagnoses | 2023 | Ages 13 years and older | All races/ethnicities | Both sexes | All transmission categories | United States

Cases

COVID-19 Pandemic

Data from 2010 to present based on most recent known address

USA: 38,793 cases (+3.2%)
13.7 per 100k (+3.0%)

Year

-- Data not shown for trend chart --

MO: 553 cases (+8.0%)
10.6 per 100k (+8.2%)

IL: 1.569 cases (+20.0%)
14.7 per 100k (+20.5%)
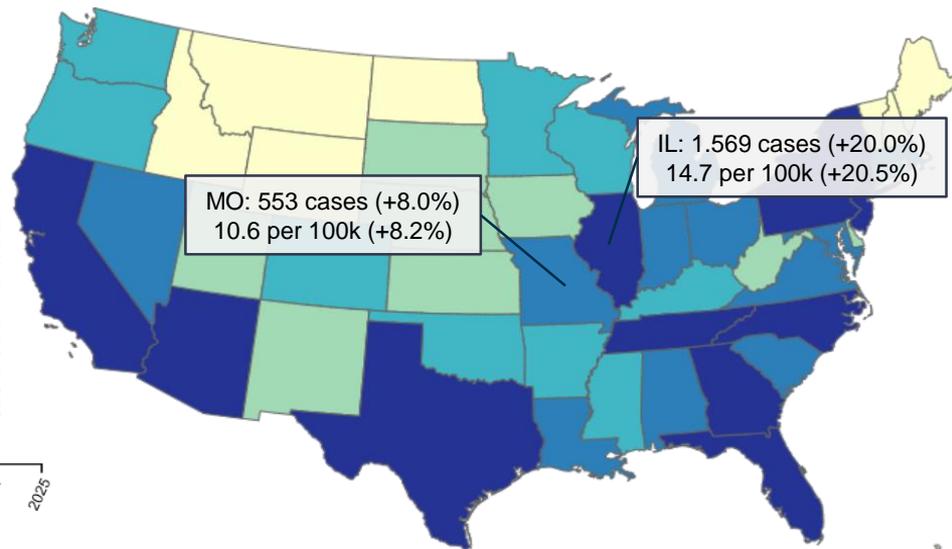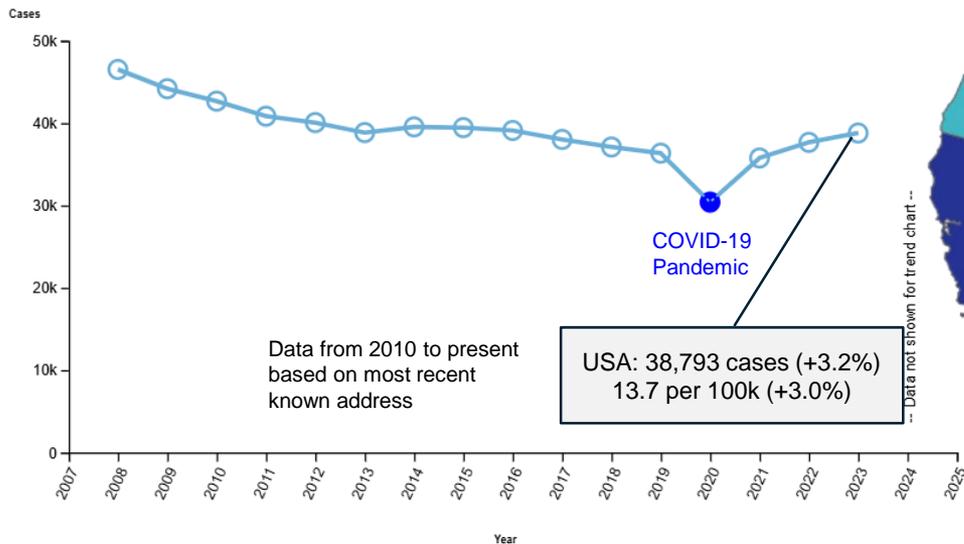
HIV Epidemiology
National & State Mortality, 2023

HIV deaths | 2023 | Ages 13 years and older | All races/ethnicities | Both sexes | All transmission categories | US Map-State Level

COVID-19 Pandemic

Data from 2010 to present based on most recent known address

USA: 18,789 cases (-3.7%)
6.6 per 100k (-4.3%)

IL: 601 cases (-11.0%)
5.6 per 100k (-11.0%)

MO: 284 cases (+3.6%)
5.4 per 100k (+1.9%)
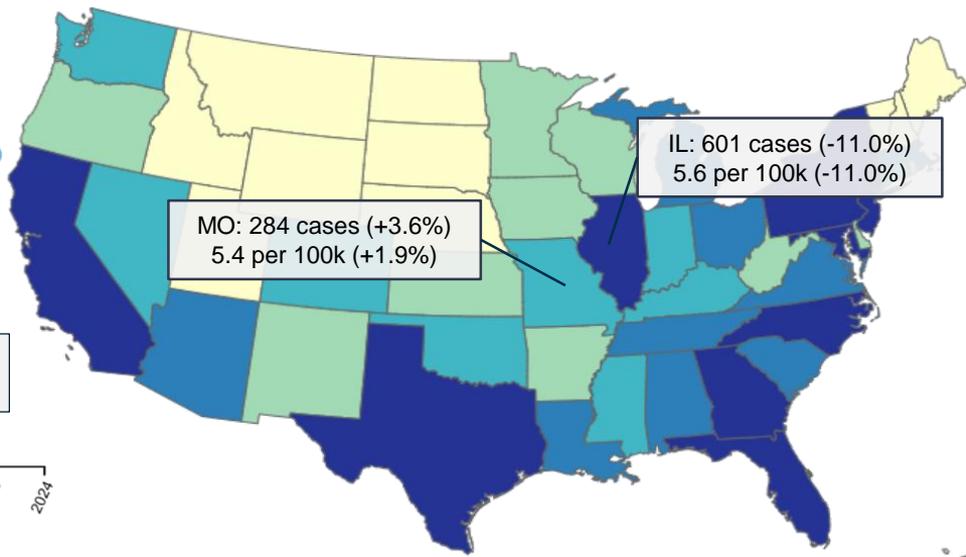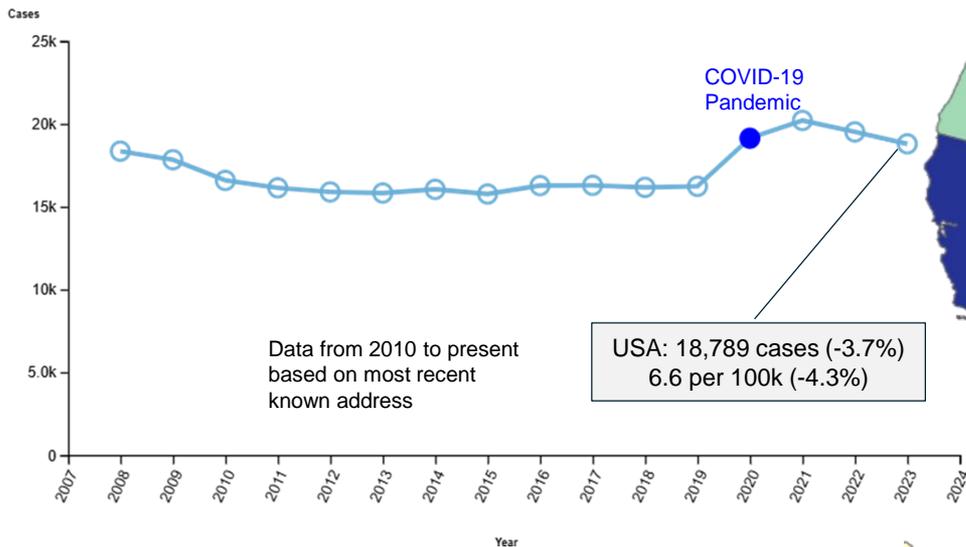
HIV Epidemiology
National & State Linkage to Care, 2023

Linkage to HIV care | 2023 | Ages 13 years and older | All races/ethnicities | Both sexes | All transmission categories | United States

IL: 1319 cases (84.1%)

MO: 463 cases (83.7%)

USA: 31,104 cases (82.8%)

COVID-19 Pandemic

Data from 2010 to present based on most recent known address

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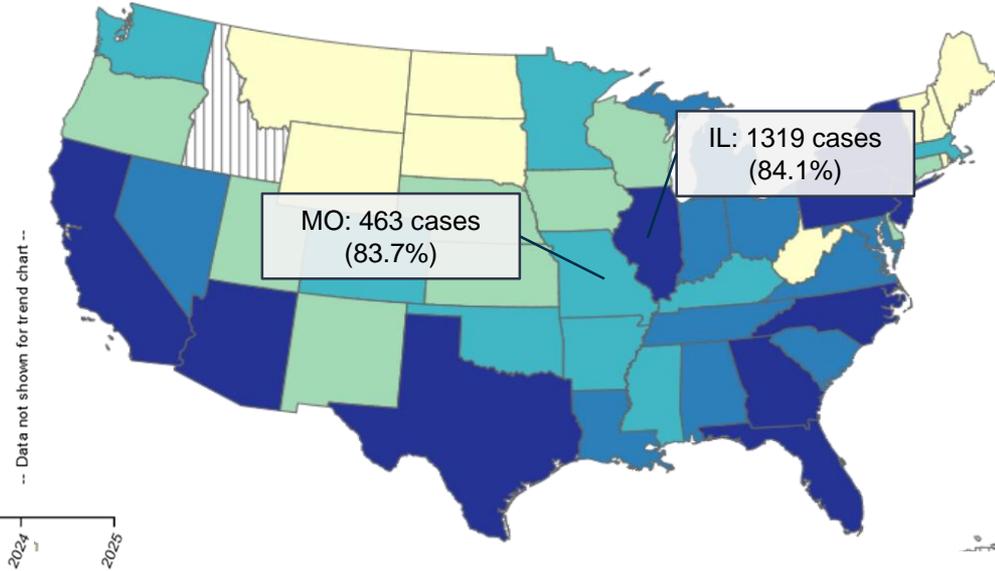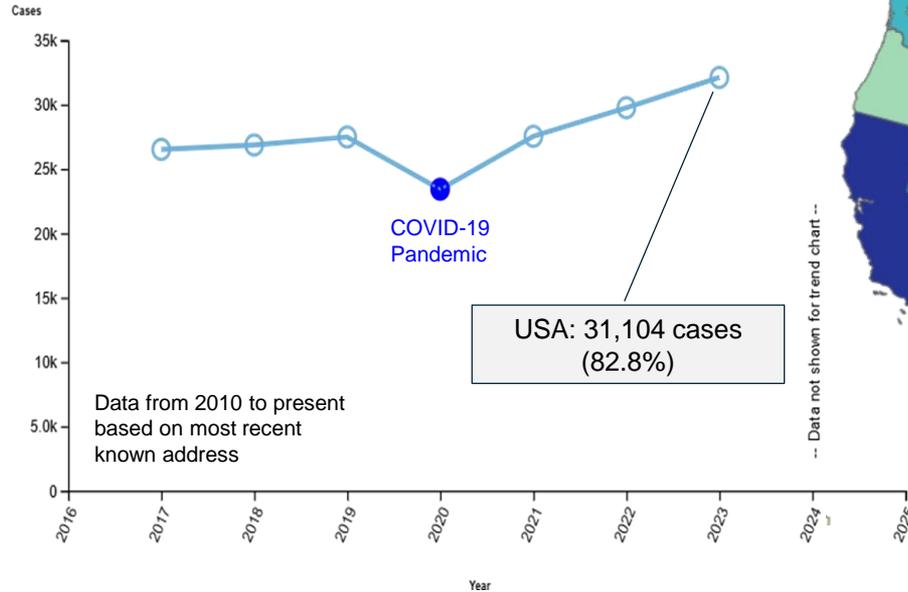
HIV Epidemiology
National & State Receipt of HIV Medical Care, 2023
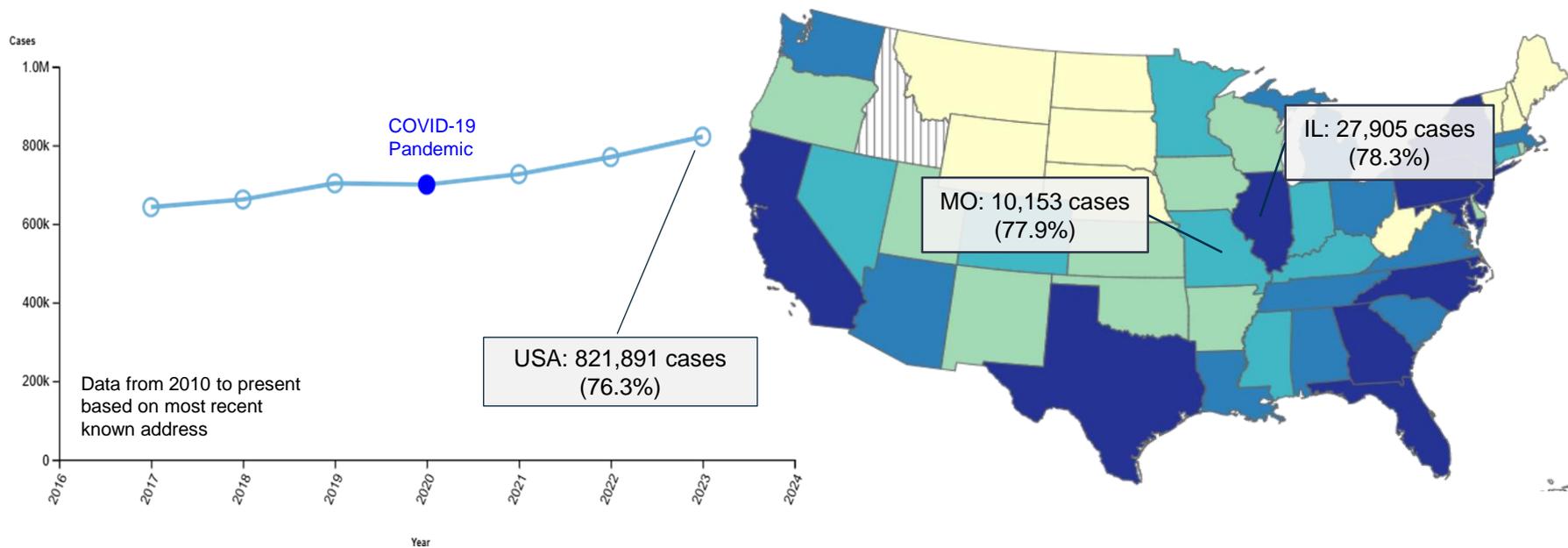
# HIV Epidemiology
National & State Viral Suppression, 2023

HIV viral suppression | 2023 | Ages 13 years and older | All races/ethnicities | Both sexes | All transmission categories | US Map-State Level

COVID-19 Pandemic

USA: 723,768 cases (67.2%)

Data from 2010 to present based on most recent known address

IL: 22,590 cases (63.4%)

MO: 8,700 cases (66.8%)
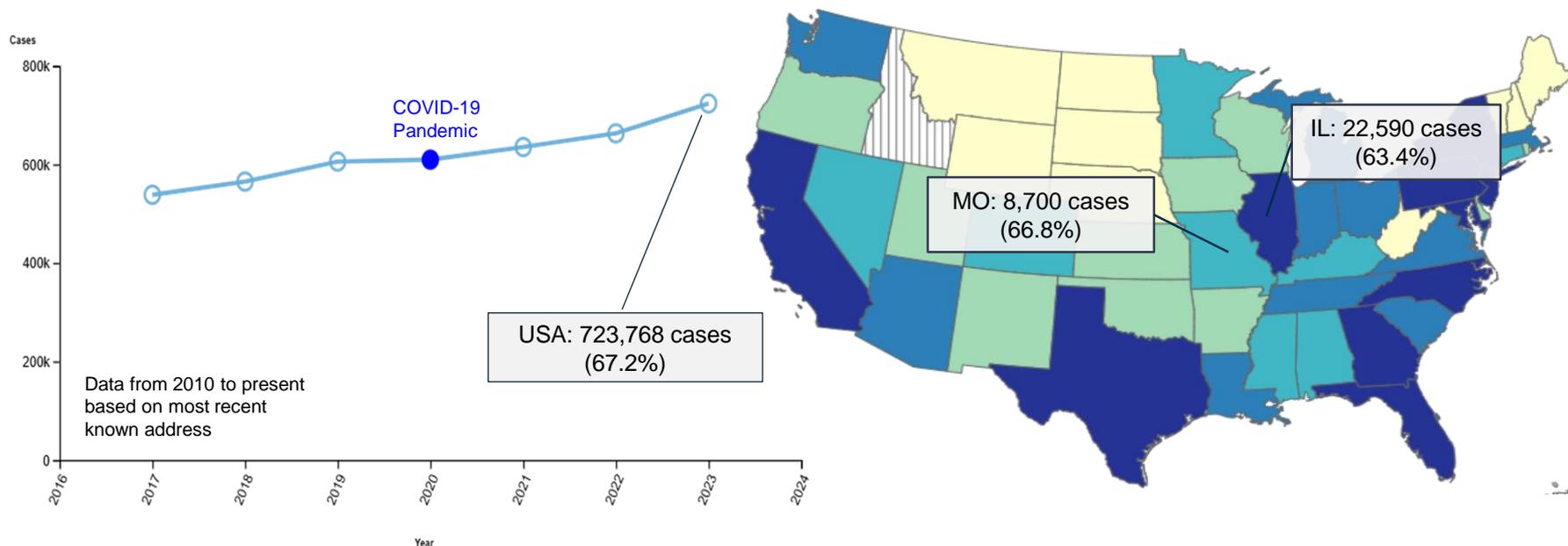
TGA Metrics: Prevalence, Incidence, etc.

iStock
Credit: Bulat Silvia
1131749775

TGA Metrics
Regional Profile, 2023

- *Overall Demographics*

  - *Population: 2,743,815*

  - *Sex: 48.8% male, 51.2% female*

  - *Race: 70.5% White, 17.7% Black, 11.8% Other, 3.9% Hispanic/Latinx*

  - *Edu. Attainment: 6.6% below HS, 25.2% HS grads, 30.2% some college or Assoc. Degree, 38% w/ Bachelor's Degree or higher*

🟥	Missouri HIV Prevention Region
🟥	Missouri Counties of St Louis TGA
🟦	Illinois Counties of TGA in HIV Prevention Region
🟩	Illinois Counties of HIV Prevention Region not in TGA

TGA Metrics

- *Overall Demographics (cont.)*
  - *Income (median): $79,813*
  - *Health insurance: 5.7% w/o insurance, 31.4% w/ public insurance*
  - *Below poverty level: 10.3%*
  - *Occupied households, no vehicle: 7.1%*

🟥	**Missouri HIV Prevention Region**
🟥	**Missouri Counties of St Louis TGA**
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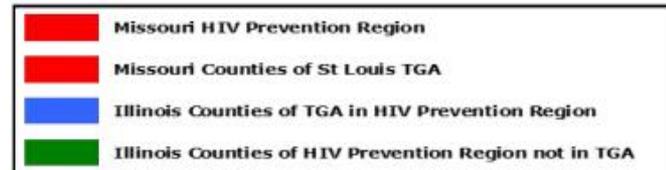
TGA Metrics
Population by County, 2023

2023 COUNTY	Total Population	% of TGA
CLINTON, IL	36,899	1.3%
JERSEY, IL	21,336	0.8%
MADISON, IL	264,631	9.6%
MONROE, IL	34,969	1.3%
ST. CLAIR, IL	254,777	9.3%
FRANKLIN, MO	105,316	3.8%
JEFFERSON, MO	228,227	8.3%
LINCOLN, MO	61,636	2.2%
ST. CHARLES, MO	409,830	14.9%
ST. LOUIS CITY, MO	293,109	10.7%
ST. LOUIS COUNTY, MO	996,618	36.3%
WARREN, MO	36,467	1.3%
TOTAL	2,743,815	
AVERAGE	228,651	
MEDIAN	166,772	

Legend:
- Missouri HIV Prevention Region
- Missouri Counties of St Louis TGA
- Illinois Counties of TGA in HIV Prevention Region
- Illinois Counties of HIV Prevention Region not in TGA
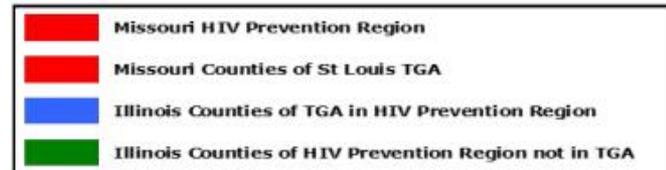
TGA Metrics
HIV Prevalence, 2023

2023 COUNTY	# of PLWHA (13+ years)	% of TGA Prevalence	Rate per 100k
CLINTON, IL	33	0.4%	106
JERSEY, IL	8	0.1%	44
MADISON, IL	228	3.0%	102
MONROE, IL	11	0.1%	37
ST. CLAIR, IL	780	10.4%	369
FRANKLIN, MO	38	0.5%	71
JEFFERSON, MO	65	0.9%	72
LINCOLN, MO	198	2.6%	101
ST. CHARLES, MO	389	5.2%	110
ST. LOUIS CITY, MO	3071	41.0%	1257
ST. LOUIS COUNTY, MO	2651	35.4%	317
WARREN, MO	19	0.3%	60
TOTAL TGA	7491	100.0%	323
AVERAGE	624	8.3%	220
MEDIAN	132	2.6%	101

- 🟥 Missouri HIV Prevention Region
- 🟥 Missouri Counties of St Louis TGA
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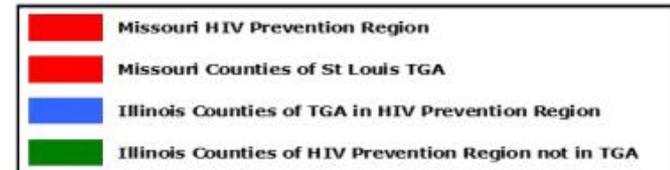
TGA Metrics
HIV Incidence, 2023

2023 COUNTY	# of PLWHA (13+ years)	% of TGA Incidence	Rate per 100k
CLINTON, IL	SUPPRESSED	SUPPRESSED	SUPPRESSED
JERSEY, IL	0	0.0%	0
MADISON, IL	15	4.9%	7
MONROE, IL	0	0.0%	0
ST. CLAIR, IL	39	12.8%	18
FRANKLIN, MO	SUPPRESSED	SUPPRESSED	SUPPRESSED
JEFFERSON, MO	6	2.0%	3
LINCOLN, MO	SUPPRESSED	SUPPRESSED	SUPPRESSED
ST. CHARLES, MO	17	5.6%	5
ST. LOUIS CITY, MO	105	34.4%	43
ST. LOUIS COUNTY, MO	123	40.3%	15
WARREN, MO	SUPPRESSED	SUPPRESSED	SUPPRESSED
TOTAL TGA	305	100.0%	13
AVERAGE	38	8.3%	11
MEDIAN	16	1.0%	6

Legend:
- **Missouri HIV Prevention Region**
- **Missouri Counties of St Louis TGA**
- **Illinois Counties of TGA in HIV Prevention Region**
- **Illinois Counties of HIV Prevention Region not in TGA**
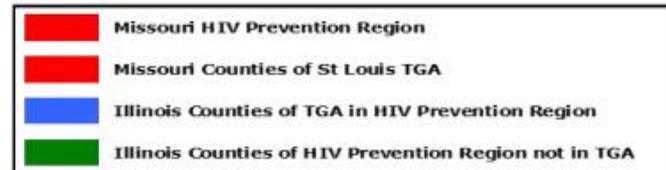
TGA Metrics
HIV Mortality, 2023

| 2023 REGION	# of PLWHA (13+ years)	% of TGA Deaths	Rate per 100k
CLINTON, JERSEY, MADISON, MONROE & ST. CLAIR, IL	25	18.8%	5
FRANKLIN, JEFFERSON, LINCOLN, ST. CHARLES, ST. LOUIS CITY, ST. LOUIS COUNTY & WARREN, MO	108	81.2%	6
TOTAL TGA	133	100.0%	6
AVERAGE	N/A	N/A	N/A
MEDIAN	N/A	N/A	N/A

Legend:
- Missouri HIV Prevention Region
- Missouri Counties of St Louis TGA
- Illinois Counties of TGA in HIV Prevention Region
- Illinois Counties of HIV Prevention Region not in TGA
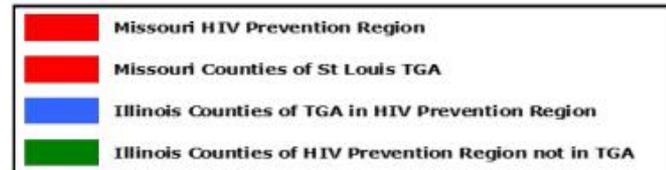
TGA Metrics
Linkage to Care, 2018-2022

Linkage to Care
St. Louis TGA

Legend: Sum of Total No. (red), Sum of >=1 CD4 or VL tests (orange), Sum of % LTC (dashed orange line)

% LTC values by year: 2018: 65%, 2019: 76%, 2020: 85%, 2021: 82%, 2022: 86%

TGA Metrics
Receipt of Care, 2018-2022

Receipt of Care
St. Louis TGA

74% 77% 75% 77% 75%

Legend:
- Sum of Total alive (no.)
- Sum of >=1 CD4 or VL tests (No.)
- Sum of >=1 CD4 or VL tests (%)
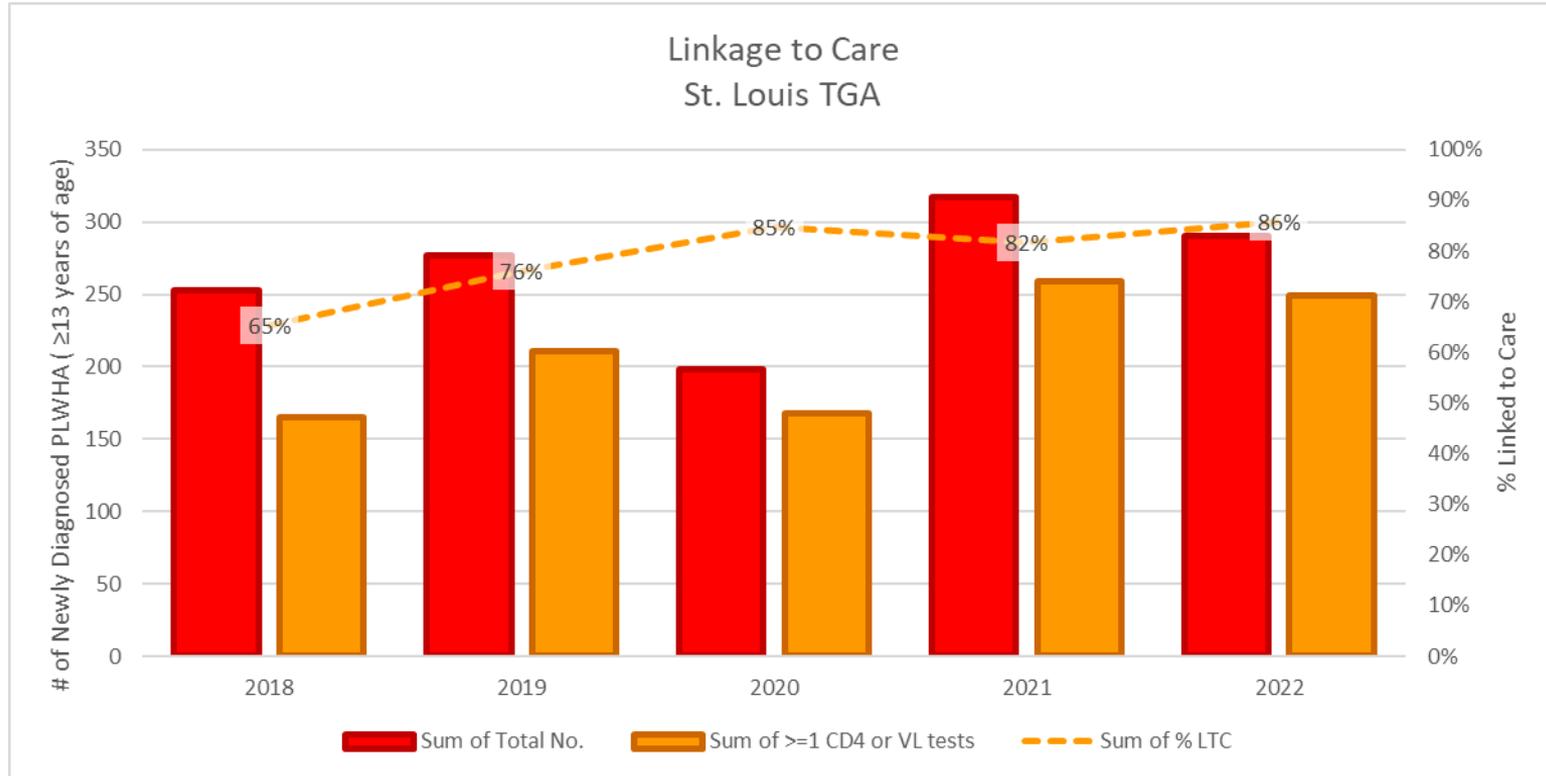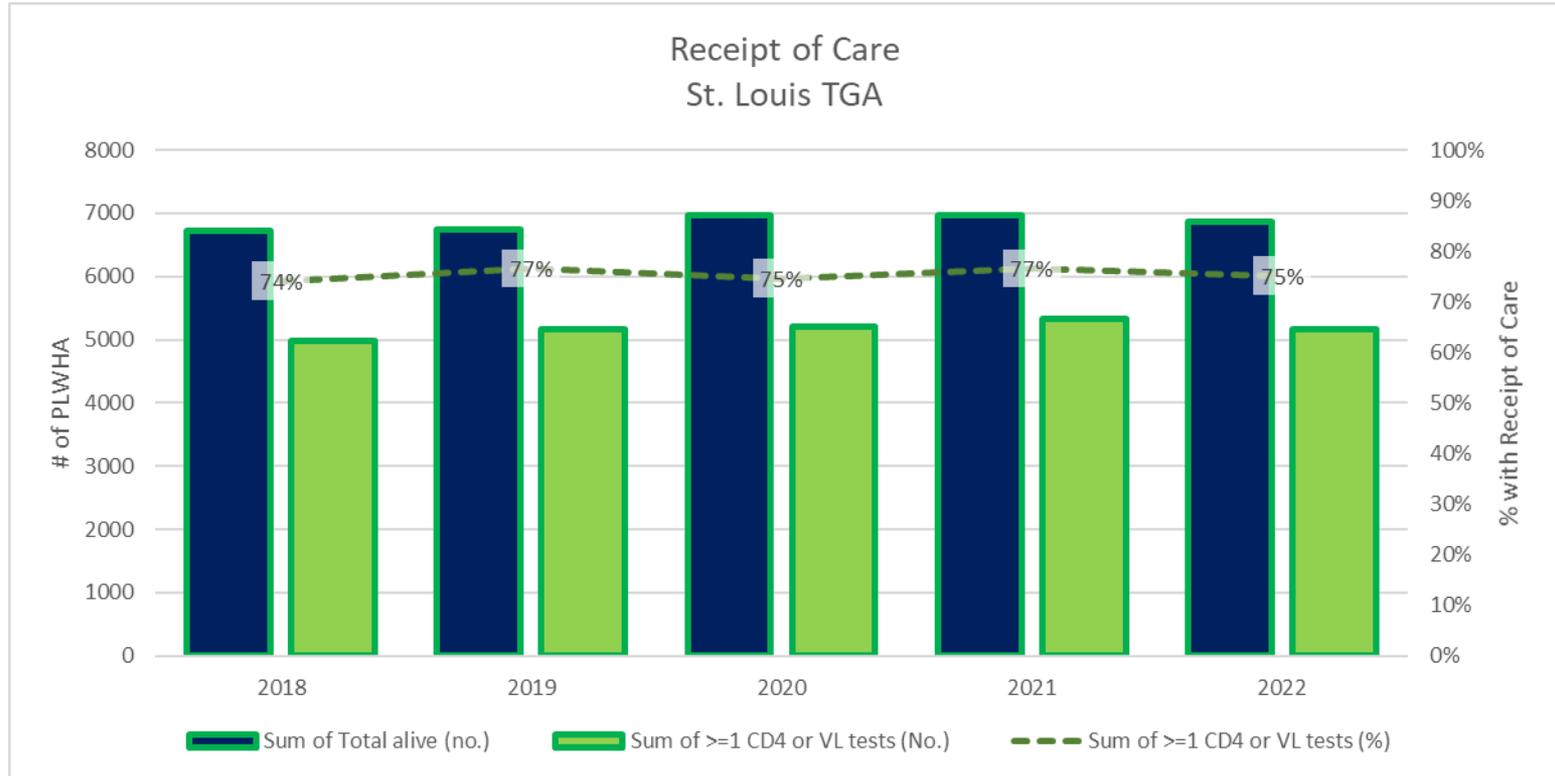
TGA Metrics
Retained in Care, 2018-2022

Retained in Care
St. Louis TGA

Legend:
- Sum of Total alive (no.)
- Sum of >=2 CD4 or VL testsa (no.)
- Sum of >=2 CD4 or VL testsa (%)

Percentages shown: 2018: 54%, 2019: 58%, 2020: 51%, 2021: 57%, 2022: 55%

TGA Metrics
Receipt of Care, 2018-2022

Viral Suppression
St. Louis TGA
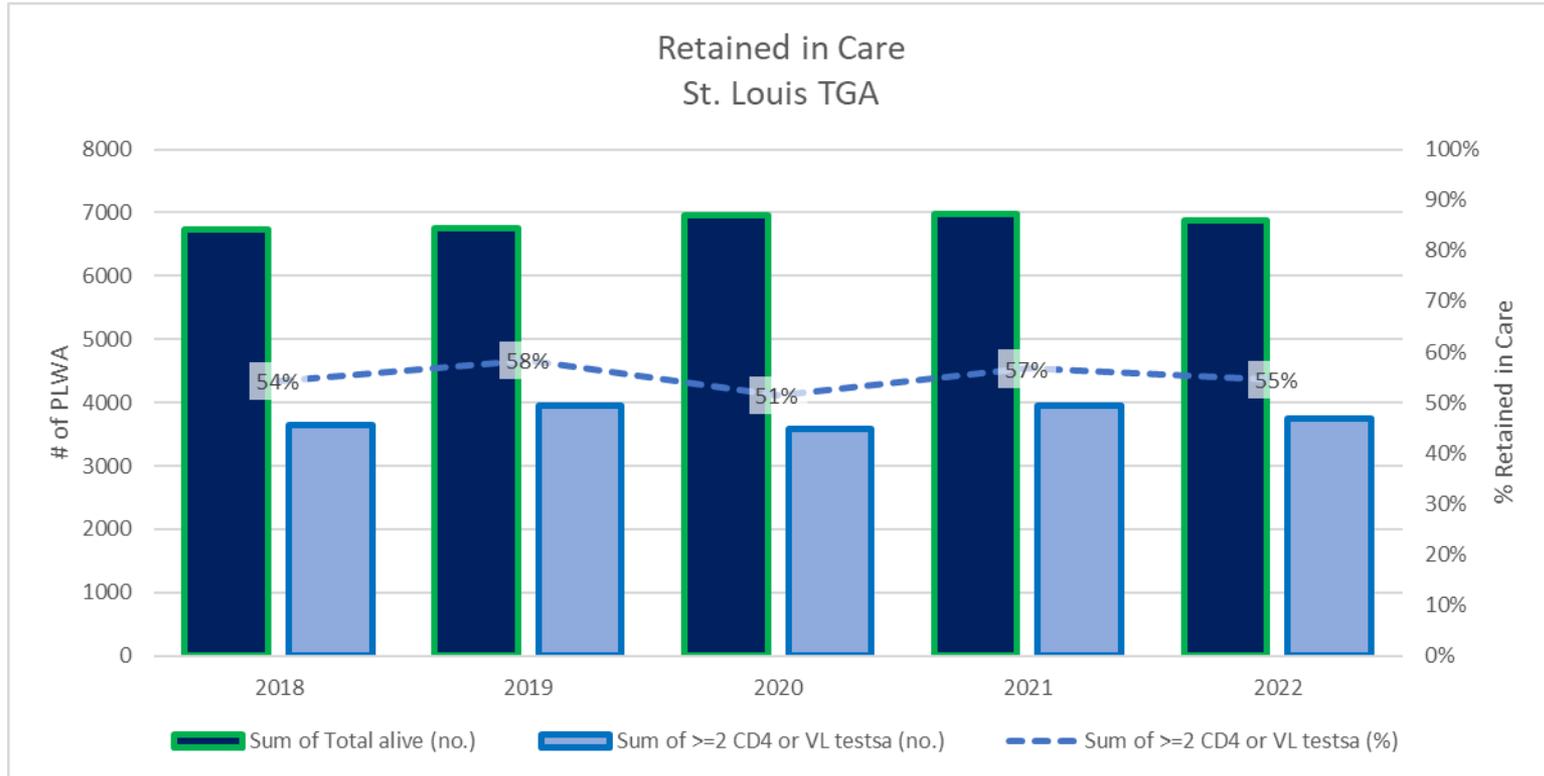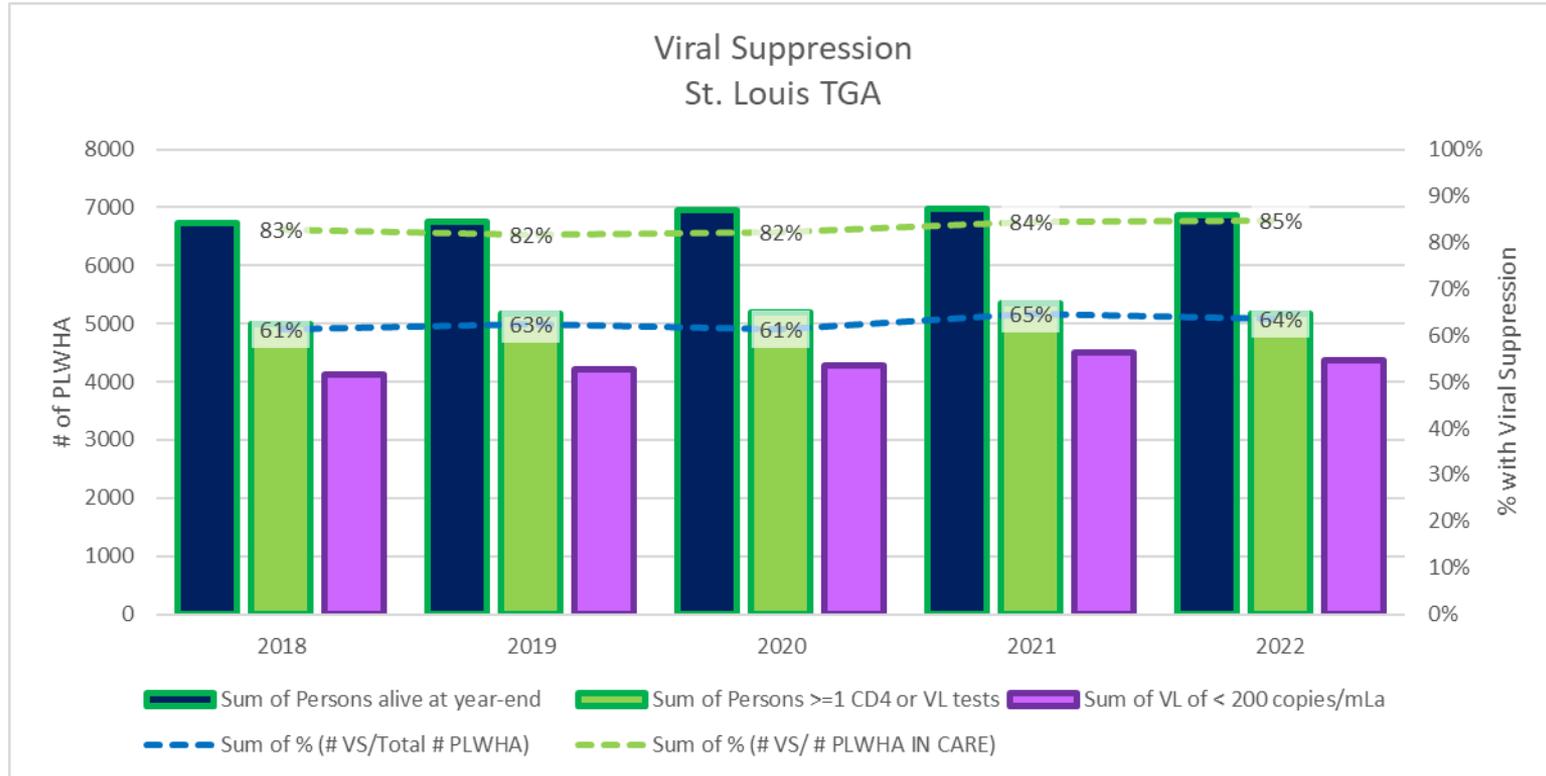
TGA Metrics
EHE Goals, 2022-2027

Diagnosis-based HIV Care Continuum, St. Louis TGA
2022 Baselines & 2027 Goals
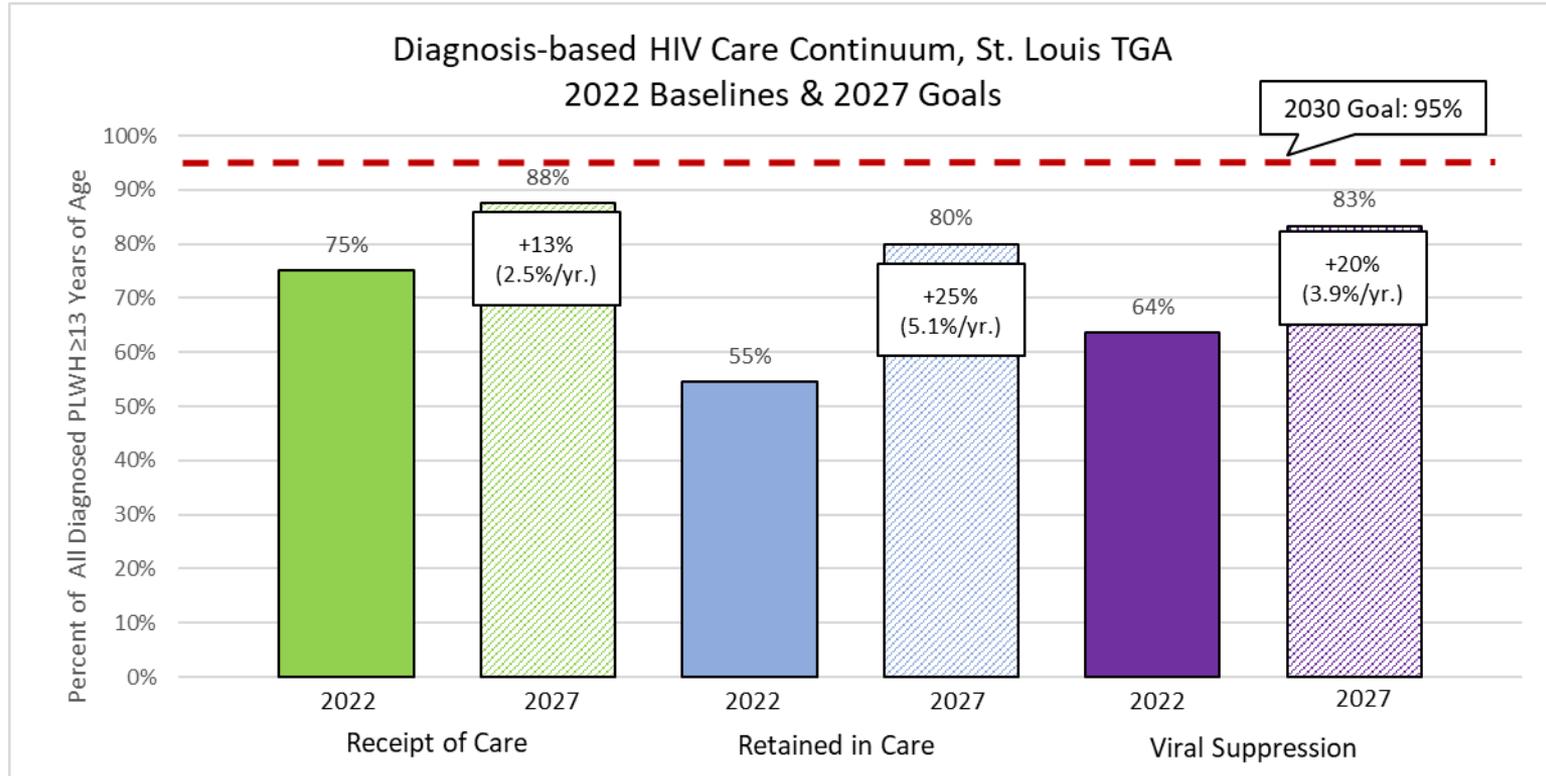
J. Alex Plurad, MD, MPH
Epidemiologist – HIV, STIs, TB

Final Thoughts...

Questions

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Thank you!

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