

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14820
Abstract Type	Breakout
Abstract Title	Social Vulnerability Among New HIV Diagnoses in Louisiana
Submitted in 2020	Yes
Presentation Format Abstract	Any of the above formats

BACKGROUND: Social vulnerability describes the degree to which a person or community experience poverty, unemployment, access to transportation, and other factors that influence their capacity to respond to external stressors. Identifying communities that are more socially vulnerable can aid in outbreak preparedness and response planning for diseases like HIV, which disproportionately affects marginalized groups. Racial disparities in social vulnerability were assessed among new HIV diagnoses in Louisiana.

METHODS: Residence at HIV diagnosis was geocoded to the census tract-level among Louisiana HIV diagnoses from 2017-2019 and matched to the Centers for Disease Control and Prevention Social Vulnerability Index (SVI) database. The SVI ranks each census tract on 15 factors from the U.S. Census including poverty, education, housing, transportation, and minority status. Census tracts for the entire United States are ranked against one another. The tract rankings are based on percentiles with percentile ranking values ranging from 0 to 1 with higher values indicating greater vulnerability.

RESULTS: From 2017-2019, there were 2,868 new HIV diagnoses in Louisiana, of which, 2,515 (87.7%) had a geocoded address at HIV diagnosis classified as residential. Among HIV diagnoses with a geocoded residence, 416 (16.5%) lived in a census tract with a percentile ranking value of 0.9 or higher for overall social vulnerability as compared to 8.3% of the Louisiana total population. The majority of new HIV diagnoses and Louisiana residents with an overall social vulnerability percentile ranking value of 0.9 or higher were non-White, 92.3% and 77.3%, respectively. Among Louisiana HIV diagnoses, the median overall social vulnerability percentile ranking value for Whites was 0.38 as compared to 0.71 for non-Whites.

CONCLUSIONS: The percentage of persons newly diagnosed with HIV who live in census tracts with high social vulnerability was twice as high as the Louisiana total population. In addition, communities of color tend to experience higher social vulnerability than White communities and are disproportionately impacted by the HIV epidemic. With increased focus and effort to rapidly detect and respond to HIV clusters and outbreaks comes the need to identify socially vulnerable communities in order to ensure response efforts adequately address individual and community health needs.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	HIV/AIDS; Social Determinants
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	lauren.ostrenga@la.gov
Presenting Author(s) Institution	Lauren Ostrenga
Affiliation	Louisiana Department of Health State Public Health Agency

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14198
Abstract Type	Lightning
Abstract Title	Comparing the Surveillance-Based Hepatitis C Treatment Cascade between People Coinfected with HIV and Hepatitis C and People Mono-Infected with Hepatitis C in North Carolina
Submitted in 2020	Yes
Presentation Format Abstract	Virtual

BACKGROUND: Chronic hepatitis C (HCV) has been reportable in North Carolina (NC) since 2016. There are an estimated 150,000 people with HCV in NC, with an estimated 4-13% coinfectd with HIV. People living with HIV (PLWH) have more accessible resources to HIV and HCV care in the state, such as Ryan White and the HIV Medication Assistance Program, than HCV mono-infected individuals. We sought to examine if HIV/HCV coinfectd individuals had better HCV treatment outcomes than mono-infected.

METHODS: PLWH in NC through the end of 2019 reported to the enhanced HIV/AIDS Reporting System (eHARS) were matched with all chronic HCV cases that met the 2016 HCV case definition reported to the NC Electronic Disease Surveillance System from 2016 to 2019, to determine the coinfectd population. The steps of the HCV treatment cascade examined include: 1) RNA detectable, 2) engaged in care, defined as having either an additional RNA after their initial date of report to public health, 3) started direct-acting antivirals (DAA), defined as having a positive RNA followed by a negative RNA, 4) attained sustained virologic response (SVR), defined as an undetectable HCV RNA ≥ 12 weeks after last negative RNA, and 5) HCV re-infection, defined as a positive RNA ≥ 12 months after last negative RNA. Chi-square analyses were performed to determine if the proportions engaged in care, started on DAAs, and attained SVR differed by HIV coinfection status.

RESULTS: Data from eHARS through 2019 shows there were 34,460 PLWH, and of those, 1,412 (4%) were coinfectd with HCV and 559 (40%) reported injection drug use (IDU) (includes men who report sex with men and IDU) as a risk for HIV. Our data suggests that HIV/HCV coinfectd individuals were more likely to be engaged in HCV care (77% vs 67% respectively, $p < 0.0001$), to start DAAs (22% vs 15% respectively, $p < 0.0001$), and to attain SVR (22% vs 11% respectively, $p < 0.0001$) compared to HCV mono-infected individuals. There was no HCV re-infection among the PLWH.

CONCLUSIONS: Based on our surveillance data, people coinfectd with HIV and HCV have better HCV treatment outcomes than those with HCV mono-infection. Factors, such as prior engagement and retention in care for other conditions, ease of access to DAA therapy, and provider comfort level in management of HCV may influence rates of treatment and SVR.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	Hepatitis; HIV/AIDS; Epidemiology
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	nicole.d.adams@dhhs.nc.gov
Presenting Author(s) Institution	Nicole Adams
Affiliation	North Carolina Department of Health and Human Services State Public Health Agency

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14919
Abstract Type	Lightning
Abstract Title	Partnering to Improve Response Efforts in an HIV Outbreak Among People Who Inject Drugs - Minnesota 2019-2021
Submitted in 2020	No
Presentation Format Abstract	Virtual

BACKGROUND: In February 2020, the Minnesota Department of Health (MDH) detected an HIV outbreak in Minneapolis/St. Paul. The case definition includes people who inject drugs (PWID) who were diagnosed after December of 2018. As of December 24, 2020, 27 new HIV diagnoses have been associated with the outbreak. To improve “on-the-ground” understanding, communication, and service delivery, MDH implemented sustained forums for response planning and feedback.

METHODS: MDH identified and engaged community stakeholders by establishing forums for ongoing response planning, including: 1) weekly meetings with MDH staff and frontline community-based organizations (CBOs) to address current needs, and 2) monthly meetings with MDH leadership, local public health, and community partners to discuss outbreak response strategies.

RESULTS: This work has improved MDH’s outbreak response activities, routine prevention and engagement, and has resulted in two overarching outcomes: (1) improvements to ongoing partnerships and (2) interventions developed directly from engagement activities. A focus on changing agency culture allowed MDH to build connection and trust and collaborate better with CBOs doing frontline HIV prevention and harm reduction work. MDH worked to create a consistent virtual forum that was casual, free of expectations that CBOs deliver anything, and flexible enough to reflect and honor real-time priorities. In the current response period, 50+ hours were spent in active engagement between MDH and frontline partners, 35+ hours with frontline CBOs, and 15+ hours with local public health and other administrative agencies. New interventions implemented include expansion of mobile HIV testing during a global pandemic, implementation of a rapid/mobile PrEP pilot, and a virtual HIV outbreak town hall for over 100 HIV service providers. In addition, from March-December of 2020, MDH purchased and distributed additional supplies in direct response to requests from frontline partners, including SSP supplies, over 600 warm weather supplies for unhoused communities, nearly 1000 gift cards to incentivize targeted rapid HIV testing, and linkage to and retention in HIV care.

CONCLUSIONS: Our approach to ongoing shared decision-making in this response disrupts the narrative that health departments alone can address and prevent outbreaks. Resulting interventions more effectively meet the needs of most impacted communities. Sustained commitment to genuine partnership can improve response strategies and prevent future outbreaks, using methods including consistent messaging to partners and working to overcome institutional barriers to meet real-time needs. To ensure success, intentional engagement must become a part of general operating procedures at the health department.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	Outbreaks; Collaboration; HIV/AIDS
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	anna.r.bosch@state.mn.us
Presenting Author(s) Institution	Anna Bosch
Affiliation	Minnesota Department of Health State Public Health Agency

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14089
Abstract Type	Lightning
Abstract Title	Understanding Factors Associated with COVID-19 Positivity Among People Living with HIV in Oregon to Promote Health Equity
Submitted in 2020	No
Presentation Format Abstract	Virtual

BACKGROUND: Over 7,800 people with living with HIV (PLWH) in Oregon are at risk of infection with SARS-CoV-2 and consequent adverse clinical outcomes. Communities of color are disproportionately impacted by both COVID-19 and HIV. The purpose of this study was to determine whether PLWH in Oregon, who test positive for COVID-19, particularly PLWH of color, experienced excess morbidity and mortality from SARS-CoV-2 compared to PLWH who test negative for COVID-19.

METHODS: We probabilistically linked lab-confirmed and presumptive COVID-19 cases and negative lab COVID-19 results from the Oregon Pandemic Emergency Response Application (Opera) to lab-confirmed HIV cases in Oregon Public Health Epidemiologists' User System (Orpheus) and CDC's Enhanced HIV/AIDS Reporting System (eHARS) based on last name, first name, and date-of-birth using Match*Pro v1.5 Software. We examined COVID-19 testing and result data for all PLWH with a specimen collection date between February 29, 2020 and November 29, 2020, comparing percent positivity by demographic, clinical, geographic, HIV mode of transmission, and vital status information by test result (positive vs. negative). We used Chi-squared statistics and Fisher's Exact tests in SAS 9.4.

RESULTS: The positivity rate for COVID-19 among PLWH in our cohort was lower than the rate in the general population in Oregon (5.8% vs. 7.4%, $p = 0.006$). Compared to PLWH with negative COVID-19 results, PLWH with positive results tended to be younger, foreign-born, identify as a person of color, and live in the Portland Metro Area in Oregon. Close to 78% of PLWH with a positive COVID-19 result reported having any underlying condition compared with 92.2% of PLWH with a negative result. Gender, HIV mode of transmission, and vital status did not significantly vary by COVID-19 status. Positivity rates for COVID-19 were highest among PLWH who identified as Hispanic or Latino/a/x (13.7%), American Indian/Alaska Native (13.0%), Asian and Native Hawaiian/Pacific Islander (16.7%). PLWH born in Mexico (17.2%), which accounts for the largest proportion of foreign-born individuals in Oregon, and individuals born in all countries other than Mexico also showed elevated positivity rates (15.4%) compared to PLWH born in the US (4.4%).

CONCLUSIONS: The COVID-19 pandemic has magnified historical disparities in social determinants of health, structural racism, and lack of access to testing and treatment innovations, which likely exacerbate susceptibility to COVID-19 among Native people, communities of color, and people born outside of the US. Confronting and dismantling racism at individual and institutional levels is necessary to close the gap in HIV and COVID-19 health outcomes.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	HIV/AIDS; COVID-19; Health Disparities
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	amy.zlot3@dhsosha.state.or.us
Presenting Author(s) Institution	Amy Zlot Oregon Health Authority
Affiliation	State Public Health Agency

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14197
Abstract Type	Poster
Abstract Title	Association between Having a Regular Healthcare Provider and Pre-Exposure Prophylaxis Usage Among Black and White Men Who Have Sex with Men: Atlanta, Georgia, 2019
Submitted in 2020	No
Presentation Format Abstract	Any of the above formats

BACKGROUND: Pre-exposure prophylaxis (PrEP) is an effective medication for preventing the spread of human immunodeficiency virus (HIV) that can only be accessed with a prescription from a licensed prescriber. Regular healthcare providers (e.g. primary care providers) are among the most common type of healthcare providers in the United States, making it likely that individuals at risk of HIV will interact with them. However, the majority of at-risk men who have sex with men (MSM) report that their regular healthcare provider did not discuss PrEP with them recently. Our study aimed to assess the association between having a regular healthcare provider and PrEP usage among MSM.

METHODS: We collected cross-sectional survey data from 849 Georgia residents through two 2019 Atlanta Pride events and two online platforms (Facebook and Grindr). The 5-minute survey was self-administered and included questions on healthcare access, HIV risk behaviors, PrEP usage, and other health-related topics. Our study population consisted of 260 non-Hispanic Black and White MSM who lived in the metro Atlanta area and were not HIV positive. Using crude and adjusted log binomial regressions, we calculated prevalence ratios for Black and White MSM separately to examine the associations between having a regular healthcare provider and ever using PrEP (either current or previous usage).

RESULTS: Among Black MSM, the proportion of those who had ever used PrEP was almost three-times higher for those with a regular healthcare provider compared to those without one (aPR 2.6; 95% CI 1.0, 6.9). Conversely, the proportion of White MSM who had ever used PrEP was lower for those with a regular healthcare provider compared to those without one (aPR 0.7; 95% CI 0.4, 1.3). In a sub-analysis of MSM who had never used PrEP, Black MSM were more likely to report having a regular healthcare provider who discussed PrEP with them in the last year (37%) compared to White MSM (22%) ($p=0.05$).

CONCLUSIONS: Findings from this study suggest that having a regular healthcare provider may be more strongly associated with PrEP usage among Black MSM compared to White MSM. Improving access to a regular healthcare provider may be an important PrEP facilitator for all MSM, but especially important for Black MSM. Further research is needed to understand the mechanisms involved in the differing associations observed for Black and White MSM.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	HIV/AIDS; Prevention; Health Care
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	Nellie.Garlow@emory.edu
Presenting Author(s) Institution	Eleanor Garlow
Affiliation	Rollins School of Public Health, Emory University
	Student

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14664
Abstract Type	Poster
Abstract Title	Characterization of Demographic Differences Among Molecular HIV Clusters in Georgia, 2018–2020
Submitted in 2020	No
Presentation Format Abstract	Any of the above formats

BACKGROUND: In 2018, Georgia had the highest rate of new HIV diagnoses in the US among states. Molecular HIV surveillance uses similar HIV genotype sequences to identify transmission clusters. Clusters indicate recent and rapid transmission, and large clusters are of particular interest. Describing these clusters can help better understand HIV transmission dynamics and help focus prevention efforts. This analysis described demographic characteristics among persons associated with molecular clusters of varying size in Georgia, 2018–2020.

METHODS: Data were drawn from the Georgia Department of Public Health enhanced HIV/AIDS Reporting System and a secure HIV-TRACE local installation. Secure HIV-TRACE uses HIV polymerase gene sequences to identify molecular clusters with genetic distance of $\leq 0.5\%$, representing recent HIV transmission. Analysis included individuals who currently reside in Georgia, age 13 and older, diagnosed with HIV infection during 2018–2020, and had a genotype sequence. Molecular clusters were grouped into three categories, small (2–3 members, $n=200$), medium (4–9 members, $n=43$), and large (≥ 10 members, $n=5$).

RESULTS: Overall, 3913 people were included in this analysis. Of them, 3240 (82.8%) were male at birth, 2661 (68.0%) were Black, 355 (9.1%) were Hispanic, 583 (14.9%) were White, 2309 (59.0%) were MSM, 636 (16.3%) were heterosexual contacts, 53 (1.4%) were persons who inject drugs (PWID), and 1967 (50.3%) were over 30 at HIV diagnosis. Among 708 persons in clusters at the $\leq 0.5\%$ distance, 623 (88.0%) were males and 85 (12.0%) females; 473 (66.8%) were Black, 75 (10.6%) Hispanic, and 114 (16.1%) White; 88 (12.4%) were heterosexual contacts, 10 (1.4%) PWID, and 503 (71.1%) MSM; 224 (31.6%) were over 30 and 484 (68.4%) under 30. There were 67 (1.7%), 215 (5.5%), and 426 (10.9%) in large, medium, and small clusters, respectively. Among the 67 persons in large clusters, the majority were male (97.0%), MSM (80.6%), and under 30 (74.6%). The proportion Black in large clusters was similar to all persons in clusters (65.7%), Hispanic was higher (16.4%), and White was lower (9.0%).

CONCLUSIONS: Under 30 MSM accounted for a disproportionate segment of large clusters, which represent recent and rapid transmission. The lower proportion of Whites and higher proportion of Hispanics in large clusters may be driven by small numbers as half of the members of the largest cluster were Hispanic. Notably, there were no large or medium clusters dominated by PWID. Using HIV surveillance and molecular data together can help better understand HIV transmission patterns to guide and focus prevention efforts.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	Health Disparities; HIV/AIDS; Surveillance
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	daniel.mauck@dph.ga.gov
Presenting Author(s) Institution	Daniel Mauck
Affiliation	Georgia Department of Public Health State Public Health Agency

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14642
Abstract Type	Poster
Abstract Title	HIV Viral Suppression During the Prenatal Period Reduces Likelihood of Vertical Transmission and Improves Pregnancy Outcomes in Tennessee
Submitted in 2020	No
Presentation Format Abstract	Any of the above formats

BACKGROUND: Approximately 5,000 persons living with HIV (PLWH) give birth each year in the United States. The use of antiretroviral therapy (ART) has resulted in decreased vertical HIV transmission during pregnancy, childbirth, and breastfeeding. Establishing early prenatal care, initiating ART during pregnancy, and achieving viral suppression before delivery is critical. To evaluate and identify opportunities to reduce vertical transmission and improve pregnancy outcomes in Tennessee, we examined correlates of viral suppression among pregnant PLWH.

METHODS: Birth certificate data denoting all live births in Tennessee during 2015–2019 were obtained from the Tennessee Department of Health (TDH) Birth Statistical File. HIV data were obtained from the TDH Enhanced HIV/AIDS Reporting System (eHARS). Birth certificate and eHARS data were matched on maternal name, social security number, and date of birth. Diagnostic and HIV-1 RNA viral loads obtained in the prenatal period (defined as ≤ 280 days prior to delivery through time of delivery) were categorized as virally suppressed (< 200 copies/mL) or not virally suppressed (≥ 200 copies/mL). Chi-square statistic (observations > 5), Fisher's exact test (< 5), and Student t-test (continuous values) were used to identify significant associations between viral suppression status and covariates of interest (i.e., transmission risk, prenatal care, pregnancy outcomes). Logistic regression was performed on covariates with statistically significant differences ($p < 0.05$).

RESULTS: During the prenatal period, 215 [77%] of PLWH were virally suppressed and 63 [23%] were not virally suppressed. PLWH who were virally suppressed were more likely to have had prenatal care [80%] and deliver vaginally [88%] compared to PLWH who were not virally suppressed ($p < 0.05$). Prenatal care is defined as having at least one visit. PLWH who were virally suppressed were also more likely to deliver a child who was HIV-negative [79%], normal birth weight (≥ 2500 grams) [81%], and full-term (≥ 39 weeks) [90%] compared to PLWH who were not virally suppressed ($p < 0.05$). PLWH who were not virally suppressed were 6.2 times more likely (odds ratio; 95% CI 2.5-14.9) to deliver a preterm infant (< 37 weeks) ($p < 0.05$).

CONCLUSIONS: Viral suppression decreases the risk of vertical transmission of HIV and the likelihood of adverse pregnancy outcomes. Routine one-time HIV screening for persons of childbearing age and more frequent screenings for persons engaged in high-risk behaviors should be promoted during gynecological visits to diagnose HIV and initiate ART. Sexual and reproductive health clinics play a critical role in offering family planning services for PLWH seeking to delay pregnancy until achieving and maintaining viral suppression.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	HIV/AIDS; Infant Health; Maternal and Child Health
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	Melanie.Ratliff@tn.gov
Presenting Author(s) Institution	Tennessee Department of Health
Affiliation	State Public Health Agency

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14096
Abstract Type	Poster
Abstract Title	Improving HIV Data Management By Research Electronic Data Capture Project Development
Submitted in 2020	No
Presentation Format Abstract	Virtual

BACKGROUND: In 2006, laboratories began reporting HIV test results to the Tennessee Department of Health (TDH) via electronic laboratory reporting (ELR), facilitating more efficient, automated matching and data entry of lab reports for persons previously reported to the enhanced HIV/AIDS Reporting System (eHARS). However, each year, 7% of all ELR reports (>8,000) did not match to existing records and required routing via mail to regional field staff for manual data entry. This process introduced challenges tracking receipt and eHARS entry, delayed identification of new diagnoses and confidentiality concerns. In September 2017, to address these concerns, the HIV surveillance program developed a HIPAA-compliant Research Electronic Data Capture (REDCap) project entitled “HIV Labs” to manage these challenges.

METHODS: With input from field staff “HIV Labs” was designed to mirror eHARS data entry to increase efficiency and reduce errors. Data access groups were used to limit staff access to lab reports within their regions. Reports were created to help users prioritize and manage labs during investigation. After implementation, feedback was elicited from users, resulting in several enhancements: removing duplicate lab reports, transposing multiple results to a single record, assigning labs based on patient address (vs. provider), simplifying the record closeout process and creating prioritization reports. Additionally, evaluation metrics were developed for users and their managers to monitor lab closure status (i.e., open/closed) and timeliness (i.e., date received by TDH to closure date).

RESULTS: Prior to “HIV Labs” implementation, TDH did not have a mechanism to monitor closure status and timeliness of unmatched HIV lab reports. Metrics calculated in December for the respective year indicated that 22% and 65% of labs received in 2018 and 2019, respectively, were closed compared to 79% of labs received in 2020. Closure timeliness decreased 241 days (86%) over the first three years of implementation (280, 119 and 39 days) across the three observation years. Despite regional differences in closure timeliness (2018: 60–339 days; 2019: 26–216 days; 2020: 12–104 days), all regions demonstrated improvement over time.

CONCLUSIONS: The implementation of “HIV Labs” changed workflows to improve the security of confidential patient information and the efficiency of HIV lab investigations while providing mechanisms for process monitoring. Evaluation metrics revealed improvements in lab report closure status and timeliness. Next steps for continued improvement include provision of REDCap trainings and technical guidance on workflow for field staff, in addition to ongoing solicitation of feedback from users.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	HIV/AIDS; Surveillance
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	samantha.mathieson@tn.gov
Presenting Author(s) Institution	Samantha A. Mathieson
Affiliation	Tennessee Department of Health State Public Health Agency

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14718
Abstract Type	Poster
Abstract Title	Receipt of HIV Care Among Georgians Living with HIV/AIDS Preceding and during the COVID-19 Pandemic
Submitted in 2020	No
Presentation Format Abstract	In-Person

BACKGROUND: Utilization of in-person care have decreased during the COVID-19 pandemic, both as a result of patient apprehension about accessing care, and because health systems and clinics have implemented measures to promote social distancing (e.g. tele-health and extended renewal of prescriptions). Receipt of care by persons living with HIV (PLWH) is a critical step towards achieving viral suppression, which is important for the health of PLWH and to reduce forward transmission of HIV. We analyzed Georgia HIV surveillance data before and during the COVID-19 pandemic to describe changes in receipt of care for PLWH.

METHODS: Georgia's HIV surveillance system collects CD4 counts and viral load (VL) test results for PLWH in Georgia. Laboratory reports are used as a proxy for receipt of care and serve as the basis for the HIV care continuum. Using data reported through October 2020, we analyzed the proportion of persons receiving at least 1 CD4 or VL test during the six months pre-pandemic (July-December 2019) and during the pandemic (March-August 2020), the proportion virally suppressed among those receiving a test, and the percent change by demographic characteristics.

RESULTS: Overall, 60.8% of PLWH in Georgia had at least 1 CD4 count or VL test in the 2nd half of 2019, compared with 50.9% during March-August 2020, a 16.3% decrease. The percent decrease by race/ethnicity ranged from 17.1% for Blacks to 12.5% for Whites; by age group, it ranged from 32.1% in persons ages 13-19 years to 15.9% in those 60 years and older; by transmission category, it ranged from 17.3% in persons with HIV attributable to injection drug use to 15.1% in men who have sex with men. Overall, among those who received HIV care, 84% were virally suppressed during the pre-pandemic period, and 83% during the pandemic period.

CONCLUSIONS: Among those who had CD4/VL tests done, the proportion virally suppressed did not change, however the proportion of PLWH with a test during the pandemic period decreased. Although persons who did not have a CD4 or VL test may have been in contact with a provider, the impact of this decrease on viral suppression is unknown at this time. The overall decrease, and the variation by demographic characteristics highlights the need for HIV care providers to reach out to patients who have missed in-person or virtual appointments to ensure they do not fall out of care due to COVID-19-related disruptions.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	Surveillance; Epidemiology; HIV/AIDS
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	stephen.ray@dph.ga.gov
Presenting Author(s) Institution	Stephen Ray
Affiliation	Georgia Department of Public Health State Public Health Agency

SubmissionType Breakout/Quick/Lightning/Poster

ID 14145

Abstract Type Poster

Abstract Title Understanding the HIV Epidemic in the Context of the Heterogeneity of Asian & Pacific Islanders in New York City

Submitted in 2020 Yes

Presentation Format Abstract Any of the above formats

BACKGROUND: Asian and Pacific Islanders (API) are a growing, heterogeneous racial/ethnic minority group. Nationally, APIs show both a low but increasing rate of HIV diagnoses (HIVdx) and a low prevalence of HIV testing. This analysis characterizes the epidemiology of HIV among APIs in New York City (NYC), and examines differences in testing and diagnosis among API subgroups.

METHODS: To obtain HIVdx rates, our numerator included HIVdx reported to the population-based NYC HIV surveillance registry for API residents age ≥ 13 years and diagnosed in NYC during 2010-2019. Our denominator used 2014-2018 American Community Survey population estimates. Lifetime HIV testing was estimated using 2013-2017 data from the NYC Community Health Survey for APIs age ≥ 18 years old. Age-adjusted rates were standardized to the 2000 US census.

RESULTS: From 2010-2019, there were 1,062 APIs diagnosed with HIV in NYC, 76.2% born outside the United States (US). Newly diagnosed APIs were most commonly men ($n=941$, 88.6%), age 20-29 ($n=358$, 33.7%), living in medium-poverty neighborhoods ($n=512$, 48.2%), and men reporting a history of sex with other men ($n=710$, 66.9%). The age-adjusted yearly HIVdx rate among APIs born outside the US was 7.8/100,000 (95% CI [7.2, 8.4]); US-born APIs had a higher rate, at 13.0/100,000 (95% CI [10.6, 15.5]). Among APIs born outside the US, the highest adjusted HIVdx rates were among people born in countries in Southeast Asia, particularly Thailand (111.5/100,000) and Indonesia (52.7/100,000). The age-adjusted proportion of APIs reporting lifetime testing for HIV was 40.3%. API testing was significantly lower than testing among Latinos (76.6%), non-Latino Black (77.4%) and non-Latino White (54.2) people. Testing among non-US born APIs was 39.1%, significantly lower than US-born APIs (52.9%). The lifetime history of HIV testing among APIs was lowest among people born in Thailand (21.4%) and Indonesia (28.7%).

CONCLUSIONS: Testing among APIs was lower than citywide ranges for all NYC residents (2013-2017: 61.9-65.7%) and non-US born NYC residents (2013-2016: 60.5-63.0%). It is possible that the low HIVdx rates among NYC API residents are influenced by low proportions of lifetime HIV testing among API persons, and that undiagnosed HIV infections are not evenly distributed across API subgroups. Additional HIV risk and testing practice research among NYC APIs will improve estimates of HIV prevalence in these communities. HIV testing programs should be tailored to account for cultural heterogeneity among APIs, as well as variability in healthcare accessibility and community relationships with traditional and allopathic healthcare providers.

Committee Infectious Disease

Topic HIV & STD

Keywords Health Disparities; HIV/AIDS; Minority Health

Consider for Different Presentation? Yes

Presenting Author Email Address(es) cmcnally@health.nyc.gov

Presenting Author(s) Institution New York City Department of Health and Mental Hygiene

Affiliation Local Public Health Agency

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14983
Abstract Type	Quick
Abstract Title	Assessing the Success of the ATRA Black Box in Interstate Deduplication and Data Completeness
Submitted in 2020	No
Presentation Format Abstract	Any of the above formats

BACKGROUND: Interstate deduplication of persons living with HIV has been an ongoing effort of HIV surveillance programs, supported by Cumulative and Routine Interstate Duplicate Review reports generated by the CDC (CIDR and RIDR) and routine record searches completed by jurisdictions. The ATRA Black Box is a secure, confidential technology that processes data, to report potential case pairs between participating jurisdictions. The confidence in the accuracy of the Black Box matching algorithms, and the subsequent use of the matched data, allows for reduced call burden and quicker ascertainment of case pairs between jurisdictions. The objective of this project is to assess the success of the Black Box in reporting case pairs and the contribution to data completeness in 2020.

METHODS: The Black Box processes data files from each participating jurisdiction's HIV surveillance system and matches cases based on demographic information such as name, date of birth, social security number, and birth sex, similar to how case pairs are evaluated during routine record searches. Matches are categorized from Low to Exact, contingent on the quantity of variables that match for each prospective case and reported back to jurisdictions in ADI reports. Reports include a full match report with demographic information for each case pair. In Louisiana, Black Box matches categorized as Exact or Extremely High were imported into eHARS (n=184) in 2020.

RESULTS: The match report generated from the most recent Black Box run, with 21 participating jurisdictions, included 61% of case pairs (n=279) with participating Black Box states on 2020 RIDR files. Of the case pairs on RIDR first resolved by Black Box (n=55), 100% were found to have correct demographic and diagnosing information, later confirmed by routine RIDR calls with participating jurisdictions. At the end of the 2020 calendar year, the Black Box had resolved 3,872 of Louisiana's pending CIDR cases (30%). 10,701 case pairs on the Black Box match report were found to correspond with Louisiana's eHARS background RIDR file, allowing for 2,704 current address updates in 2020.

CONCLUSIONS: The integration of the Black Box into Louisiana's surveillance program has allowed for expedited identification of case pairs with all participating jurisdictions. Additional participation in a modified version of the Black Box that pulls alias names between 5 jurisdictions furthered the contribution to interstate de-duplication. Overall, the Black Box has not only enhanced the efficiency and timeliness of resolving case pairs, it has also contributed greatly to data completeness.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	HIV/AIDS; Surveillance
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	Justice.King@la.gov
Presenting Author(s) Institution	Justice King
Affiliation	Louisiana Department of Health State Public Health Agency

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14666
Abstract Type	Quick
Abstract Title	Declines in Reportable Diseases during the COVID-19 Pandemic: Changes in Health Care Seeking Behavior or Reduced Transmission?
Submitted in 2020	No
Presentation Format Abstract	Hybrid

BACKGROUND: The COVID-19 pandemic has caused unrivaled social disruption, affecting in-person interactions, visits to health care providers for non-COVID illnesses, well-checks, and routine screenings. The Cook County Department of Public Health sought to quantify reductions in tuberculosis disease diagnoses and chlamydia and gonorrhea diagnoses and compare and contrast these conditions to determine the extent to which declines were driven by a reduction in care-seeking behaviors or as a result of personal/sexual interactions. TB incidence is not expected to change rapidly because it is typically a slow-growing disease. However, STIs may be more sensitive to changes in social interactions that may occur during a pandemic.

METHODS: We aggregated probable and confirmed case data for chlamydia, gonorrhea, and TB for suburban Cook County from 2015 to 2020 for January through October, comparing 2020 cases to previous years. STI testing data were acquired from a large hospital system in Cook County.

RESULTS: From January to October 2020, reported chlamydia cases declined 68.8% compared to the same time frame in 2019; gonorrhea cases declined 60.1%. The decline in cases was more pronounced in the months after the first 'lockdown' in Illinois, occurring mid-March. Clinic data indicate that though the number of tests decreased 34% in 2020 compared to 2019, the percent positivity increased from 7.5% to 9.2%. Despite the overall decrease in reported chlamydia and gonorrhea cases, the distribution of sex, age, and race/ethnicity was similar for 2019 and 2020. TB cases, already in a downward secular trend averaging about 2.7% per year for 2015 to 2019, decreased by 27.3% during this same time frame in 2020.

CONCLUSIONS: The number of reported cases of chlamydia and gonorrhea in suburban Cook County substantially decreased during the COVID-19 pandemic; however, STI test positivity at a large local hospital system increased. Additionally, a much larger than expected decline in TB cases occurred during the same period. Taken together, these data seem to indicate that changes in care-seeking behaviors are likely the driver of observed reductions in STIs and TB, rather than reductions in behaviors that lead to tuberculosis, chlamydia and gonorrhea. Reduced care-seeking is likely to impact detection of other reportable diseases as well. State and local health departments may need to prepare for an influx of reportable diseases after the pandemic ends.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	Sexually Transmitted Diseases; Surveillance; COVID-19
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	alexandra.burda@cookcountyhealth.org
Presenting Author(s) Institution	Lex Burda
Affiliation	Cook County Department of Public Health CDC/CSTE Fellow

SubmissionType Breakout/Quick/Lightning/Poster

ID 14079

Abstract Type Quick

Abstract Title Inability to Pay Medical Bills Among Adults with Diagnosed HIV — United States, 2017–2019

Submitted in 2020 No

Presentation Format Abstract Any of the above formats

BACKGROUND: The inability to pay medical bills affects HIV care continuum outcomes in people with HIV, and thus is a barrier to achieving national HIV prevention goals. However, recent nationally representative estimates of inability to pay medical bills among people with HIV have not been published. Using representative data from the Medical Monitoring Project (MMP), we examined differences in inability to pay medical bills by selected sociodemographic characteristics among adults with diagnosed HIV in the United States.

METHODS: MMP is a complex sample survey that produces nationally representative estimates of characteristics among adults with diagnosed HIV. Sampling occurs at two stages; 16 states and 1 territory were first selected from all U.S. states and Puerto Rico, then persons were randomly sampled for participation. During 6/2017–5/2019, we asked a sample of 8,272 adults with diagnosed HIV their race/ethnicity, income level, and healthcare coverage to assess their ability to pay for HIV medical care. We defined inability to pay medical bills as having problems paying or being unable to pay one's personal medical bills. Healthcare coverage was categorized as: any private, public only (Medicare, Medicaid, state/local public insurance, VA/CHAMPUS coverage), and uninsured/Ryan White HIV/AIDS Program (RWHAP) coverage only. We reported weighted percentages of inability to pay medical bills by selected sociodemographic characteristics and used Rao-Scott chi-square tests ($p < .05$) to report differences between groups. All measures were based on the 12 months before interview.

RESULTS: Nearly one in five (18%) adults with diagnosed HIV reported an inability to pay medical bills. Inability to pay medical bills varied by race/ethnicity (non-Hispanic Black/African American: 22%; non-Hispanic White: 19%; Hispanic/Latino: 16%) and was higher among persons who experienced homelessness (28% vs. 20%). Inability to pay medical bills also varied by healthcare coverage type, with the highest percentage of inability to pay among those that were uninsured or had RWHAP coverage only (public only: 17%; any private: 22%; uninsured/RWHAP coverage only: 34%).

CONCLUSIONS: Nearly one in five adults with diagnosed HIV were unable to pay medical bills during the past 12 months; inability to pay medical bills was highest among non-Hispanic Blacks/African Americans, persons experiencing homelessness, and those who were uninsured or relied on RWHAP coverage only. Health care and social service providers can assist persons with HIV who are experiencing financial challenges by linking them to financial assistance or service programs designed to help reduce the burden of unpaid medical bills.

Committee Infectious Disease

Topic HIV & STD

Keywords HIV/AIDS; Social Determinants; Health Insurance

Consider for Different Presentation? Yes

Presenting Author Email Address(es) ihg3@cdc.gov

Presenting Author(s) Institution Ruth E. Luna-Gierke

Affiliation Centers for Disease Control and Prevention

CDC

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14049
Abstract Type	Quick
Abstract Title	Is the Juice Worth the Squeeze? - Response Results to Three Clusters of HIV in Texas Involving Latino/Hispanic MSM Identified Using Molecular Analysis
Submitted in 2020	No
Presentation Format Abstract	Any of the above formats

BACKGROUND: Project Conéctate/PS17-1711 is a Centers for Disease Control and Prevention (CDC) funded demonstration project to identify rapidly growing clusters of HIV transmission involving Latinx men who have sex with men (MSM), where higher HIV incidence is observed, using molecular analysis. Sites must identify clusters, analyze existing data sources to identify related transmission and risk networks and determine follow up activities needed based on the cluster make up, community barriers and challenges, and to determine if the activities are generalizable to established HIV prevention interventions. Three molecular clusters, 1711_CDC_201512_51(Cluster A) (n=44), 1711_TX_201801_442 (Cluster B) (n=13), 1711_CDC_201612_796(Cluster C) (n=23), were investigated in Texas in 2019-2020. Field Health Advocate (FHA) staff in Texas carried out the in-person follow up of these clusters.

METHODS: Clusters were identified using Secure HIV-TRACE and linked with partner services information to identify the associated transmission (A: n=42, B: n=16, C: n=16) and risk networks (A: n=175, B: n=49, C: n=36). Molecular and Transmission network persons living with HIV (PLWH) were re-interviewed, offered a \$50 Visa gift card as a token of appreciation for participation and offered linkage to care. Risk network (HIV negative) members were offered HIV testing, PrEP linkage and a \$25 Visa gift card.

RESULTS: 159 PLWH were contacted for re-engagement in care, 90 (57%) were confirmed to already be in care, 4 (2.5%) were linked to care, 4 (2.5%) refused services, 9 (5.6%) were unable to be located, and 12 (7.5%) were living out of state or incarcerated. Outcome results for the remaining 40 are still pending review. FHA staff were able to contact 161 risk network persons, test 67 and identify 4 new PLWH (positivity rate 5.9%). 38 were tested independently by medical providers or other health department staff after being assigned to FHAs, identifying 2 new PLWH (positivity 5.2%).

CONCLUSIONS: Cluster detection and response is an activity that has the potential to identify new PLWH at rates varyingly comparable to focused and partner services HIV testing, as well as highlight gaps in HIV Prevention, Care, Partner Services, Surveillance and other programs. The staff expertise and time commitment needed to conduct these activities to the extent done in this demonstration project is beyond typical prevention and public health follow-up and would be difficult for many jurisdictions to obtain and/or maintain. In depth, ongoing collaboration from all areas of HIV program are essential to the success of this level of cluster response.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	HIV/AIDS; Sexually Transmitted Diseases
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	analise.monterosso@dshs.texas.gov
Presenting Author(s) Institution	Analise Monterosso
Affiliation	Texas Department of State Health Services State Public Health Agency

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14891
Abstract Type	Quick
Abstract Title	Mycoplasma Genitalium Prevalence in El Paso County Colorado Family Planning Clinic 2019: Findings and Implications
Submitted in 2020	Yes
Presentation Format Abstract	Any of the above formats

BACKGROUND: *Mycoplasma genitalium* is a sexually transmitted infection (STI) with potential acute and long-term health effects. Prevalence in the United States is one percent, which is more than gonorrhea (0.4%) but less than chlamydia (2.3%). Despite relatively high prevalence, *M. genitalium* is not included in routine screening. Among men, *M. genitalium* is a cause of non-gonococcal urethritis. Among women, it is often asymptomatic until complications occur. Complications can include pelvic inflammatory disease which may result in tubal scarring with resulting infertility and/or ectopic pregnancy. It is also potentially associated with adverse pregnancy outcomes such as preterm birth and spontaneous abortion. In addition to adverse health outcomes, *M. genitalium* is increasingly resistant to azithromycin and requires treatment with moxifloxacin which can be cost prohibitive, carries increased risk of side effects, and is contraindicated in pregnancy. Given the emerging public health importance of *M. genitalium*, El Paso County Public Health (EPCPH) sought to understand the local burden of *M. genitalium* infection among clients of the EPCPH Family Planning clinic.

METHODS: EPCPH conducted nucleic acid amplification testing with the Aptima Hologic technology for *M. genitalium* on a retrospective cohort of specimens from patients who had sought care at the Family Planning Clinic in 2019. Twenty-three specimens were selected based on presumed risk for *M. genitalium* associated with ICD-10 codes. Forty-three specimens were randomly selected from among male patients.

RESULTS: Among the 43 randomly selected specimens, six tested positive for *M. genitalium* (14.0%). Among specimens selected based on risk factors, four tested positive (17.4%). EPCPH did not find a statistically significant increase in the relative risk for *M. genitalium* in the group with presumed risk factors (RR = 1.25, 95% CI = 0.39 – 3.97). In total, 15 percent of the 66 specimens were positive, which is consistent with the national average among adults presenting for STI screening.

CONCLUSIONS: EPCPH found a prevalence of 15 percent among a small cross section of patients, most of whom would not have been screened for *M. genitalium* in the course of standard care. *M. genitalium* should be considered for cases that are refractory to standard STI treatments and may factor into decision-making regarding antibiotic use. Further cost benefit analysis is necessary to determine sustainable screening and treatment protocols based on local prevalence.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	Sexually Transmitted Diseases; Screening
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	RajkoAnic@elpasoco.com
Presenting Author(s) Institution	Rajko Anic El Paso County Public Health
Affiliation	Local Public Health Agency

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14368
Abstract Type	Quick
Abstract Title	Trends in Nationally Notifiable Sexually Transmitted Disease Case Reports during the U.S. COVID-19 Response
Submitted in 2020	No
Presentation Format Abstract	Virtual

BACKGROUND: U.S. COVID-19 prevention measures to reduce close personal contact likely affected sexual behaviors (e.g., meeting new sexual partners), as well as sexually transmitted diseases (STD)-related care (e.g., frequency of STD screening visits), leading to possible changes in the STD epidemic. To describe changes in reported STDs during the response, we reviewed cases of nationally notifiable STDs before, during, and after the COVID-19 shelter-in-place orders in spring 2020. **METHODS:** We reviewed cases of chlamydia, gonorrhea, and primary & secondary (P&S) syphilis reported to CDC's National Notifiable Disease Surveillance System in 2019 and 2020. For each STD, we used the assigned *MMWR* week to compare the number of 2020 cases reported for a given week to the number of 2019 cases reported in the same week, expressing 2020 cases as a percentage of 2019 cases. To allow for lags in reporting, 2020 cases reflect data through *MMWR* week 44 (week of October 25, 2020), reported to CDC as of December 22, 2020. **RESULTS:** During *MMWR* week 1 to week 11 (week of March 8, 2020), the weekly number of cases of STDs reported in 2020 as a percentage of the cases in the same week in 2019 were similar. Large relative deficits in the weekly number of 2020 cases compared to 2019 cases began in week 12 for chlamydia (76% deficit) and in week 13 for gonorrhea (77% deficit) and P&S syphilis (71% deficit). Greatest relative deficits occurred in week 15 (chlamydia: 50%, gonorrhea 71%, and P&S syphilis: 64%). Across all three STDs, the deficits began to reduce in week 16 (week of April 12, 2020). As of *MMWR* week 44, the substantial relative deficit in the cumulative number of chlamydia cases persisted (82%; 1,388,464 versus 1,442,847 cases) but there were similar numbers of cumulative P&S syphilis cases (94%; 28,181 versus 29,851 cases), and gonorrhea cases (101%; 475,420 versus 472,179 cases) reported. **CONCLUSIONS:** During the initial shelter-in-place orders enacted in March and April 2020, national case reporting for STDs dramatically decreased. Rebounds in the number of gonorrhea and P&S syphilis cases reported suggest STDs may have increased during 2020 and that the STD epidemic occurring prior to COVID-19 pandemic may not have abated.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	Sexually Transmitted Diseases; Surveillance
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	igf0@cdc.gov
Presenting Author(s) Institution	Elizabeth Torrone
Affiliation	Centers for Disease Control and Prevention

SubmissionType	Breakout/Quick/Lightning/Poster
ID	14882
Abstract Type	Quick
Abstract Title	"Ending the HIV Epidemic" in Los Angeles County: Promoting Self-Test Kits to Increase Access to HIV Testing Among Men Who Have Sex with Men (MSM)
Submitted in 2020	No
Presentation Format Abstract	Any of the above formats

BACKGROUND: In 2019, the United States (US) launched the federal initiative, *Ending the HIV Epidemic (EHE): A Plan for America*, to reduce the number of new HIV infections by 90% by 2030. Expanded testing is needed to increase the number of people living with HIV (PLWH) who are aware of their HIV infection. HIV self-test kits represent a promising strategy to expand access to HIV testing among persons who have never or recently been tested. In Los Angeles County (LAC), 81% of new HIV diagnoses in 2018 were among MSM, and in 2017, awareness of HIV infection was estimated to be lower among Black and Latino MSM (74% and 77%) compared to white MSM (100%) and persons aged 13-24 (46%) compared to those aged ≥25 (83%). We describe implementation of an HIV self-testing program to reduce disparities in HIV testing and awareness in LAC.

METHODS: LAC contracted with a non-profit organization to provide free HIV self-testing kits to residents through the online *TakeMeHome* program, promoted via dating apps targeted to MSM and health department websites. Residents who have never or not recently tested (>1 year) for HIV qualify to be sent a kit. Participants are asked to complete a short demographic questionnaire. We tested for differences between participants who never tested for HIV compared to those who ever tested using chi-square and t-tests.

RESULTS: From 8/01/2020-11/30/2020, 357 participants requested a kit (89.4% male sex; mean age=30.1 years, Standard Deviation [SD]=9.1). 33.1% of participants reported never having tested for HIV and 66.9% reported testing >1 year ago. Participants that had never tested were significantly younger (mean age=26.9 years, SD=8.1) than those who reported ever having an HIV test (mean age=31.7, SD=9.1; $p<.0001$); there were no differences in HIV testing history by sex. Among the 285 (79.8%) who completed the demographic questionnaire, 33.0% reported never having tested for HIV. Most reported being Hispanic/Latinx (45.6%) followed by White (21.8%), Asian (10.2%), Black (9.5%) and multiple/other race/ethnicity (13%). There were no differences in HIV testing history by race/ethnicity.

CONCLUSIONS: Over one-third of participants had never previously tested for HIV, suggesting that *Take Me Home* can increase testing access among LAC residents unaware of their HIV status, particularly among younger residents. Uptake of self-testing was lower among black residents compared to those of other race/ethnicities highlighting need for improved marketing. Further evaluation will determine whether the program increases identification of new HIV infections.

Committee	Infectious Disease
Topic	HIV & STD
Keywords	Disease Prevention; HIV/AIDS; Special/Vulnerable Populations
Consider for Different Presentation?	Yes
Presenting Author Email Address(es)	bmoulton@ph.lacounty.gov
Presenting Author(s) Institution	Bret Moulton Los Angeles County Department of Public Health
Affiliation	Local Public Health Agency