# Westchester County Department of Health

2024.02

## Community Health Data Report

2024.02

## Hospital Visits Associated with Substance Use, Westchester County, 2019-2020

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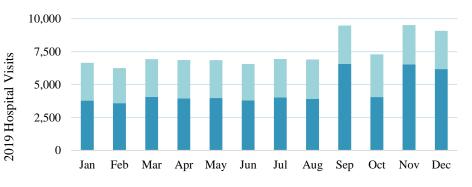
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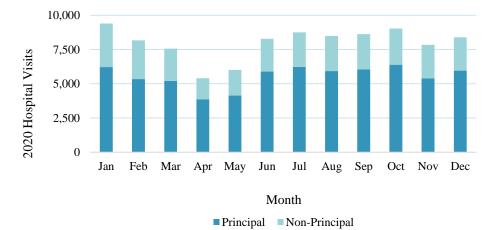
Project Director: Jiali Li, Ph.D. Director of Research & Evaluation Hospital visits in this report include emergency department visits, outpatient services, and ambulatory surgeries. Hospital visits associated with substance use in this report are defined as such visits with substance use documented as one or more diagnoses, including the main diagnosis (principal) and the accompanying diagnoses (non-principal).

Hospital Visits Associated with Substance Use by Month, Westchester County, 2019-2020



Month

Principal Non-Principal

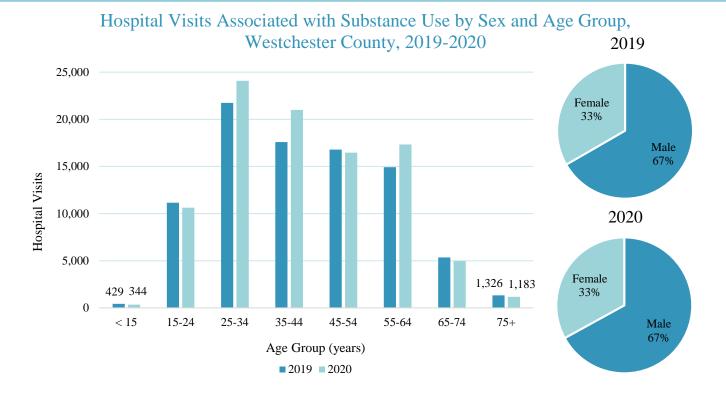


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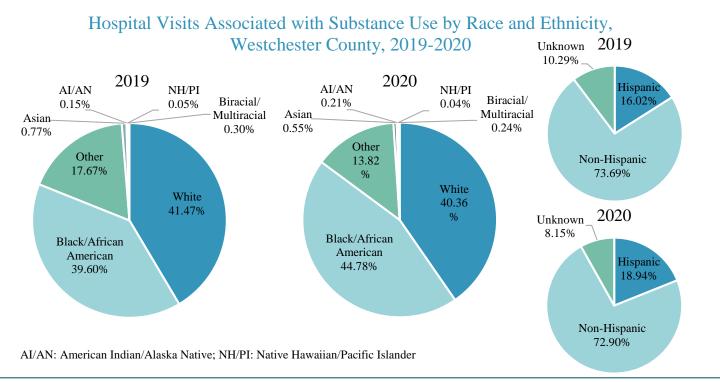
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George Latimer, County Executive Sherlita Amler, MD, Commissioner Department of Health

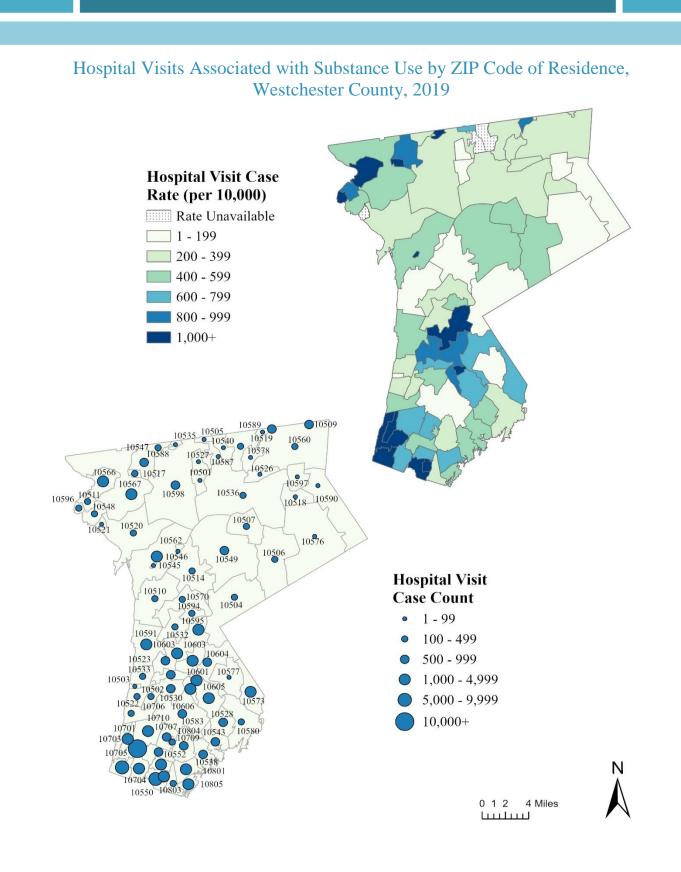
## Demographics



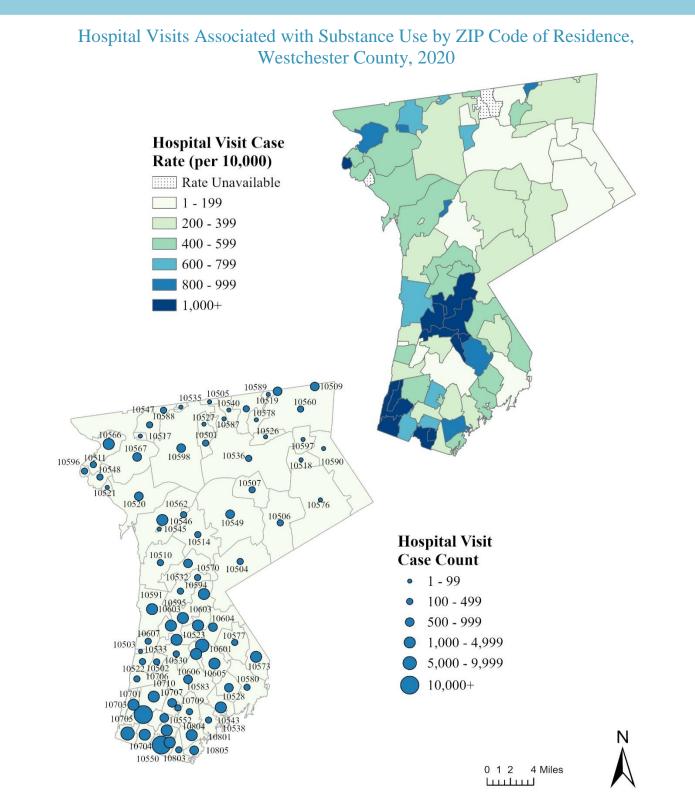
There were more men than women who made hospital visits associated with substance use. Those aged 25-34 had the highest number of visits compared to other age groups. White and Black/African American residents each comprised 40% or more of the hospital visits associated with substance use, and about three quarters who made such visits were non-Hispanics.



## Geographic Distribution



## Geographic Distribution



Most hospital visits associated with substance use in 2019 and 2020 were made by people residing in the southern and central regions of Westchester County. When accounting for population size, the highest rates of hospital visits were for residents in ZIP codes corresponding to Mount Vernon, Peekskill, Valhalla, White Plains, and Yonkers.

## Substance Type

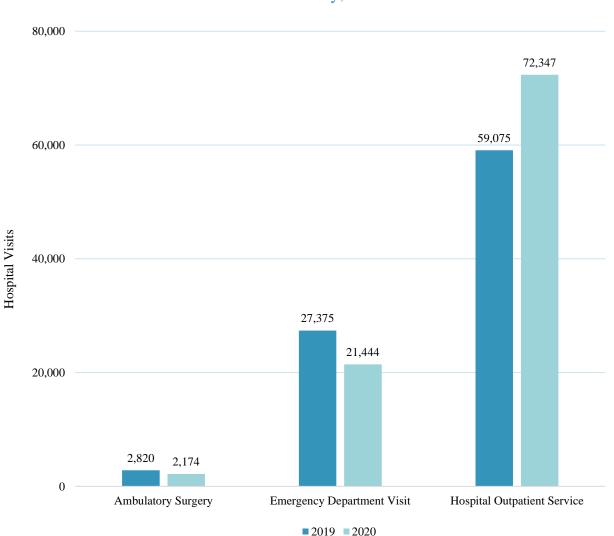
Hospital Visits Associated with Substance Use by Substance Type, Westchester County, 2019-2020 33,173 28,203 30,000 21,139 19,984 Hospital Visits 20,000 17,831 15,945 14,298 11,073 10,000 5,997 5,524 3,114 3,441 1,818 1,219 1,636 840 0 Tobaconticotie UnspecifiedOther Polysubstance Cannabis Hallucinogen Opioid Alcohol Cocaine 2019 2020

Among hospital visits associated with substance use, a large number of visits involved the use of multiple substances in both 2019 and 2020.

#### Hospital Visits Associated with Substance Use by Hospital of Care, Westchester County, 2019-2020

Hospital of Care		2019		2020	
		(%)	Visits	(%)	
TOTAL	89,270	100.0	95,965	100.0	
WESTCHESTER COUNTY	80,995	<b>90.7</b>	89,663	93.4	
Montefiore Mount Vernon Hospital	2,654	3.0	1,981	2.1	
Montefiore New Rochelle Hospital	1,644	1.8	1,540	1.6	
New York Presbyterian Hospital - Westchester Behavioral Health	582	0.7	556	0.6	
New York Presbyterian/Lawrence Hospital	1,146	1.2	1,598	1.6	
New York Presbyterian/Hudson Valley Hospital	4,207	4.7	3,122	3.3	
Northwell Health Northern Westchester Hospital	1,417	1.6	1,244	1.3	
Northwell Health Phelps Hospital	2,765	3.1	1,954	2.0	
St. John's Riverside Hospital - Dobbs Ferry Pavilion	606	0.7	220	0.2	
St. John's Riverside Hospital - Park Care Pavilion	35,286	39.5	51,511	53.7	
St. John's Riverside Hospital - St. John's Division	2,393	2.7	1,315	1.4	
St. Joseph's Medical Center - St. Vincent's Westchester Division	11,611	13.0	10,834	11.3	
St. Joseph's Medical Center	7,229	8.1	5,991	6.2	
Westchester Medical Center	3,839	4.3	3,074	3.2	
White Plains Hospital Center	5,572	6.2	4,722	4.9	
Other	4	0.0	1	0.0	
BRONX COUNTY	3,045	3.4	2,338	2.4	
NEW YORK COUNTY	3,263	3.7	2,184	2.3	
PUTNAM COUNTY	913	1.0	705	0.7	
OTHER NEW YORK STATE COUNTIES	1,094	1.2	1,075	1.1	

Hospital outpatient care is categorized as hospital outpatient services (services including any medical procedures, screenings, diagnoses, and treatments where a hospital stay is not required), emergency department visits (visits where patients are discharged within one day of admission), and ambulatory surgeries (surgical procedures that do not require an overnight hospital stay).



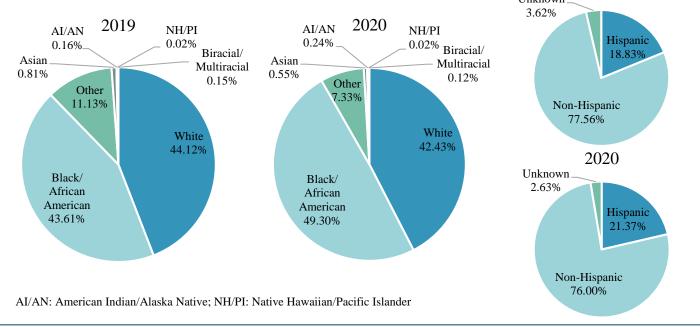
#### Hospital Visits Associated with Substance Use by Type of Care Facilities, Westchester County, 2019-2020

## Hospital Outpatient Services

Hospital Outpatient Services Associated with Substance Use by Sex and Age Group, Westchester County, 2019-2020 2019 20,000 Female Other Outpatient Services 16,000 31% Male 12,000 69% 8,000 2020 4,000 Female 526 597 33% 224 208 0 Male <15 15-24 25-34 35-44 45-54 55-64 65-74 75 +67% Age Group (years) 2019 2020

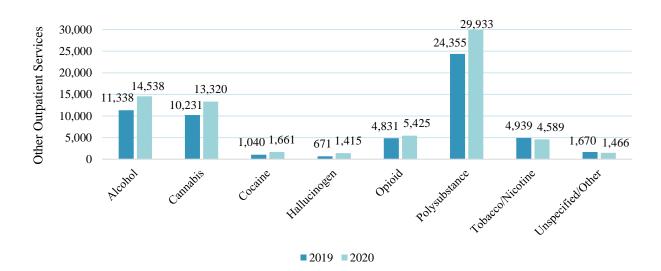
There were more men than women who received hospital outpatient services associated with substance use. Residents aged 25-34 received the most services compared to other age groups. White and Black/African American residents accounted for approximately 90% of those receiving such services, and non-Hispanic residents were the majority of those receiving such services.

### Hospital Outpatient Services Associated with Substance Use by Race and Ethnicity, Westchester County, 2019-2020 2019



## Hospital Outpatient Services

Hospital Outpatient Services Associated with Substance Use by Substance, Westchester County, 2019-2020



#### Hospital Outpatient Services Associated with Substance Use by Hospital of Care, Westchester County, 2019-2020

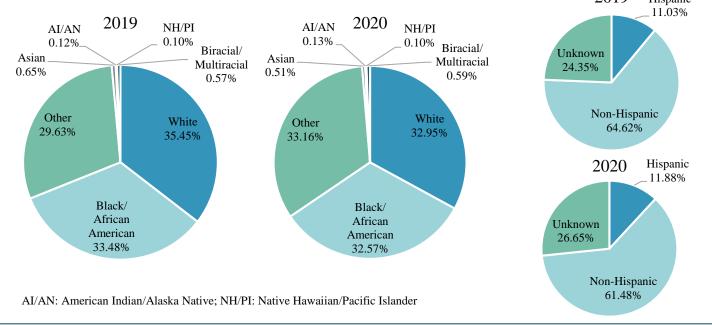
Hospital of Care		9	2020		
Hospital of Care	Visits	(%)	Visits	(%)	
TOTAL	59,075	100.0	72,347	<i>99.9</i>	
WESTCHESTER COUNTY	55,840	94.5	70,134	96.9	
Montefiore Mount Vernon Hospital	565	1.0	459	0.6	
Montefiore New Rochelle Hospital	559	0.9	388	0.5	
New York Presbyterian Hospital - Westchester Behavioral Health	582	1.0	556	0.8	
New York Presbyterian/Lawrence Hospital	362	0.6	371	0.6	
New York Presbyterian/Hudson Valley Hospital	462	0.8	665	0.9	
Northwell Northern Westchester Hospital	116	0.2	130	0.2	
Northwell Phelps Hospital	1,850	3.1	1,107	1.5	
St. John's Riverside Hospital - Dobbs Ferry Pavilion	21	0.0	54	0.1	
St. John's Riverside Hospital - Park Care Pavilion	35,286	59.7	51,511	71.2	
St. John's Riverside Hospital - St. John's Division	431	0.7	304	0.4	
St. Joseph's Medical Center - St. Vincent's Westchester Division	11,611	19.7	10,834	15.0	
St. Joseph's Medical Center	352	0.6	493	0.7	
Westchester Medical Center	1,999	3.4	1,608	2.2	
White Plains Hospital Center	1,640	2.8	1,624	2.2	
Other	4	0.0	0	0.0	
BRONX COUNTY	1,244	2.1	892	1.2	
NEW YORK COUNTY	1,806	3.1	1,041	1.4	
PUTNAM COUNTY	27	0.1	32	0.0	
OTHER NEW YORK STATE COUNTIES	158	0.3	248	0.3	

## **Emergency Department Visits**

Emergency Department Visits Associated with Substance Use by Sex and Age Group, Westchester County, 2019-2020 2019 6,000 5,000 Female 38% Male 4,000 ED Visits 62% 3,000 2020 2,000 1,000 <sup>607</sup> 436 Female 204 134 33% 0 Male < 15 15-24 25-34 35-44 45-54 55-64 65-74 75 +67% Age Group (years) 2019 2020

There were more men than women who made an ED visit associated with substance use. Residents aged 25-34 made the most visits compared to other age groups. White and Black/African American residents accounted for one-third of such ED visits, and non-Hispanic residents were the majority of such ED visits.

#### Emergency Department Visits Associated with Substance Use by Race and Ethnicity, Westchester County, 2019-2020 2019 Hispanic



## **Emergency Department Visits**



#### Emergency Department Visits Associated with Substance Use by Substance, Westchester County, 2019-2020

#### Emergency Department Visits Associated with Substance Use by Hospital of Care, Westchester County, 2019-2020

Hospital of Care		2019		2020	
		(%)	Visits	(%)	
TOTAL	27,375	100.0	21,444	100.0	
WESTCHESTER COUNTY	23,384	85.4	18,183	84.8	
Montefiore Mount Vernon Hospital	2,064	7.5	1,484	6.9	
Montefiore New Rochelle Hospital	1,068	3.9	1,135	5.3	
New York Presbyterian/Lawrence Hospital	580	2.1	1,002	4.7	
New York Presbyterian/Hudson Valley Hospital	3,612	13.2	2,383	11.1	
Northwell Northern Westchester Hospital	1,144	4.2	962	4.5	
Northwell Phelps Hospital	901	3.3	833	3.9	
St. John's Riverside Hospital - Dobbs Ferry Pavilion	580	2.1	164	0.8	
St. John's Riverside Hospital - St. John's Division	1,945	7.1	1,000	4.7	
St. Joseph's Medical Center	6,876	25.1	5,436	25.3	
Westchester Medical Center	1,343	4.9	1,213	5.7	
White Plains Hospital Center	3,271	11.9	2,571	12.0	
BRONX COUNTY	1,446	5.3	1,184	5.5	
NEW YORK COUNTY	940	3.4	757	3.5	
PUTNAM COUNTY	735	2.7	569	2.7	
OTHER NEW YORK STATE COUNTIES	870	3.2	751	3.5	

## **Ambulatory Surgeries**

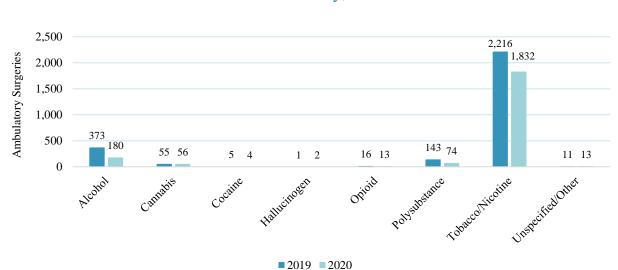
Ambulatory Surgeries Associated with Substance Use by Sex and Age Group, Westchester County, 2019-2020 2019 1,000 Female 41% 750 Ambulatory Surgeries Male 59% 500 2020 250 193 150 Female 42% 1 2 Male 0 58% < 15 15-24 25-34 35-44 45-54 55-64 65-74 75 +Age Group (years) 2019 2020

Among those who received ambulatory surgery services associated with substances use, over half were males. Residents aged 55-64 had the most surgery services associated with substance use compared to other age groups. White residents had the most surgery services associated with substance use compared to other race groups, and non-Hispanic residents were the majority of those receiving such services.

#### Westchester County, 2019-2020 Unknown 2019 \_ Hispanic 13.62% 5.53% 2019 2020 NH/PI AI/AN AI/AN NH/PI 0.07% 0.14% Biracial/ 0.18% 0.05% Biracial/ Asian Asian Multiracial Multiracial 1.24% 1.01% 0.85% 0.64% Non-Hispanic 80.85% Other White Other White 38.37% 44.40% 38.68% 44.53% 2020 Hispanic Unknown 7.73% 9.66% Black/ Black/ African African American American 14.89% 14.95% Non-Hispanic 82.61% AI/AN: American Indian/Alaska Native; NH/PI: Native Hawaiian/Pacific Islander

# Ambulatory Surgeries Associated with Substance Use by Race and Ethnicity,

## Ambulatory Surgeries



Ambulatory Surgeries Associated with Substance Use by Substance, Westchester County, 2019-2020

#### Ambulatory Surgeries Associated with Substance Use by Hospital of Care, Westchester County, 2019-2020

Hospital of Caro	201	9	2020		
Hospital of Care	Visits	(%)	Visits	(%)	
TOTAL	2,820	100.0	2,174	100.0	
WESTCHESTER COUNTY	1,731	61.4	1,346	61.9	
Montefiore Mount Vernon Hospital	25	0.9	8	0.4	
Montefiore New Rochelle Hospital	17	0.6	17	0.8	
New York Presbyterian/Lawrence Hospital	204	7.3	225	10.4	
New York Presbyterian/Hudson Valley Hospital	133	4.7	74	3.4	
Northwell Northern Westchester Hospital	157	5.6	152	7.0	
Northwell Phelps Hospital	14	0.5	14	0.6	
St. John's Riverside Hospital - Dobbs Ferry Pavilion	5	0.2	2	0.1	
St. John's Riverside Hospital - St. John's Division	17	0.6	11	0.5	
St. Joseph's Medical Center	1	0.0	62	2.9	
Westchester Medical Center	497	17.6	253	11.6	
White Plains Hospital Center	661	23.4	527	24.2	
Other	0	0.0	1	0.0	
BRONX COUNTY	355	12.6	262	12.1	
NEW YORK COUNTY	517	18.3	386	17.8	
PUTNAM COUNTY	151	5.4	104	4.8	
OTHER NEW YORK STATE COUNTIES	66	2.3	76	3.5	

## Data Sources

This Community Health Data Report was prepared using the New York State Department of Health's Statewide Planning and Research Cooperative System (SPARCS). SPARCS collects information pertaining to discharges across all hospitals in New York State. This includes each hospital inpatient stay and hospital outpatient (ambulatory surgery, emergency department, and other outpatient services) visit. The data reported in this brief references only hospital outpatient visits for Westchester County from 2019 and 2020.

SPARCS data is collected at the patient-level, reporting the demographics, diagnoses, services provided, and hospital charges for each patient. In order to protect patient privacy, de-identified data was used to create this report, meaning all personal identifiers (i.e., patient names, residential addresses, and individual medical records) have been omitted from the county's data set.

Additionally, reporting of data by individual hospitals to the New York State Department of Health varies in completeness over time. As a result, SPARCS data is routinely being updated. All data reported in this brief reflect SPARCS in relation to Westchester County as of July 2022.

#### <u>Maps</u>

The distribution of hospital visits associated with substance use by residential ZIP code are reported by both case count and case rate. To determine rates, population data was retrieved from the American Community Survey 5-Year Estimate (2015-2019) for 2019, and the decennial United States Census (2020) for 2020.

Rates could not be calculated for three ZIP codes. Populations for 10521 and 10587 are not reported by the U.S. Census Bureau, and instead are determined by use of census-designated places (CDPs). Additionally, more hospital visits are reported in 10540 than total population. In order to maintain consistency in hospital visit and population reporting, hospital visits in these three ZIP codes are grouped into the nearest and/or largest neighboring ZIP codes.

#### Diagnoses

SPARCS uses the tenth revision of the International Classification of Diseases (ICD-10) to log diagnoses made during each hospital visit for 2019 and 2020. Hospital visits associated with substance use were determined for this data report by a search of the ICD-10 codes listed for each visit. The principal diagnosis is the condition of the patient chiefly responsible for their hospital visit. The non-principal diagnosis is an accompanying condition the patient has that contributes to their visit. This data brief includes all cases with any diagnosis involving substance use. Codes of interest are listed by substance type in Appendix A.

# Appendix

Substance	Category	ICD-10 Code	Description			
	Abuse	F10.1	Alcohol abuse			
	Dependence	F10.2	Alcohol dependence			
	Use		Alcohol use, unspecified			
	Poisoning/ Adverse Effect	T51.0	Toxic effect of alcohol			
		G31.2 G62.1	Degeneration of nervous system due to alcohol Alcoholic polyneuropathy			
		G72.1	Alcoholic myopathy			
		I42.6				
	Disease	K29.2	Alcohol cardiomyopathy			
Alcohol			Alcoholic gastritis			
		K70	Alcoholic liver disease			
		K85.2	Alcohol induced acute pancreatitis			
		K86.0	Alcohol induced chronic pancreatitis			
	Pregnancy/	O35.4	Maternal care for (suspected) damage to fetus from alcohol			
	Childbirth/	099.31	Alcohol use complicating pregnancy, childbirth, and the			
	Postpartum		puerperium			
	Complications	P04.3	Newborn affected by maternal use of alcohol			
	_	Q86.0	Fetal alcohol syndrome (dysmorphic)			
	Therapy	Z71.41	Alcohol abuse counseling and surveillance of alcoholic			
	Presence in Bloodstream	R78.0	Finding of alcohol in blood			
	Abuse	F12.1	Cannabis abuse			
	Dependence	F12.2	Cannabis dependence			
	Use	F12.9	Cannabis use, unspecified			
Cannabis	Poisoning/ Adverse Effect	T40.7	Poisoning by and adverse effect of cannabis (derivatives)			
	Pregnancy/ Childbirth/ Postpartum Complications	P04.81	Newborn affected by maternal use of cannabis			
	Abuse	F14.1	Cocaine abuse			
	Dependence	F14.2	Cocaine dependence			
	Use	F14.9	Cocaine use, unspecified			
	Poisoning/ Adverse Effect	T40.5	Poisoning by and adverse effect of cocaine			
Cocaine	Pregnancy/ Childbirth/ Postpartum Complications	P04.41	Newborn affected by maternal use of cocaine			
	Presence in Bloodstream	R78.2	Finding of cocaine in blood			
	Abuse	F16.1	Hallucinogen abuse			
Hallucinogen	Dependence	F16.2	Hallucinogen dependence			
	Use	F16.9	Hallucinogen use, unspecified			

## Appendix A. Substance Use-Related ICD-10 Codes

	Poisoning/ Adverse	T40.8	Poisoning by and adverse effect of lysergide (LSD) Poisoning by and adverse effect of other and unspecified
	Effect	T40.9	psychodysleptics (hallucinogens)
	Pregnancy/ Childbirth/ Postpartum Complications	P04.42	Newborn affected by maternal use of hallucinogens
	Presence in Bloodstream	R78.3	Finding of hallucinogen in blood
	Dependence	F17.2	Nicotine dependence
	Use	Z72.0	Tobacco use
	Poisoning	T65.2	Toxic effect of tobacco and nicotine
Nicotine/ Tobacco	Pregnancy/ Childbirth/	099.33	Tobacco use disorder complicating pregnancy, childbirth, and the puerperium
	Postpartum Complications	P04.2	Newborn affected by maternal use of tobacco
	Therapy	Z71.6	Tobacco abuse counseling
	Abuse	F11.1	Opioid abuse
	Dependence	F11.2	Opioid dependence
	Use	F11.9	Opioid use, unspecified
		T40.0 T40.1	Poisoning by and adverse effect of opium
	Poisoning/	T40.1 T40.2	Poisoning by and adverse effect of heroin Poisoning by and adverse effect of other opioids
	Adverse	T40.2 T40.3	Poisoning by and adverse effect of methadone
Opioid	Effect	T40.3	Poisoning by and adverse effect of synthetic narcotics
opioid		T40.4	Poisoning by and adverse effect of other and unspecified narcotics
-	Pregnancy/ Childbirth/ Postpartum Complications	P04.14	Newborn affected by maternal use of opiates
	Presence in Bloodstream	R78.1	Finding of opiate drug in blood
		F13.1	Sedative, hypnotic or anxiolytic-related abuse
		F15.1	Other stimulant abuse (amphetamines and caffeine)
	Abuse	F18.1 F19.1	Inhalant abuse (volatile solvents) Other psychoactive substance abuse (polysubstance/indiscriminate
			drug use)
		F13.2	Sedative, hypnotic or anxiolytic-related dependence
	Donondonos	F15.2	Other stimulant dependence (amphetamines and caffeine)
	Dependence	F18.2	Inhalant dependence (volatile solvents) Other psychoactive substance dependence
		F19.2	(polysubstance/indiscriminate drug use)
		F13.9	Sedative, hypnotic or anxiolytic-related use, unspecified
		F15.9	Other stimulant use, unspecified (amphetamines and caffeine)
Other &	Use	F18.9	Inhalant use, unspecified (volatile solvents)
Unspecified		F19.9	Other psychoactive substance use, unspecified (polysubstance/indiscriminate drug use)
		T42.3	Poisoning by and adverse effect of barbiturates
		T42.4	Poisoning by and adverse effect of benzodiazepines
		T42.5	Poisoning by and adverse effect of mixed antiepileptics
	Poisoning/ Adverse Effect	T42.6	Poisoning by and adverse effect of other antiepileptic and sedative hypnotic drugs
		T42.7	Poisoning by and adverse effect of unspecified antiepileptic and sedative-hypnotic drugs
		T43	Poisoning by and adverse effect of psychotropic drugs, not elsewhere classified
		T50.7	Poisoning by and adverse effect of analeptics and opioid receptor antagonists

	T50.9	Poisoning by and adverse effect of other and unspecified drugs, medicaments and biological substances
	035.5	Maternal care for (suspected) damage to fetus by drugs
	099.32	Drug use complicating pregnancy, childbirth, and the puerperium
	P04.16	Newborn affected by maternal use of amphetamines
	P04.17	Newborn affected by maternal use of sedative-hypnotics
Pregnancy/	P04.1A	Newborn affected by maternal use of anxiolytics
Childbirth/	P04.18	Newborn affected by other maternal medication
Postpartum	P04.19	Newborn affected by maternal use of unspecified medication
Complications	P04.40	Newborn affected by maternal use of unspecified drugs of addiction
	P04.49	Newborn affected by maternal use of other drugs of addiction
	P04.89	Newborn affected by other maternal noxious substances
	P04.9	Newborn affected by maternal noxious substance, unspecified
Therapy	Z71.51	Drug abuse counseling and surveillance of drug abuser
Presence in	R78.4	Finding of other drugs of addictive potential in blood
Bloodstream	R78.5	Finding of other psychotropic drug in blood

Source: International Classification of Diseases, Tenth Revision

Appendix D. Westenester Count	<i>y</i> <b>i</b> opulation, 2020			
	Population	Percent (%)		
Total	1,004,457	100.00		
Sex				
Male	480,510	47.84		
Female	523,947	52.16		
Age Group (years)				
< 15	178,960	17.82		
15 - 24	129,122	12.85		
25 - 34	114,111	11.36		
35 - 44	130,096	12.95		
45 - 54	139,309	13.87		
55 - 64	137,630	13.70		
65 - 74	95,929	9.55		
75 +	79,300	7.89		
Race				
White	533,150	53.08		
Black/African American	141,094	14.05		
Asian	65,707	6.54		
American Indian/Alaska Native	7,466	0.74		
Native Hawaiian/Pacific Islander	339	0.03		
Biracial/Multiracial	109,790	10.93		
Other	146,911	14.63		
Ethnicity				
Hispanic or Latino	269,334	26.81		
Not Hispanic or Latino	735,123	73.19		

#### Appendix B. Westchester County Population, 2020

Source: U.S. Census Bureau