



2019 Report

The Collaborative Report serves:

- ✓ **35** Hospitals
- ✓ **25** Counties
- ✓ **28** Local Health Departments
- ✓ **3** States

Hospitals

The Christ Hospital Health Network
 Cincinnati Children's Hospital Medical Center
 Clinton Memorial Hospital
 Highpoint Health
 Kettering Health Network
 Fort Hamilton Hospital
 Grandview Medical Center
 Greene Memorial Hospital
 Kettering Behavioral Medic Center
 Kettering Medical Center
 Soin Medical Center
 Southview Medical Center
 Sycamore Medical Center
 Lindner Center of HOPE
 Mercy Health | Cincinnati Region
 Mercy Health - Anderson Hospital
 Mercy Health - Clermont Hospital
 Mercy Health - Fairfield Hospital
 Mercy Health - West Hospital
 The Jewish Hospital – Mercy Health

Mercy Health | Springfield Region
 Mercy Health - Urbana Hospital
 Springfield Regional Medical Center
 Premier Health
 Atrium Medical Center
 Miami Valley Hospital
 Miami Valley Hospital North
 Miami Valley Hospital South
 Upper Valley Medical Center
 TriHealth
 Bethesda Butler Hospital
 Bethesda North Hospital
 Good Samaritan Hospital
 McCullough Hyde Memorial Hospital
 TriHealth Evendale Hospital
 UC Health
 Daniel Drake Center for Post-Acute Care
 University of Cincinnati Medical Center
 West Chester Hospital
 Wayne HealthCare
 Wilson Health

CITY OF CINCINNATI PROFILE

The Cincinnati Health Department contributed the following tables, charts and narrative to illustrate the health issues and priorities for the residents they serve in the City of Cincinnati.

Overview

The City of Cincinnati has a vibrant and diverse population, with strong healthcare, educational, and business institutions. It is the largest city in the region and is comprised of 52 distinct neighborhoods. As of 2016, there were 298,011 residents, of which 50.7% were Caucasian and 43.1% African American,³⁷ a racial distribution that differs from the surrounding areas in Hamilton County. Age, education and income distributions also differ between the City and the rest of the county. Nearly 45% of Cincinnati children live in poverty, compared to just over a quarter in the entire county. These and other social and economic factors affect the health status of the residents (for example, see Figure 23). For this reason, a Cincinnati-specific profile is included to identify unique Cincinnati needs and challenges.

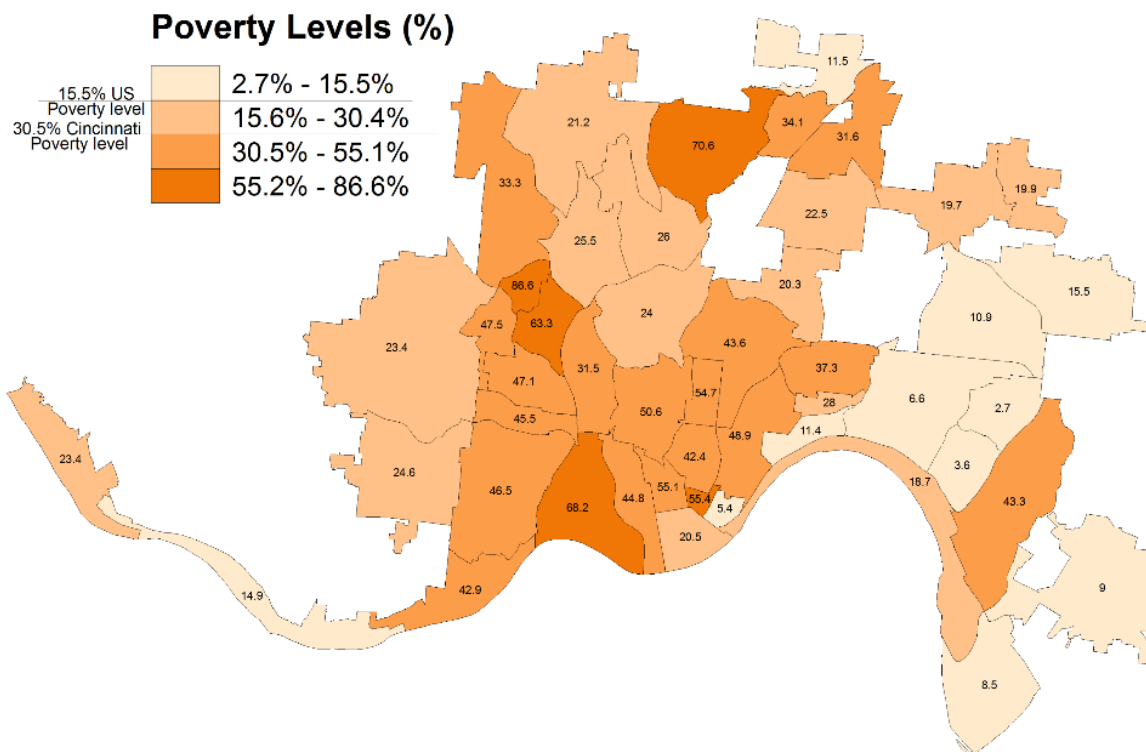


FIGURE 23. FAMILY POVERTY LEVELS (%) IN CINCINNATI, 2011-2015³⁸

The regional collaborative Community Health Improvement Plan, called the Generation Health (Gen-H) initiative, has identified the following priorities to address: healthy behaviors, especially those related to preventing chronic diseases and promoting good mental health; delivery of quality health care; and

³⁷ Source: 2012-2016 American Community Survey 5-Year Estimates

³⁸ Source: 2011-2015 American Community Survey 5-Year Estimates

sustainable financial infrastructure. As part of the CHNA process, the Cincinnati Health Department (CHD) held community meetings to determine which major health issues face our community; mental health was ranked as the top priority (Table 49 below). Additionally, a survey distributed to agencies and consumers found that their top health priority was substance abuse (Table 50).

Access to healthcare issues includes lack of insurance coverage. As shown in the Cincinnati snapshot on the next page, 14.4% of the Cincinnati population does not have health insurance. To increase access to care, the CHD, the Cincinnati Health Network, WinMed and Crossroad operate federally qualified health centers. The City of Cincinnati Primary Care (CCPC) health centers operated by the CHD serve over 40,000 people, approximately 13% of the city’s population. CCPC offers dental and vision services in addition to primary care. Moreover, CCPC health centers have added Medication-assisted treatment (MAT) services to help address the need for substance abuse treatment providers.

A focus on child health has motivated many institutions to expand services in creative ways. For instance, Cincinnati Children’s Hospital Medical Center has a large number of clinic locations and works with community residents and stakeholders to address social determinants of health such as housing environments. The CHD contracts with the Cincinnati Public School District contracts to provide comprehensive public health nursing services in the schools, and also provides 11 school-based health centers at which children can receive primary care. The services of the CHD’s School and Adolescent Health Program contribute to high rates of compliance for mandated vaccinations in students in the Cincinnati Public Schools (91.6% for the 2017-2018 school year).

Priority Issues for the City of Cincinnati

Community partner meetings were held 6/4, 6/14, and 7/11/18 for the City of Cincinnati. Forty-six individuals from agencies serving the City of Cincinnati attended the meetings. Each individual was given three dots to choose their top three priorities based on topics when asked, “Given the health issues facing the community, which ones would be your top priorities?”

TABLE 49. CITY OF CINCINNATI PARTNER AGENCY MEETING PRIORITIES

Priority	# Votes	% Votes
Mental Health	17	37%
Healthy Foods/ Nutrition	13	28%
Social Determinants of Health	10	22%
Poverty	7	15%
Substance Abuse	6	13%
Housing	6	13%

Surveys were distributed to agencies who serve the City of Cincinnati community, their consumers, and Cincinnati community members, including Latino and Rwandan refugees. The surveys were completed between 4/11/18 and 8/27/18. The most common responses are to answer the question “Given the health issues facing the community, which ones would be your top priorities?” There were 193 responses to the survey.

TABLE 50. CITY OF CINCINNATI RESIDENTS, CONSUMER AND AGENCY PRIORITIES

Priority	# Mentions	% Participants
Substance Abuse	65	34%
Violence	27	14%
Access to Medical and Dental Care	15	8%
Mental Health	13	7%
Access to Healthy Foods	12	6%

Environmental Exposure

Given the older housing stock in the city, many Cincinnati children are exposed to lead paint. The overall prevalence of elevated blood lead levels (EBLL) $\geq 5 \mu\text{g/dL}$ in Cincinnati children is 3.8%, compared to the Ohio (2.8%). Additionally, some neighborhoods have a dramatically higher percentage of children with EBLL (Figure 25). The effects of lead poisoning are irreversible and may be severe, including mental retardation, increased risk of developing disruptive behavioral issues, and lower lifelong earning potential.³⁹ As shown in Figure 25, neighborhoods greatly affected by lead exposure also have greater family poverty levels.

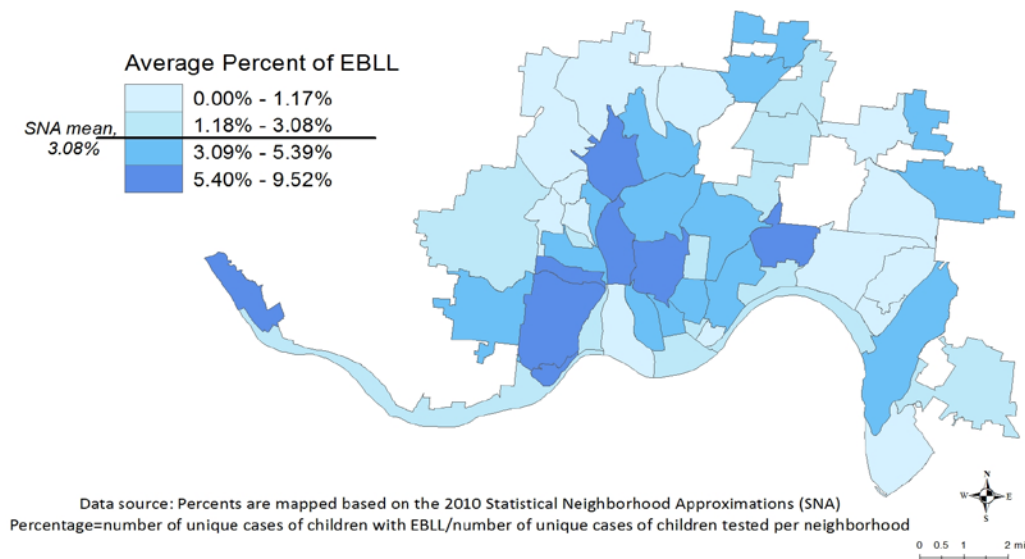


FIGURE 24. ELEVATED BLOOD LEAD LEVEL ($\geq 5 \mu\text{g/dL}$) IN CHILDREN AGED < 6 YEARS, BY NEIGHBORHOOD IN CINCINNATI, 2013-2017⁴⁰

TABLE 51. URBAN: CINCINNATI VS. HAMILTON COUNTY

³⁹ Lanphear, B. P., Dietrich, K., Auinger, P., & Cox, C. (2000). Cognitive deficits associated with blood lead concentrations $< 10 \mu\text{g/dL}$ in US children and adolescents. *Public health reports (Washington, D.C.: 1974)*, 115(6), 521-9.

⁴⁰ Source: Ohio Department of Health Healthy Homes and Lead Poisoning Prevention Program

City of Cincinnati Health Snapshot

Pop.: 298,011

Measure/Indicator	City of Cincinnati	Hamilton County	State	U.S.
Health Outcomes				
Cancer mortality, Breast (rate per 100,000)*	17.5	24.4	22.2	20.2
Cancer mortality, Lung (rate per 100,000)*	59.3	50.6	48.2	39.4
Cancer mortality, Overall (rate per 100,000)*	204.1	179.1	174.3	157.1
Cancer mortality, Colon & Rectum (rate per 100,000)*	18.5	17.3	15.5	14.0
Child mortality (rate per 100,000 1-17 yrs.)*	35.3	23.7	20.1	19.9
Chronic Lower Respiratory Disease (CLRD) deaths age 65 and up (rate per 100,000)*	315.8	271.8	316.1	270.9
Diabetes (%) ^{##}	13.7	12.1	11.1	10.7
Heart Disease Deaths (rate per 100,000)*	205.4	174.1	188.4	167
Infant Mortality (rate per 1,000 live births)*	11.0	9.0	7.2	5.9
Injury Deaths (rate per 100,000)*	65.2	63.8	61.2	45.3
Low birthweight (%)*	11.9	9.4	8.5	8.2
Preterm Birth (%)*	11.0	10.7	10.3	9.6
Stroke Deaths (rate per 100,000)*	62.1	49.3	40.6	37.5
Health Behaviors				
Adult Obesity (%) ^{##}	35.6	29.1	30.6	29.2
Adult Smoking (%) ^{##}	23.1	22.9	22.0	16.5
Adults with high blood pressure (% Yes) ^{##}	36.5	34.3	33.9	32.0
Alcohol-impaired driving deaths (%)	U	38.0	34.0	30.0
Chlamydia incidence (rate per 100,000) [@]	2273.7	858.1	521.6	497.3
Gonorrhea incidence (%) [@]	950.3	355.5	176.8	145.8
HIV prevalence (rate per 100,000)	U	369.1	199.5	305.2
Homicide (rate per 100,000)*	19.0	9.8	5.9	5.5
Motor vehicle crash deaths (rate per 100,000)*	8.8	7.1	10.3	11.5
Physical inactivity (%) ^{##}	29.6	24.5	26.4	25.2
Substance Abuse/Mental Health				
Depression (%)	U	18.5	18.5	17.1
Drug poisoning deaths (rate per 100,000)*	41.8	35.5	26.2	14.6
Fentanyl & related drug OD deaths (rate per 100,000)*	16.1	15.0	9.0	2.6
Heroin poisoning overdose deaths (rate per 100,000)	24.9	21.4	10.9	3.5
Prescription opioid overdose deaths (rate per 100,000)	9.1	7.4	5.9	4.0
Suicide (rate per 100,000)*	12.8	12.6	13.3	13.0
Access to Care				
Dentists (patient:provider ratio) [^]	1389:1	1380:1	1660:1	U
Mammography screening (%)	U	67.5	68.4	65.5
Mental health providers (patient:provider ratio) [^]	414:1	415:1	636:1	501:1
Primary care physicians (patient:provider ratio) [^]	952:1	920:1	1310:1	U
Uninsured (%) [#]	14.4	7.9	7.6	11.8
Socio-Economic/Demographic				
Children in poverty (%) [#]	44.6	26.1	22.1	21.2
Hispanic (%) [#]	3.2	2.9	3.5	17.3
African American (%) [#]	42.8	25.7	12.1	12.3
Population that is 65 and older (%) [#]	11.6	14.2	23.0	22.3
Population below 18 years of age (%) [#]	22.1	23.3	14.5	16.0

Top Causes of Death

Heart Disease
Cancer
Injury
Stroke

Homicide Deaths

Rate is higher than Hamilton County, OH, and US rates

STIs

Higher rates of chlamydia and gonorrhea than Hamilton County, OH, and US rates

Drug ODs

Death rates are higher than Hamilton County, OH, and US for drug poisoning, heroin &

% Uninsured Residents

Higher than Hamilton County,

Children

Higher infant and child mortality rates and higher percentage of children living in poverty than Hamilton County, OH and US

City of Cincinnati Data Sources: *Ohio Department of Health, Vital Statistics, 2012-2016; @Ohio Department of Health, STD Surveillance Program, 2016; #2012-2016 American Community Survey 5-Year Estimates; ##500 Cities Data Project; ^Data USA: Cincinnati, OH. U = Unavailable.

Key Indicators of Health: Cincinnati Snapshot

The snapshot shows how the health of Cincinnati residents compares to that of residents of Hamilton County, the state of Ohio, and the United States, as a whole. See Table 51 on the previous page.

Causes of Mortality

While the Snapshot (Table 51) compared the health of residents of the City of Cincinnati to those of Hamilton County as a whole, this section explores the relative importance of different causes to mortality within the City.

For Cincinnati residents as a whole, heart disease and cancer are top two causes of death (Table 52). Drug overdose is a major contributor to unintentional injury, making it the third most common cause of death (see also the *Opioid Epidemic* section, below).

TABLE 52. LEADING CAUSE OF DEATH FOR THE CITY OF CINCINNATI, 2012-2016⁴¹

	Leading Cause of Death	Mortality Rate (per 100,000)
	All Cause	995.6
1	Diseases of the heart	205.8
2	Malignant neoplasms (Cancer)	204.1
3	Accidents (unintentional injuries)	65.2
4	Cerebrovascular diseases	62.1
5	Chronic lower respiratory diseases	46.9
6	Diabetes Mellitus	33.9
7	Alzheimer's disease	29.2
8	Nephritis, nephrotic syndrome and nephrosis	24.4
9	Influenza and pneumonia	19.6
10	Assault (Homicide)	18.9

Table 53, below, shows the relative contribution of the different types of cancer to Cincinnati mortality.

⁴¹ Source: Ohio Department of Health, Vital Statistics; Cincinnati Health Department, Vital Records and Statistics, 2012-2016.

TABLE 53. LEADING CAUSE OF CANCER DEATH FOR THE CITY OF CINCINNATI⁴²

	Cancer Type	Mortality Rate (per 100,000)
	All Cancer	204.1
1	Lung and Bronchus	59.3
2	Colon and Rectum	18.5
3	Breast (F)	17.5
4	Pancreas	13.3
5	Prostate	9.5
6	Kidney	4.9
7	Corpus Uteri	4.0
8	Oral Pharynx	3.1
9	Cervix Uteri	1.0

As seen in Tables 54 and 55, there are large disparities in the mortality rates by gender and race. As shown, men more burdened by heart disease and cancer while women are more burdened by stroke (Table 54). Caucasians have higher mortality rates than African Americans for all three of these causes, while African Americans have higher mortality rates due to causes such as homicide (Table 55).

Cincinnati children are more likely to die before their first birthday than children in the rest of the county, state or the U.S., with an infant mortality rate of 11.0 per 1,000 live births in Cincinnati. Contributing factors to infant mortality include low birthweight, preterm birth, and unsafe sleeping conditions. Many institutions and residents have joined together to address this problem and have created Cradle Cincinnati as a collaborative effort to reduce infant mortality.

While the City closely tracks the nation in terms of the leading causes of death, mortality rates are often higher in Cincinnati than in Hamilton County, Ohio and the United States, and homicide is within the top 10 causes in Cincinnati.

⁴² Source: Ohio Department of Health, Vital Statistics; Cincinnati Health Department, Vital Records and Statistics, 2012-2016.

TABLE 54. LEADING CAUSE OF DEATH BY GENDER FOR THE CITY OF CINCINNATI⁴³

	Gender	Leading Cause of Death	Mortality Rate (per 100,000)
1	Female	Malignant neoplasms	199.3
2		Diseases of the heart	196.5
3		Cerebrovascular diseases	70.1
4		Chronic lower respiratory diseases	51.9
5		Accidents (unintentional injuries)	44.9
6		Alzheimer's disease	42.2
7		Diabetes mellitus	32.7
8		Nephritis, nephrotic syndrome and nephrosis	24.1
9		Influenza and pneumonia	21.5
10		Septicemia	17.7
1	Male	Disease of the heart	215.7
2		Malignant neoplasms	209.4
3		Accidents (unintentional injuries)	86.8
4		Cerebrovascular diseases	53.7
5		Chronic lower respiratory diseases	41.5
6		Diabetes mellitus	35.3
7		Assault (homicide)	33.3
8		Nephritis, nephrotic syndrome and nephrosis	24.7
9		Intentional self-harm (suicide)	19.7
10		Influenza and pneumonia	17.7

⁴³ Source: Ohio Department of Health, Vital Statistics; Cincinnati Health Department, Vital Records and Statistics, 2012-2016.

TABLE 55. LEADING CAUSE OF DEATH BY RACE FOR THE CITY OF CINCINNATI⁴⁴

Race		Leading Cause of Death	Mortality Rate (per 100,000)
African American	1	Malignant neoplasms	209.7
	2	Diseases of the heart	188.5
	3	Cerebrovascular diseases	57.9
	4	Accidents (unintentional injuries)	43.4
	5	Diabetes mellitus	40.6
	6	Assault (homicide)	36.3
	7	Nephritis, nephrotic syndrome and nephrosis	33.8
	8	Chronic lower respiratory diseases	
	9	Certain conditions originating in the perinatal period	18.3
	10	Septicemia	16.6
Caucasian	1	Disease of the heart	247.5
	2	Malignant neoplasms	225
	3	Accidents (unintentional injuries)	94.4
	4	Cerebrovascular diseases	74.2
	5	Chronic lower respiratory diseases	67.7
	6	Alzheimer's disease	47.4
	7	Diabetes mellitus	31.1
	8	Influenza and pneumonia	27.3
	9	Nephritis, nephrotic syndrome and nephrosis	18.6
	10	Intentional self-harm (suicide)	18.3

Opioid Epidemic

Cincinnatians die in greater numbers from opioids and other drug-related causes than Hamilton County residents and are more likely to die from homicide (see Profile above). The City of Cincinnati bears a disproportionate burden of drug-overdose related costs—people buy drugs in the City, overdose in the City (personnel costs of police and fire department response) and are often treated in the City even if they are not residents. This economic burden on Cincinnati diverts funds that could be used to address other challenges. Figure 25 shows the type of opioid overdoses between 2007 and 2017, with synthetic narcotics being a greater cause of overdose deaths in more neighborhoods in 2017 compared to such deaths in 2007. Table 56 shows the growing count of drug overdose deaths from 2012 to 2016 with drug overdoses by heroin and synthetic opioids rapidly increasing over time. Exposure to violence, especially in childhood, is highly stressful and can lead to poor physical health as well as mental health challenges.

⁴⁴ Source: Ohio Department of Health, Vital Statistics; Cincinnati Health Department, Vital Records and Statistics, 2012-2016.

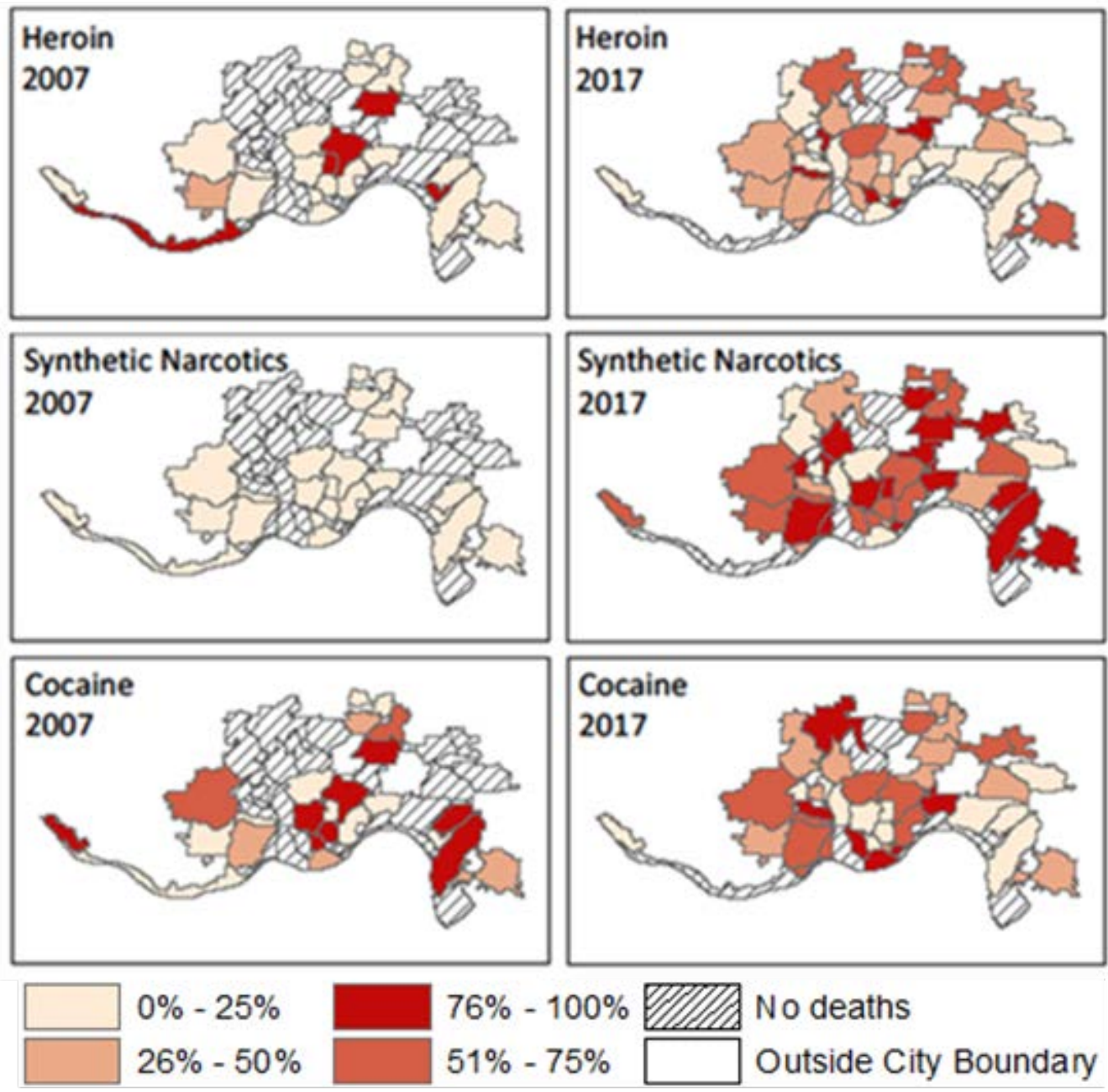


FIGURE 25. PERCENTAGE OF OVERDOSE DEATHS INVOLVING HEROIN, SYNTHETIC OPIOIDS AND COCAINE BY NEIGHBORHOOD, 2007 AND 2017⁴⁵

⁴⁵ Source: Ohio Department of Health, Vital Statistics; Cincinnati Health Department, Vital Records and Statistics, 2012-2016.

TABLE 56. TOTAL OVERDOSE DEATHS BY DRUG POISONING FOR THE CITY OF CINCINNATI⁴⁶

Drug Categories	2012	2013	2014	2015	2016	Total
Total Drug Overdose Deaths	65	94	108	166	148	581
Poisoning by Heroin	36	66	54	103	91	350
Poisoning by Natural or Semisynthetic Opioids*	14	13	24	27	26	104
Poisoning by Methadone**	3	4	3	9	4	23
Poisoning by Synthetic Opioids other than Methadone***	1	8	39	96	83	227
Poisoning by Unspecified Opioids	2	2	2	8	5	19

Notes:

*Natural opioids include morphine and codeine, and semisynthetic opioids include drugs such as oxycodone, hydrocodone, hydromorphone, and oxymorphone.

**Methadone is a synthetic opioid.

***Synthetic opioids other than methadone, include drugs such as tramadol and fentanyl.

Some deaths involved more than one type of opioid. These deaths were included in the counts for each category. Therefore, categories presented are not mutually exclusive.

⁴⁶ Source: Ohio Department of Health, Vital Statistics; Cincinnati Health Department, Vital Records and Statistics, 2012-2016.