New York State Prevention Agenda Prevent Communicable Diseases Priority Action Plan

Updated: April 27, 2021

Define the Priority:

A communicable disease is an illness or infection that can be spread from person to person, animal to person, animal to animal or person to animal. Communicable diseases contribute to sickness and death in New York State and are preventable. Additional information about the burden of communicable diseases, underlying risk factors and associated disparities can be found at: https://www.health.ny.gov/prevention/prevention_agenda/2019-2024/docs/sha/contributing_causes_of_health_challenges.pdf#page=153

The Prevent Communicable Disease Action plan contains five focus areas, each with at least one goal:

Focus Area 1: Vaccine Preventable Diseases
Goal 1.1: Improve vaccination rates
Goal 1.2: Reduce Vaccination coverage disparities
Focus Area 2: Human Immunodeficiency Virus (HIV)
Goal 2.1: Decrease HIV morbidity (new HIV diagnoses)
Goal 2.2: Increase viral suppression
Focus Area 3: Sexually Transmitted Infections
Goal 3.1: Reduce the annual rate of growth for STIs
Focus Area 4: Hepatitis C Virus (HCV)
Goal 4.1: Increase the number of persons treated for Hepatitis C Virus
Goal 4.2: Reduce the number of new HCV cases among people who inject drugs
Focus Area 5: Antimicrobial Resistance and Healthcare-Associated Infections
Goal 5.1: Improve infection control in healthcare facilities
Goal 5.2: Reduce infections caused by multidrug resistant organisms
Gold 5.3: Reduce inappropriate antibiotic use

Focus Area 1: Vaccine Preventable Diseases

The reduction of vaccine-preventable diseases is an extremely important public health goal achieved through immunization. Although vaccine-preventable disease (VPD) rates are low in New York State (NYS) and in the United States (US), the prevalence of certain diseases is beginning to increase due to pockets of under-immunization and global travel. In addition, lagging human papillomavirus (HPV) and influenza vaccine coverage in NYS puts New Yorkers at risk of these serious vaccine-preventable diseases.

Goal 1.1: Improve Vaccination Rates

Objectives:

1.1.1 By December 31, 2024, increase the rates of immunization among NYS 24-35-montholds with the 4:3:1:3:3:1:4 series (4 DTaP, 3 polio, 1 MMR, 3 Hep B, 3 Hib, 1 varicella, 4 PCV13) by 10% from 64.1% in 2018 to 70.5%.

Data Source: New York State Immunization Information System (NYSIIS) and Citywide Immunization Registry (CIR)

1.1.2 By December 31, 2024, increase the percentage of NYS 13-year-old adolescents with a complete HPV vaccine series by 10% from 34.0% in 2018 to 37.4%. Data Source: NYSIIS and CIR

1.1.3 By December 31, 2024, increase influenza immunization rates of New Yorkers aged 6 months and older by 10% from 49.80% in 2016-17 to 54.8%. *Data Source: FluVaxView*

1.1.4 By December 31, 2024, increase the age-adjusted pneumococcal vaccination rate of New Yorkers aged 65 years and older by 10% from 69.3% in 2016 to 76.2%. Data Source: Behavioral Risk Factor Surveillance System

Goal 1.2: Reduce vaccination coverage disparities

Objectives:

1.2.1 By December 31, 2024, reduce the disparity measured by the difference in the 4:3:1:3:3:1:4 vaccine series coverage between NYS 19-35-month-olds living in households below the federal poverty level compared with those living in households at or above the federal poverty level by 50% to 4.90%.

• Baseline: 9.70%; Year: 2016

Data Source: National Immunization Survey

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• Baseline: 11%; Year: 2016 Data Source: National Immunization Survey – Teen

Intervention #1: Ensure and enforce strong immunization requirements for child care, school and post-secondary institution entry and attendance.

Evidence base:

• <u>Community Preventive Services Task Force Finding and Rationale Statement:</u> <u>Vaccination Requirements for Child Care, School, and College Attendance</u>

Age range(s): May impact all ages, but primarily impacts:

- Children up to age 12
- Adolescents (13-21)

Social Determinant of Health addressed: Education **Sector(s) playing lead role:** Governmental Public Health Agencies; Colleges and Universities; Schools (K-12); Policy makers and elected officials

Sector(s) playing contributing role: Healthcare Delivery System, Insurers, Media, Community or neighborhood residents, CBOs and Human service agencies Intermediate-level measures:

- Increased annual school immunization coverage rates.
- Decreased annual school medical and religious exemption rates.

Intervention #2: Maximize use of the New York State Immunization Information System (NYSIIS) and the Citywide Immunization Registry (CIR) for vaccine documentation, assessment, decision support, reminders and recall. Increased use of the registries can better inform assessments of vaccine coverage, missed vaccination opportunities and help address disparities in vaccine coverage including those for specific age groups.

Evidence base:

• <u>Community Preventive Services Task Force Finding and Rationale Statement:</u> <u>Immunization Information Systems</u>

Age range(s): All Ages, including older adults.

Social Determinant of Health addressed: Health Care

Sector(s) playing lead role: Governmental Public Health Agencies; Healthcare Delivery System; Policy makers and elected officials

Sector(s) playing contributing role: Insurers; Media; Colleges and Universities; Schools (K-12); CBOs and Human service agencies

Intermediate-level measures:

• Increased proportion of immunizations reported to NYSIIS within 14 days of administration

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• Increased number of reminder/recall reports run in NYSIIS each year

Intervention #3: Implement and promote use of standing orders for vaccine administration.

Evidence base:

• <u>Community Preventive Services Task Force Finding and Rationale Statement:</u> <u>Standing Orders</u>

Age range(s): All ages, including older adults.

Social Determinant of Health addressed: Health Care

Sector(s) playing lead role: Healthcare Delivery System;

Sector(s) playing contributing role: Governmental Public Health Agencies; Insurers; Colleges and Universities; CBOs and Human service agencies; Policy makers and elected officials

Intermediate-level measures:

- Increased number of clinics utilizing standing orders for vaccine administration
- Increased proportion of vaccines administered by the clinic for which standing orders have been implemented

Intervention #4: Minimize client out-of-pocket costs for vaccinations.

Evidence base:

• <u>Community Preventive Services Task Force Finding and Rationale Statement:</u> <u>Reducing Client Out-of-Pocket Costs for Vaccinations</u>

Age range(s): All ages

Social Determinant of Health addressed: Economic Stability; Health Care **Sector(s) playing lead role:** Governmental Public Health Agencies; Healthcare Delivery System; Policy makers and elected officials

Sector(s) playing contributing role: Media; CBOs and Human service agencies Intermediate-level measures:

- Increased number of no-cost or reduced-cost vaccine doses administered
- Increased number of patients referred to health insurance navigators

Intervention #5: Offer vaccines in locations and hours that are convenient to the public including pharmacies, vaccine only clinics, and other sites that are accessible to people of all ages.

Evidence base:

Stinchfield PK. Practice-proven interventions to increase vaccination rates and broaden the immunization season. The American Journal of Medicine. 2008;121(7): S11–S21. **Age range(s):** All ages including older adults

Social Determinant of Health addressed: Economic Stability; Education; Transportation; Health Care

Sector(s) playing lead role: Healthcare Delivery System; Employers and businesses and unions

Sector(s) playing contributing role: Governmental Public Health Agencies; Insurers; Media; Colleges and Universities; Schools (K-12); CBOs and Human service agencies; Policy makers and elected officials

Intermediate-level measures:

- Improved patient/parent satisfaction with clinic locations and hours
- Increased number of patients seen per clinic date and location

Focus Area 2: Human Immunodeficiency Virus (HIV)

New York State is engaged in a three-point plan to move closer to the end of the AIDS epidemic. The goal is to reduce the number of new HIV infections to just 750 (from an estimated 3,000 in 2013) by 2020 and achieve the first ever decrease in HIV prevalence in New York State.

The three-point plan identifies persons with HIV who remain undiagnosed and link them to health care; links and retains persons diagnosed with HIV in health care to maximize virus suppression so they remain healthy and prevent further transmission; and facilitates access to Pre-Exposure Prophylaxis (PrEP) for high-risk persons to keep them HIV negative.

<u>Ending the Epidemic (ETE)</u> is maximizing the availability of life-saving, transmission-interrupting treatment for HIV, saving lives and improving the health of New Yorkers. It will move New York from a history of having the worst HIV epidemic in the country to a future where new infections are rare and those living with the disease have normal lifespans with few complications. This focus area plan was developed in conjunction with and supports *Ending the Epidemic*.

Goal 2.1: Decrease HIV Morbidity (new HIV Diagnoses)

Goal 2.2: Increase Viral Suppression

Objectives

2.1.1 By December 31, 2024, reduce the number of new HIV diagnoses by 70% to 1,020 diagnoses or 5.2 per 100,000 population. (Baseline: 3,391 diagnoses or 17.3 per 100,000 population; Year: 2013; Data Source: HIV Surveillance)

2.1.2 By December 31, 2024, reduce the newly diagnosed HIV case rate among African Americans by 70% to no more than 13 new diagnoses per 100,000 population. (Baseline: 43 per 100,000 population; Year: 2013; Data Source: HIV Surveillance)

2.1.3 By December 31, 2024, reduce the newly diagnosed HIV case rate among Hispanics by 70% to no more than 10 new diagnoses per 100,000 population. (Baseline: 32 per 100,000 population; Year: 2013; Data Source: HIV Surveillance)

2.2.1 By December 31, 2024, increase the percentage of all persons living with diagnosed HIV infection (PLWDHI) who receive care with suppressed viral load by 17% to 95%. (Baseline: 81%; Year: 2013; Data Source: HIV Surveillance)

2.2.2 By December 31, 2024, increase the percentage of African American persons living with diagnosed HIV infection (PLWDHI) who receive care with suppressed viral load by 23% to 95%. (Baseline: 77%; Year: 2013; Data Source: HIV Surveillance)

2.2.3 By December 31, 2024, increase the percentage of Hispanic American persons living with diagnosed HIV infection (PLWDHI) who receive care with suppressed viral load by 17% to 95%. (Baseline: 81%; Year: 2013; Data Source: HIV Surveillance)

Intervention #1: Facilitate access to Pre-Exposure Prophylaxis (PrEP) and non-occupational post-exposure prophylaxis (nPEP) for high-risk persons to keep them HIV-negative. Access can be facilitated by the following:

- Statewide education campaign on PrEP and nPEP
- Expanding funded programming for PrEP
- Creating a statewide mechanism for persons to access PrEP and nPEP
- Determining a method for measuring the number of New Yorkers on PrEP and nPEP

Evidence Base: PrEP is a targeted biomedical intervention to facilitate "health care as prevention," a six-pronged intervention for people who are HIV-negative and at high risk for infection. The intervention includes a once daily pill; periodic HIV testing; periodic STD screening; counseling about the use of condoms to prevent STDs; education about harm reduction options; and, counseling to promote adherence to the once-a-day PrEP medication. PrEP has been studied in multiple randomized controlled and open-label trials in several populations, including MSM, ^{48 49} heterosexual serodiscordant couples, ⁵⁰ heterosexual men and women, ^{51, 52, 53} transgender women, ⁵⁴ and PWID. ⁵⁵ A recent meta-analysis suggests >70% protection across all studies in which >70% adherence was reported. ⁵⁶

Implementation Resources: NYS Medicaid, along with most insurance plans, covers the only currently FDA-approved PrEP medication, Truvada[®]. Uninsured individuals may receive Truvada[®] through the Gilead patient assistance program: (<u>https://start.truvada.com/</u>). The NYS PrEP Assistance Program can also help to cover the costs of clinical visits and lab testing for uninsured and underinsured individuals who qualify:

https://www.health.ny.gov/diseases/aids/general/prep/docs/prep_payment_options.pdf. The NYS DOH website on PrEP has useful information on PrEP and nPEP programming, as well as links to additional resources:

https://www.health.ny.gov/diseases/aids/general/prep/consumers.htm

Target Population by Age: New Yorkers of all ages at highest risk for acquiring HIV **Social Determinants of Health:** Health care

Sectors Playing Lead Role: State and local health departments, STI service providers, healthcare delivery system.

Sectors Playing Contributing Role: Insurers, Colleges and universities, community or neighborhood residents, CBOS Human Service agencies

Intermediate Measures: Number of New Yorkers prescribed PrEP, by patient demographic factors to ensure equal access.

Intervention #2: Link and retain persons diagnosed with HIV in care to maximize virus suppression so they remain healthy and prevent further transmission. Linkage and retention to be facilitated by the following activities:

- Promoting the message that individuals with a sustained undetectable viral load will not sexually transmit HIV;
- Expanding Data to Care (DTC) activities, which uses HIV surveillance data to identify previously-known, HIV-positive individuals who appear to be out of care, with the specific objectives of re-engaging these individuals in medical care and notifying, testing and treating partners;
- Expand funded programming aimed at improving outcomes for persons with HIV/AIDS by increasing linkage to care, improving retention in care, and promoting adherence to ART;
- Leverage NY Links and other regionally based collaboratives to identify innovative solutions for improving linkage and retention in HIV care services.

Evidence Base: Clinical trials and cohort studies have long supported the fact that adherence to Antiretroviral Therapy (ART) reduces the risk of transmitting HIV. Today, treatment as prevention (TasP) has become a widely-accepted strategy for addressing the HIV epidemic and reducing new infections. Most recently, results from the HIV Prevention Trials Network 052⁵⁷ and PARTNER⁵⁸ studies demonstrate that, not only does effective antiretroviral treatment improve the health of each person living with HIV, it also prevents transmission of HIV to sexual partners. Thus, individuals with a sustained undetectable viral load will not sexually transmit HIV, or "Undetectable equals Untransmittable" (U=U). Please visit <u>https://health.ny.gov/endingtheepidemic</u> to view a recent webinar on the topic of U=U and to receive updates as they become available.

Data to Care (D2C) is a public health strategy that uses HIV surveillance and other data to support the HIV Care Continuum, by identifying persons living with HIV who are in need of HIV medical care or other services and facilitating linkage to those services. Some examples of D2C activities include using HIV surveillance data to identify persons who are not in care (NIC) and then link or re-engage them in care; and identifying persons who are in care but are not virally suppressed and work with clients and their providers to support attaining viral suppression. D2C has been show to:

- Improve linkage to or re-engagement in care for persons living with HIV;
- Improve viral suppression;
- Improve surveillance data quality; and
- Promote better collaboration between surveillance, prevention and care and treatment staff.

More information on DTC is available at: <u>https://effectiveinterventions.cdc.gov/en/2018-design/data-to-care/group-1/data-to-care/data-to-care-essential-elements</u>

Implementation Resources: Strategies and Resources for Retention in Care resource has been posted to the NYSDOH website. It can be found at:

http://www.health.ny.gov/diseases/aids/general/standards/docs/strategies_resources_retenti on_in_care.pdf.

Target Population by Age: New Yorkers living with diagnosed HIV infection who are not virally suppressed (or who are risk of becoming unsuppressed)

Social Determinants of Health: Health Care

Sectors Playing Lead Role: State and local health departments, including partner services programs, healthcare delivery system, MCOs.

Sectors Playing Contributing Role: Colleges and universities, community or neighborhood residents, CBOS Human Service agencies

Intermediate Measures: Viral suppression, by patient demographic factors to ensure equity across all groups

Focus Area 3: Sexually Transmitted Infections (STIs)

One important aspect of achieving optimal sexual health is the identification, treatment, and prevention of sexually transmitted infections (STIs). STIs can be spread from person to person through condomless genital, anal, and oral sex. Untreated STIs can lead to abdominal pain, infertility, pelvic inflammatory disease, and more serious complications. Pregnant women with syphilis may pass their infection on to their infants (or in the uterus) which can cause major health problems, including stillbirth or death shortly after birth.

STIs are the most commonly reported communicable disease. To interrupt the steady increase in rates, public health and health care professionals engage in education and counseling, testing, and treatment, along with provider and community engagement to support prevention.

Goal 3.1: Reduce the annual rate of growth for STIs

Objectives

3.1.1 By December 31, 2024, reduce the annual rate of growth for early syphilis by 50% to 10%. (Baseline: 20%; Year: 2012-2016 average 5-year percent change; Data Source: STI Surveillance)

3.1.2 By December 31, 2024, reduce the annual rate of growth for gonorrhea by 50% to 4%. (Baseline: 8%; Year: 2012-2016 average 5-year percent change; Data Source: STI Surveillance)

3.1.3 By December 31, 2024, reduce annual rate of growth for chlamydia by 50% to 1%. (Baseline: 2%; Year: 2012-2016 average 5-year percent change; Data Source: STI Surveillance)

3.1.4 By December 31, 2024, keep the age-adjusted diagnosis rate of gonorrhea to no more than 242.6 per 100,000 population (Baseline: 149.8 per 100,000; Year: 2016; Data Source: STI Surveillance).

3.1.5 By December 31, 2024, keep the age-adjusted diagnosis rate of chlamydia to no more than 676.9 per 100,000 population (baseline: 567.0 per 100,000; Year: 2016; Data Source: STI Surveillance).

3.1.6 By December 31, 2024, keep the age-adjusted diagnosis rate of early syphilis to no more than 79.6 per 100,000 population (Baseline: 31.2 per 100,000; Year: 2016; Data Source: STI Surveillance).

Intervention #1: Increase partner services

Evidence Base: Partner Services is the front-line public health intervention for interrupting HIV and STI transmission in the community. Trained DOH workers work with persons newly diagnosed with HIV or STIs to ensure they and their partners are linked to care, treatment, and prevention. Any provider who diagnoses STIs should work with their local DOH partner services program to ensure their patients have access to this free, confidential service.

Implementation Resources:

https://www.health.ny.gov/diseases/communicable/std/partner_services/index.htm https://www.cdc.gov/std/program/partners.htm https://nysptc.org/ https://www.health.ny.gov/diseases/aids/ending_the_epidemic/docs/std_workgroup_strategi es.pdf

Target Population by Age: New Yorkers of all ages

Social Determinants of Health: Health care

Sectors Playing Lead Role: Governmental public health agencies, healthcare delivery system Sectors Playing Contributing Role: Insurers, colleges and universities, community or neighborhood residents, CBOs and human service agencies

Intermediate Measures: Number of patients offered and accepting Partner Services, number of patients naming at least one partner, number of partners linked to testing and treatment

Intervention #2 Increase STI testing and treatment

Evidence Base: Ensuring that all persons at risk for STIs have access to affordable, accessible, convenient, and culturally-responsive STI testing and treatment services is the bedrock of any STI prevention and control strategy. While STIs are increasing, testing and treatment are effective methods for reducing transmission and promoting sexual health at the individual level. STI testing should be offered in venues and at times that are convenient for population groups most affected by STIs. Providers should ask their patients about which body parts they and their partners use during sex and offer STI testing of the throat and rectum (in addition to genitals) as appropriate.

Implementation Resources: https://www.cdc.gov/std/tg2015/screening-

recommendations.htm

Target Population by Age: New Yorkers of all ages Social Determinants of Health: Health care Sectors Playing Lead Role: Healthcare delivery system Sectors Playing Contributing Role: Governmental public health agencies, insurers, colleges and universities, schools, CBOs and human service agencies

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Intermediate Measures: Number of patients testing for STIs; number of patients positive for STIs; number of patients diagnosed with an STI who receive treatment

Intervention #3: Promote distribution of condoms

Evidence Base: While new methods for preventing HIV have garnered attention over the last several years, the foremost primary prevention method for sexually active people remains condoms. New approaches for increasing condom utilization, and making condoms a regular part of sexual health, will be important for reducing STI impact in NYS. Providers of sexual health services can partner with the NYSCondom program to make condoms more available within their local community.

Implementation Resources: https://www.cdc.gov/condomeffectiveness/index.html

https://www.health.ny.gov/diseases/aids/consumers/condoms/nyscondom.htm

https://www.health.ny.gov/diseases/aids/ending_the_epidemic/

https://www.health.ny.gov/diseases/aids/ending_the_epidemic/docs/std_workgroup_strategi es.pdf

Target Population by Age: New Yorkers of all ages

Social Determinants of Health: Health care

Sectors Playing Lead Role: Healthcare delivery system

Sectors Playing Contributing Role: Governmental public health agencies, insurers, media, colleges and universities, schools, community or neighborhood residents, CBOs and human services agencies, housing agencies

Intermediate Measure: Number of condoms distributed; percentage of sexually active people who report using condoms

Intervention #4: Promote Expedited Partner Therapy

Evidence Base: Expedited Partner Therapy (EPT) is a practice that allows health care providers to provide a patient with either antibiotics or a written prescription, intended for the patients' sexual partner(s). In New York State, EPT is used for treatment of exposure to chlamydia. Broad implementation of EPT across multiple provider types will be an important population-level intervention for chlamydia control, given this STI's prevalence in the state (with over 110,000 diagnoses annually it is the most commonly reported communicable disease). Providers of sexual health services should take steps to ensure EPT is offered to patients who they diagnose with chlamydia.

Implementation Resources:

https://www.health.ny.gov/diseases/communicable/std/ept/

https://www.health.ny.gov/diseases/aids/ending the epidemic/docs/std workgroup strategi

<u>es.pdf</u>

Target Population by Age: New Yorkers of all ages Social Determinants of Health: Health care

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Sectors Playing Lead Role: Healthcare delivery system

Sectors Playing Contributing Role: Governmental public health agencies, insurers, media, colleges and universities, CBOs and human services agencies, policy makers and elected officials **Intermediate Measure:** Number of providers who offer EPT, number of patients who receive an EPT prescription, number of EPT prescriptions filled

Focus Area 4: Hepatitis C Virus (HCV)

Hepatitis C virus (HCV) causes liver disease and it is found in the blood of persons who are infected. HCV is spread by contact with the blood of an infected person.

HCV is a major public health problem causing substantial morbidity and mortality, including cirrhosis and liver cancer. Most people with HCV are unaware they are infected. Individuals with chronic infection are at risk for developing chronic liver diseases such as cirrhosis and cancer of the liver.

The approval of direct acting antiviral therapies makes it possible to cure most people who are treated, making HCV elimination possible. The majority of HCV infections occurs among PWID. Data released from Centers for Disease Control and Prevention (CDC), in 2017, shows that, in over just five years, the number of new HCV infections reported to CDC has nearly tripled, reaching a 15-year high. 850 new cases were reported in 2010, and 2,436 new cases reported in 2015.⁵⁹

An estimated 114,000 New Yorkers are living with HCV. New York State has established a Hepatitis C Elimination Task Force to advise the state as it implements a plan to eliminate HCV. This Focus area was developed in conjunction with those efforts.

Goal 4.1: Increase the number of persons treated for HCV

Objective 4.1.1: By December 31, 2024, increase the cumulative number of Medicaid enrollees treated for HCV by 497% - 724%, from 6,560 in 2017 to 32,611 – 47,466. (Baseline: 6,560; Year: 2017; Data Source: NYS Medicaid)

Intervention #1: Conduct educational campaign promoting testing and treatment for HCV. **Evidence Base:** <u>CDC Know More Hepatitis Campaign</u>

Implementation Resources: CDC Know More Hepatitis Campaign; NYSDOH Hepatitis web site;

NY Cures Hepatitis C web site

Target Population by Age: New Yorkers of all ages

Social Determinants of Health: Community Cohesion, Health Care

Sectors Playing Lead Role: Public Health agencies, Healthcare Delivery

Sectors Playing Contributing Role: Employers businesses and unions, insurers, media, Colleges and universities, schools, community or neighborhood residents, human service agencies,

policy makers and elected officials, transportation agencies housing agencies

Intermediate Measures: Availability of HCV educational materials, client awareness of Hepatitis C

Intervention #2: Increase capacity for HCV treatment across NYS by increasing provider knowledge and skills for prescribing HCV medications.

Evidence Base:

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- <u>New York State Department of Health, Treatment of Hepatitis C Virus with Direct-Acting</u> <u>Antivirals</u>
- <u>AASLD/IDSA HCV Guidance: Recommendations for Testing</u>, <u>Managing</u>, and <u>Treating</u> <u>Hepatitis C</u>

Implementation Resources: The <u>New York State Department of Health AIDS Institute Clinical</u> <u>Education Initiative (CEI)</u> enhances the capacity of New York's diverse health care workforce to deliver clinical services to improve health outcomes related to HIV, sexually transmitted diseases (STDs) and hepatitis C (HCV).

Target Population by Age: All ages

Social Determinants of Health: Community Cohesion, Health Care Sectors Playing Lead Role: Public Health agencies, Healthcare Delivery Sectors Playing Contributing Role: Employers businesses and unions, insurers, media, Colleges and universities, schools, community or neighborhood residents, human service agencies, policy makers and elected officials, transportation agencies housing agencies Intermediate Measures: MOUs with HCV providers for timely linkage to care; provider knowledge of HCV treatment

Goal 4.2: Reduce the number of new HCV cases among people who inject drugs

Objective 4.2.1: By December 31, 2024, increase the number of individuals with a syringe transaction at an AIDS Institute registered syringe exchange program by 3% annually to 33,781 clients in 2024. (Data Source: AIDS Institute Reporting System)

Intervention #1: Expand capacity for harm reduction services.

Evidence Base: Based on existing evidence, the U.S. Surgeon General has <u>determined</u> that Syringe Service Programs, when part of a comprehensive prevention strategy, can play a critical role in preventing HIV among persons who inject drugs (PWID); can facilitate entry into drug treatment and medical services; and do not increase the unsafe illegal injection of drugs. These programs have also been associated with reduced risk for infection with hepatitis C virus (HCV).

Implementation Resources: NYSDOH AIDS Institute Policies and Procedures for Syringe

Exchange Program.

<u>CDC Syringe Services Program Guidance and Resources</u> <u>Syringe Services Program (SSP) Development and Implementation Guidelines for State and</u> <u>Local Health Departments, NASTAD.</u>

Target Population by Age: All New Yorkers with special focus on those < 30 years of age Social Determinants of Health: Community Cohesion, Health Care Sectors Playing Lead Role: Public Health Agencies

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Sectors Playing Contributing Role: Healthcare Delivery, Employers businesses and unions, insurers, media, Colleges and universities, schools, community or neighborhood residents, human service agencies, policy makers and elected officials, transportation agencies housing agencies

Intermediate Measures: Increases in syringe distribution, provision of HCV screening and linkage to care

Intervention #2: Increase access to HCV screening among injection drug users < 30 years of age by providing onsite HCV rapid testing.

Evidence Base:

- <u>Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and</u> <u>HCV-Related Chronic Disease</u>
- <u>New York State Department of Health, Treatment of Hepatitis C Virus with Direct-Acting</u>
 <u>Antivirals</u>
- <u>AASLD/IDSA HCV Guidance: Recommendations for Testing, Managing, and Treating</u> <u>Hepatitis C</u>
- <u>CDC Recommendations for Hepatitis C Screening Among Adults in the United States</u>

Implementation Resources: NYSDOH Hepatitis C Rapid Testing Implementation Guide

Target Population by Age: All New Yorker with special focus on those < 30 years of age **Social Determinants of Health:** Health Care, Education

Sectors Playing Lead Role: Health Care Delivery Systems, Public Health Agencies, CBOs and Human Service Providers

Sectors Playing Contributing Role: Healthcare Delivery, Employers businesses and unions, insurers, media, Colleges and universities, schools, community or neighborhood residents, human service agencies, policy makers and elected officials, transportation agencies housing agencies

Intermediate Measures: Establish MOU with agencies that conduct HCV screening.

Focus Area 5: Antibiotic Resistance and Healthcare-Associated Infections

Antibiotic resistance occurs when antibiotics no longer work against bacteria that cause infections. Antibiotics can be lifesaving, but bacteria are becoming more resistant to treatment. Antibiotic resistance is part of a broader threat called antimicrobial resistance (AR), which is resistance to medicines used to treat all types of infections, including those caused by bacteria, parasites, and fungi. AR has been found in all regions of the world, and newly discovered strains continue to emerge and spread.

Factors such as increased globalization, poor infection control in hospitals and clinics, overprescribing of antibiotics, and unnecessary antibiotic use in agriculture are increasing the global threat of AR. The spread of AR is evident in the discovery of the *mcr*-1 gene, which confers resistance to colistin, an antibiotic of last resort. The gene was initially identified in China in 2015, but has since been identified in more than 20 countries, including the United States (US). It has been found in humans, food, animals, and environmental samples. Infections acquired in the healthcare setting, both those with or without resistance, can lead to significant illness and death. Since 2007, New York State Public Health Law § 2819 has required acute care hospitals to report selected hospital-acquired infections to the NYSDOH. Reporting these infections allows NYSDOH to determine which hospitals need help implementing practices to decrease infection rates, and it enables hospitals themselves to identify areas for potential improvement. Additionally, people can use publicly reported infection rates to help them make decisions about where to seek medical care.

Approximately 3,600 carbapenem-resistant Enterobacteriaceae (CRE) (a highly resistant group of bacteria) cases were reported by NYS hospitals in 2015. Eleven percent of the cases were bloodstream infections, resulting in an estimated 130 deaths. The overall prevalence rate was highest in the New York City area. Additionally, *C. difficile* infections (CDI) are a common adverse effect of antibiotic use. Over 20,000 cases of CDI were identified by NYS hospitals in 2015 with 40% of cases associated with medical care during that hospital stay, while others were identified in an emergency department or soon after a hospital admission. These infections may have caused an estimated 1,120 deaths.

Studies indicate that 30-50% of antibiotics prescribed nationally are unnecessary or inappropriate. The New York State Department of Health (NYSDOH) Be Antibiotics Aware Program performed an analysis of 2010-2016 NYS Medicaid prescribing data which revealed significant avoidable prescribing and wide variation in use of potentially avoidable outpatient antibiotics for acute upper respiratory conditions. Therefore, one of the most important preventive approaches to combat AR is to decrease inappropriate antibiotic use.

The prevention and control of AR requires a multifaceted, aggressive, and coordinated statewide approach involving improved infection control and prevention, improved surveillance for multidrug-resistant organisms (MDROs), and a reduction in inappropriate antibiotic use.

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• **Objective 5.1.1**: By December 31, 2024, 100% of hospitals and 85% of long-term care facilities implement an interfacility communication system regarding patient multidrug-resistant organism (MDRO) infection or colonization history.

Metric: Number of healthcare facilities that implement a system. (Baseline: not yet known; Year: 2019; Data Source: NYS Health Commerce System (HCS) survey)

• **Objective 5.1.2**: By December 31, 2024, reduce central line-associated blood stream infections (CLABSIs) in hospital intensive care units and wards by 25% to 0.70 infections per 1,000 central line days.

(Baseline: 0.92 CLABSI per 1,000 central line days in ICUs and medical/surgical wards and step-down units; Year: 2017; Data Source: National Healthcare Safety Network (NHSN))

Interventions:

- Regularly review healthcare facility lead Infection Prevention and Control NYS HCS roles in order for infection prevention and control staff to receive important health notices about infection prevention and control, healthcareassociated infections, and antibiotic resistance and to report healthcareassociated outbreaks.
- 2. Ensure staff who lead infection prevention and control at long-term care facilities have appropriate infection prevention and control training.
- 3. Ensure all staff are educated on infection prevention and control measures.
- 4. Ensure hospital evaluation of CLABSI rates and submission of an improvement plan, as appropriate.

Evidence Base and Resources:

- New York State (NYS) HCS User Account Request: https://apps.health.ny.gov/pub/ctrldocs/paperless_edoc2.pdf
- NYS HCS: <u>https://commerce.health.state.ny.us/public/hcs_login.html</u>
- The Centers for Disease Control and Prevention (CDC) Infection Control: <u>https://www.cdc.gov/infectioncontrol/index.html</u>
- The CDC Inter-Facility Infection Control Transfer Form: <u>https://www.cdc.gov/hai/pdfs/toolkits/InfectionControlTransferFormExample1.pdf</u>
- The NYS Department of Health (NYSDOH) Hospital-Acquired Infection Rates in NYS
 Hospitals:

https://www.health.ny.gov/statistics/facilities/hospital/hospital acquired infections/

253 New York State Department of Health Prevent Communicable Diseases Priority Action Plan NYSDOH Infection Control: <u>https://www.health.ny.gov/professionals/diseases/reporting/communicable/infection/</u>

Age range(s): All ages; however, given the focus on improved infection prevention and control and patient safety in hospitals and long-term care facilities, these interventions will support older adults.

Social Determinant of Health addressed: Healthcare

Sector(s) playing lead role: Healthcare delivery system

Sector(s) playing contributing role: Governmental public health agencies and insurers Intermediate-level measures:

- Long-term care facilities with an Infection Preventionist in the HCS role.
- An Infection Preventionist with completed specialized training in infection prevention and control.
- Number of infection prevention and control training and education materials provided to all staff in healthcare facility.
- Number of hospitals flagged with CLABSI rates significantly higher than the state average submitting improvement plans to the NYSDOH Hospital Associated Infection Reporting Program reporting program in time recommended.

<u>Goal 5.2</u>: Reduce infections caused by multidrug resistant organisms and *Clostridium difficile*

- **Objective 5.2.1**: By December 31, 2024, expand surveillance of healthcare associated multidrug-resistant organisms (MDROs). (Baseline: Not available; Data Source: NHSN)
- **Objective**: Decrease carbapenem-resistant Enterobacteriaceae (CRE) and *Clostridium difficile* Infection (CDI) identified by hospitals.
 - 5.2.2 By December 31, 2024, reduce hospital onset CRE bloodstream infections (BSIs) by 25% to 0.14 infections per 10,000 patient days. (Baseline: 0.18 cases per 10,000 patient days; Year: 2017; Data Source: NHSN)
 - ii. 5.2.3 By December 31, 2024, reduce admission prevalent CRE BSIs by 25% to 0.30 infections per 10,000 hospital admissions. (Baseline: 0.40 cases per 10,000 patient days; Year: 2017; Data Source: NHSN)
 - 5.2.4 By December 31, 2024, reduce hospital-onset CDIs by 25% to 3.91 cases per 10,000 patient days. (Baseline: 5.21 cases per 10,000 patient days; Year: 2017; Data Source: NHSN)
 - iv. 5.2.5 By December 31, 2024, reduce admission prevalent CDIs by 25% to 2.90 cases per 1,000 admissions. (Baseline: 3.87 cases per 1,000 admissions; Year: 2017; Data Source: NHSN)

- Objective 5.2.6: By December 31, 2024, reduce the total number of CRE infections/colonizations identified statewide by 10%.
 (Baseline: unknown; Year: 2020; Data Source: NYS Electronic Clinical Laboratory Reporting System (ELCRS) and NHSN)
- **Objective 5.2.7**: By December 31, 2024, improve identification of *Candida auris (C. auris)* infection and colonization. (Baseline: unknown; Year: unknown; Data Source: unknown)

Interventions:

1. Institute healthcare facility surveillance system for MDROs, such as by use of the NHSN MDRO module beyond CRE and CDI.

2. Ensure hospital evaluation of hospital onset CDI rates and submission of an improvement plan, as appropriate.

3. Expand laboratory testing capability for *C. auris*.

Evidence Base and Resources:

- 1. The CDC NHSN: <u>https://www.cdc.gov/nhsn/index.html</u>
- 2. The NYSDOH Hospital-Acquired Infection Rates in NYS Hospitals: https://www.health.ny.gov/statistics/facilities/hospital/hospital_acquired_infections/

Age range(s): All ages; however, given a higher prevalence of antimicrobial resistant infections found in individuals with comorbid conditions and exposure to healthcare, these interventions will support older adults.

Social Determinant of Health addressed: Healthcare

Sector(s) playing lead role: Healthcare delivery system,

Sector(s) playing contributing role: Governmental public health agencies and insurers Intermediate-level measures:

- Number of healthcare facilities using the NHSN MDRO module for expanded MDRO surveillance beyond CRE and CDI.
- Number of hospitals identified with hospital onset CDI rates significantly higher than the state average submitting improvement plans to the NYSDOH HAI reporting program in time recommended.
- Number of clinical laboratories with a rapid test for *C. auris*.

Goal 5.3: Reduce inappropriate antibiotic use

Objective 5.3.1: By December 31, 2024, reduce potentially avoidable antibiotic prescribing rates for adult outpatient acute upper respiratory infections by 25% to 30%. (Baseline: 40% among adults 18 to 64 in Medicaid; Year: 2016; Data source: NYS Medicaid <u>https://health.data.ny.gov/Health/Potentially-Avoidable-Antibiotic-Prescribing-Rates/vg7a-h5ss</u>).

Interventions:

- 1. Use healthcare provider-level feedback data to inform antibiotic prescribing.
- 2. Conduct an educational campaign for the public on antimicrobial resistance and appropriate antibiotic use.
- 3. Offer healthcare provider education and public health detailing to prescribers.

Evidence Base and Resources:

- 1. The CDC Antibiotic Prescribing <u>https://www.cdc.gov/antibiotic-</u> use/community/improving-prescribing/evidence/systematic-reviews.html
- 2. The CDC Core Elements of Outpatient Antibiotic Stewardship: <u>https://www.cdc.gov/antibiotic-use/community/improving-prescribing/core-elements/core-outpatient-stewardship.html</u>
- 3. The CDC 6/18 Initiative https://www.cdc.gov/sixeighteen/

Age range(s): All ages; however, however, given higher rates of antimicrobial prescribing and use in older age groups, these interventions will support older adults.

Social Determinant of Health addressed: Healthcare

Sector(s) playing lead role: Healthcare delivery system

Sector(s) playing contributing role: Governmental public health agencies and insurers Intermediate-level measures:

- Provision of antimicrobial prescribing data to all primary and acute care providers with comparison of their antibiotic prescribing patterns to benchmark.
- Number of healthcare providers reached with education and tools on antimicrobial resistance.

Objectives:

5.3.2 By December 31, 2024, 100% of hospitals and long-term care facilities will have an antimicrobial stewardship program (ASP) that meets the seven CDC core elements of antimicrobial stewardship. (Baseline: 88%; Year: 2017; Data Source: Health Commerce System Survey)

Compared to a baseline for hospitals from 2017, 88% of the 177 hospitals that participate in the NYS Hospital Associated Infection Reporting Program indicated on survey response in 2017 that they have an ASP that meets the seven core elements of hospital ASPs set forth by the CDC. Long-term care facilities-no baseline. In the future, this information can be collected from an annual survey on the Health Commerce System.

Interventions:

Evaluate the impact of the healthcare facility ASP (or an element of the program) to determine areas for improvement.

Evidence Base and Resources:

- 1. The CDC 6/18 Initiative <u>https://www.cdc.gov/sixeighteen/</u>
- 2. The CDC Core Elements of Hospital Antibiotic Stewardship Programs: <u>https://www.cdc.gov/antibiotic-use/healthcare/implementation/core-elements.html</u>
- 3. The CDC Core Elements of Antibiotic Stewardship for Nursing Homes: https://www.cdc.gov/longtermcare/prevention/antibiotic-stewardship.html
- 4. The CDC NHSN: <u>https://www.cdc.gov/nhsn/index.html</u>

Age range(s): All ages; however, however, given higher rates of antimicrobial prescribing and use in older age groups, these interventions will measure support older adults. Social Determinant of Health addressed: Healthcare

Sector(s) playing lead role: Healthcare delivery system Sector(s) playing contributing role: Governmental public health agencies, insurers Intermediate-level measures:

• Number of hospitals reporting antibiotic use data through NHSN Antibiotic Use and Resistance (AUR) Module.

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