

Community Health Status Assessment: High Level Summary



This summary provides a general overview of Community Health Status Assessment (CHSA) results as part of the Health Improvement Partnership Cuyahoga (HIP-C) initiative. The assessment used the documents from the Mobilizing for Action through Planning and Partnerships (MAPP) provided by the National Association of County and City Health Officials (NACCHO) in cooperation with the Public Health Practice Program Office and the Centers for Disease Control and Prevention (CDC).

This High Level Summary is one of three reports created from the data collected from the CHSA. The other products include: the *Indicator Profiles* which presents demographic data that compares the City of Cleveland to the rest of Cuyahoga County, Ohio; and the *Technical Guide* which provides the indicator definitions and data sources.

The Community Health Status Assessment is divided into eleven categories as suggested by the MAPP process:

1. Demographic characteristics
2. Socioeconomic characteristics
3. Health resource availability
4. Quality of life
5. Behavioral risk factors
6. Environmental health indicators
7. Social and mental health
8. Maternal and child health
9. Death, illness, and injury
10. Communicable disease
11. Sentinel events

Indicator Selection

Four primary sources used to select the indicators for the CHSA were: the MAPP Core indicators, the MAPP Extended indicators, the Robert Wood Johnson County Health Rankings Initiative and an indicator list developed during the recent Ohio Department of Health's Statewide Health Assessment. Three local committees representing over 40 local agencies were asked to respond to an online survey to select five indicators among each of the 11 categories. The final CHSA list includes the top five indicators.

Indicator Data Results

Research continues to illustrate the link between the range of personal, social, economic, and environmental factors that influence overall health and well-being of a population. Collectively these factors are the determinants of health. Results of the current CHSA illustrate the health impact of these factors on the residents in our community. This assessment shows that health disparities exist between the City of Cleveland and Cuyahoga County and within different age, gender, and racial/ethnic groups. National and state level data tell us that these disparities are not completely unique to our community yet they do help create a foundation for better understanding of what type of programs and resources may be needed to reduce and eliminate disparities.

The results of the assessment tell us that Cuyahoga County is currently meeting some national benchmarks that have been established to help communities assess their health status. These measures include:

- The recommended ratio of licensed primary care physicians to population.
- The percentage of adults reporting sufficient levels of physical activity.
- A lower rate of foodborne related illness due to certain bacteria (i.e. *e. coli* and *vibrio*).
- A lower rate of death due to self-harm (i.e. suicide).
- A lower rate of new AIDS cases.
- A lower percentage of female breast cancer cases being diagnosed in late stages.
- A lower rate of deaths among children 1 to 14 years old.

Cuyahoga County and the City of Cleveland are facing far more challenges meeting numerous national benchmarks across a wide range of categories. In addition to not meeting the benchmarks, significant disparities exist. For example:

- Most of the health measures indicate that residents within the City of Cleveland are not experiencing the same level of health and well-being compared to residents of Cuyahoga County.
- Table 1 shows Racial/Ethnic disparities are almost two to three times larger within the City of Cleveland compared to Cuyahoga County overall for the following: deaths occurring the first year of life; newly diagnosed cases of HIV and AIDS; homicides; and births to adolescents 10-14 and teens 15-17 years old.

Table 1

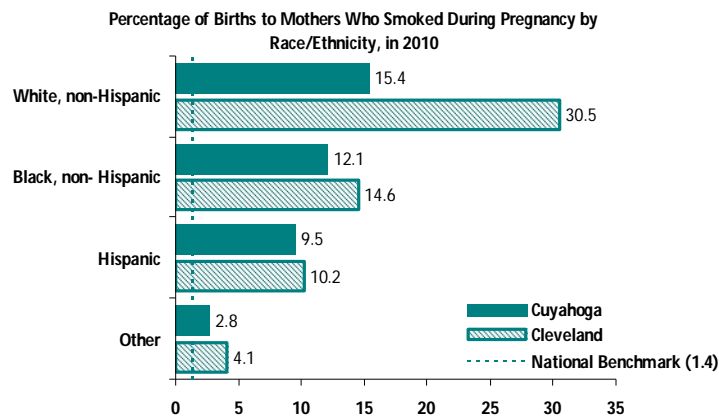
Rate	Infant Deaths (per 1,000 live births)		New Cases of HIV (per 100,000 population)		New Cases of AIDS (per 100,000 population)		Births to Adolescents 10-14 years old (per 1,000)		Births to Adolescents 15-17 years old (per 1,000)		Homicides (per 100,000 population)	
	Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland
White, non-Hispanic	5.0	4.8	5.4	16.9	3.2	10.1	0.1*	0.4*	6.0	23.7	Suppressed**	Suppressed**
Black, non-Hispanic	15.6	18.1	22.4	25.5	16.6	22.7	2.3	3.3	31.5	40.4	19.5	22.9
Hispanic	6.4	7.7	21.2	25.3	14.7	15.2	0.0	0.0	24.8	34.0	2.4	Suppressed**
Other	1.7*	8.3*	7.0	13.4	2.3	5.4	0.0	0.0	1.4*	2.7*	Suppressed**	Suppressed**

*Rate may be unstable because there were fewer than 5 cases identified for the time period analyzed.

**Age-adjusted rates are not presented when there are less than 20 cases total for the time period due to instability.

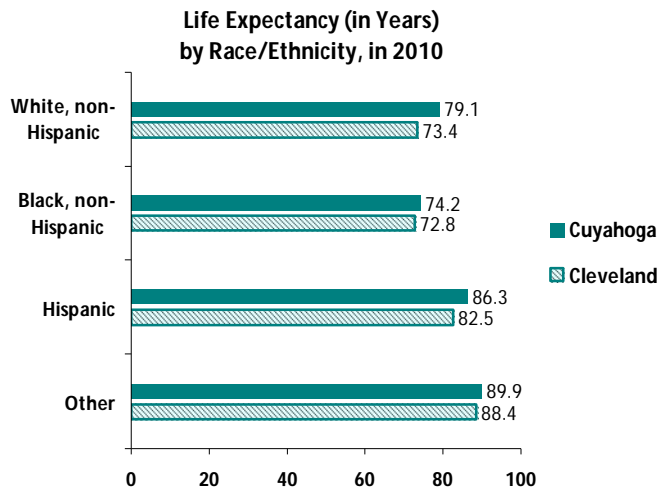
- Figure 1 shows that the use of cigarettes during pregnancy is much higher among White, non-Hispanic compared to Black, non-Hispanic, Hispanic and Other racial/ethnic groups

Figure 1



- Persons living in Cuyahoga County overall will live an average of four years longer than persons living in the City of Cleveland. Figure 2 show that this disparity is even greater among White, non-Hispanic where life expectancy is almost six years less for White, non-Hispanic within the City of Cleveland compared to their counterparts in the Cuyahoga.

Figure 2



The assessment results show the need for additional data collection and/or access for the following two categories: health resource availability and quality of life. Data were not available to evaluate disparities for the following categories: social and mental health; communicable disease; and environmental health indicators, and limited disparity data were available for behavioral risk factors.

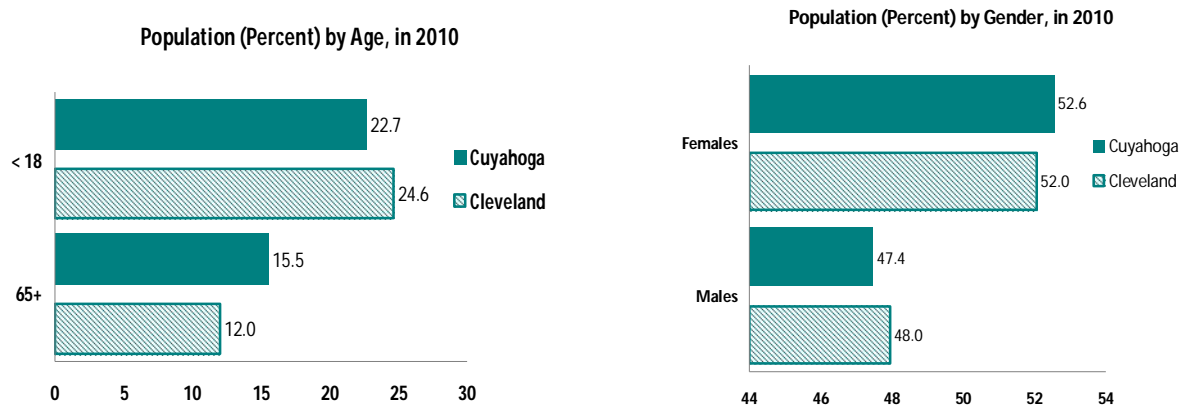
Categorical Disparity Results

Demographic Characteristics

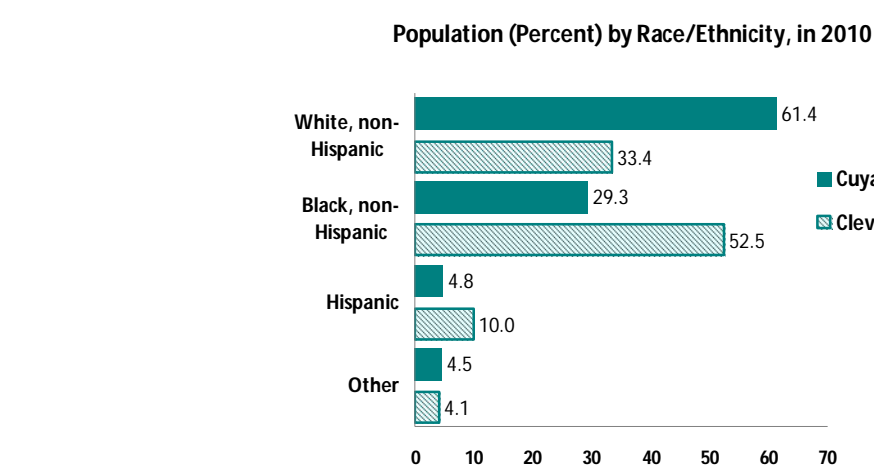
Cuyahoga County, Ohio is home to 1,280,122 people living within 59 municipalities, villages, and townships. The City of Cleveland is the largest municipality with 31% of the population or 396,815 people.

There are minor differences in age and gender when comparing the overall county to the City of Cleveland as shown in Figure 3.

Figure 3



However, there are significant differences with respect to Race/Ethnicity as shown in Figure 4:



Socioeconomic Characteristics

The relationship between socioeconomic characteristics and health status has been well established.¹ Table 2 shows that there are major differences that exist for Cuyahoga County overall compared to the City of Cleveland.

Table 2

Poverty (percent)		High School Education (percent)		Life Expectancy (years)	
Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland
17.9%	34.0%	86.4%	76.3%	77.9	73.6

Based on the indicators in this category, residents in the City of Cleveland may be faced with more challenging socioeconomic conditions (e.g. higher unemployment, higher poverty, lower insurance coverage, lower levels of educational attainment) that can affect overall health compared to Cuyahoga County overall.

Age, Gender, and Race/Ethnic Disparities

Among residents of Cuyahoga County overall and the City of Cleveland, the following disparities exist as shown in Table 3.

Table 3

	Unemployment (percent)		Without Health Insurance (percent)		Poverty (percent)		High School Education (percent)	
	Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland
< 18 years old	Data not available	Data not available	4.2%	3.7%	28.4%	52.6%	Data not available	Data not available
18-34 years old	Data not available	Data not available	25.2%	30.8%	Data not available	Data not available	85.0%	75.8%
35-44 years old	11.3%	19.4%	17.9%	29.2%	Data not available	Data not available	89.9%	80.2%
45-64 years old	9.4%	14.8%	9.1%	15.3%	Data not available	Data not available	90.0%	80.6%
≥ 65 years old	8.6%	8.7%	0.7%	0.8%	9.8%	17.6%	78.9%	64.0%
Male	9.6%	15.0%	15.0%	22.6%	16.4%	31.0%	85.5%	74.7%
Female	10.0%	16.0%	10.3%	14.8%	19.2%	36.7%	87.2%	77.8%
White (includes Hispanic)	9.6%	15.0%	10.0%	17.3%	11.0%	23.5%	90.2%	78.9%
Black (includes Hispanic)	21.5%	25.0%	17.6%	19.6%	31.1%	40.4%	81.8%	77.2%
Hispanic	17.8%	25.2%	16.9%	22.5%	36.7%	50.0%	69.6%	57.1%

Health Resource Availability

Among the five indicators selected for this category, Cuyahoga County overall data were available for two indicators, and no data were available for the City of Cleveland. This information in Table 4 suggests that there is not a shortage in the number of licensed primary care physicians in Cuyahoga County.

Table 4

	Cuyahoga	National Benchmark
Preventable Hospital Stays (rate per 1,000 Medicare enrollees)	78	49
Licensed Primary Care Physicians (ratio)	533:1	631:1
Proportion of population without a regular source of primary care	Data not available	Data not available
Percent of children who visited a doctor in the past year	Data not available	Data not available
Medicaid physician availability (ratio)	Data not available	Data not available

Quality of Life

Among the five indicators selected for this category, data were available for three indicators which one only has information for the county overall i.e. rate of recreational facilities. The quality of life experienced by the residents may be negatively impacted due to the indicators shown in Table 5.

Table 5

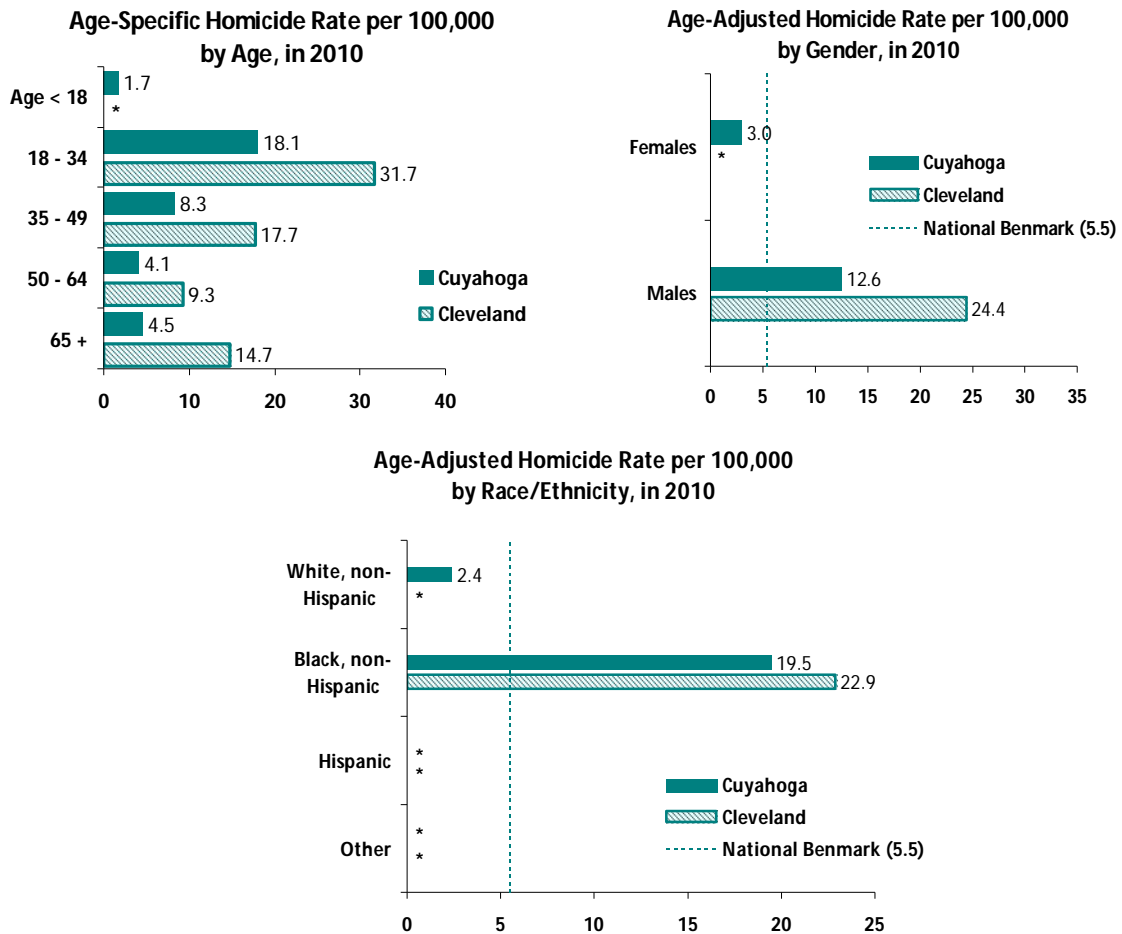
	Cuyahoga	Cleveland	National Benchmark
Percentage of people living in food desert areas	24.6%	55.7%	Data not available
Homicide Rate (per 100,000 population)	7.6	14.9	5.5
Percentage of recreation facilities	10.0%	Data not available	16.0%
Proportion of persons satisfied with the quality of life in the community	Data not available	Data not available	Data not available
Proportion of residents planning to stay in the community/neighborhood for the next five years	Data not available	Data not available	Data not available

- 1 out of 4 people in Cuyahoga County overall and 1 out of 2 people in the City of Cleveland are living in food desert areas, defined as living more than a half a mile away from a supermarket or grocery store.
- The homicide rate is higher than the national benchmark (5.5) with the City of Cleveland rate (14.9 per 100,000) being almost twice as high compared to the county overall (7.6 per 100,000).
- The number of places for recreation within the county overall (10.0 per 100,000) is much lower than the national benchmark (16.0 per 100,000).

Age, Gender, and Race/Ethnic Disparities

Figure 5 portrays disparities; although information to assess disparities is only available for homicides, among residents of Cuyahoga County overall and the City of Cleveland.

Figure 5



Behavioral Risk Factors

The information shown in Table 6 suggests that there is progress as well as challenges with respect to behaviors that impact health.

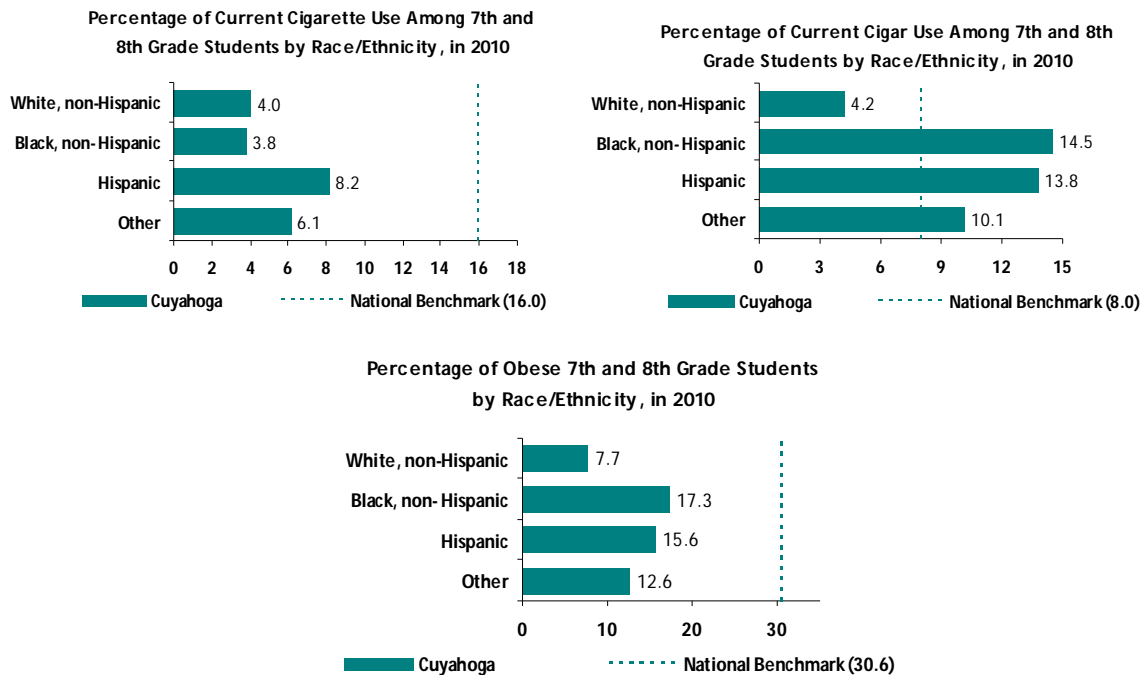
Table 6

	Cuyahoga	Cleveland	National Benchmark
Obese Adults (percent)	26.2%	35.0%	30.6%
Tobacco Use Adults (percent)	20.5%	31.3%	12.0%
Tobacco Use 7th and 8th Graders	4.2%	Data not available	16.0%
Cigar Use 7th and 8th Graders (percent)	9.0%	Data not available	8.0%
Physical Activity (percent)	48.8%	41.9%	47.9%
Consumption of Fruits/Vegetables (percent)	22.5%	23.9%	Data not available

Age, Gender, and Race/Ethnic Disparities

Although most information to assess disparities is limited to the county overall, because of lack of data for the City of Cleveland, the following disparities including cigar versus cigarette usage in 7th and 8th grade students and obesity in 7th and 8th grade students exist in Figure 6 for Cuyahoga County.

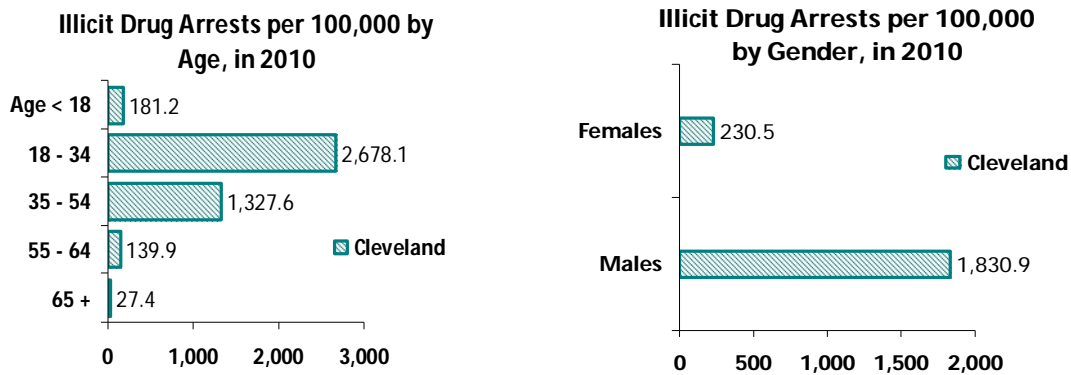
Figure 6



- Among adolescents i.e. 7th and 8th graders, Hispanic and Other report higher cigarette usage. Additionally, cigar use is approximately 3 times higher among Black, non-Hispanic and Hispanic adolescents compared to White, non-Hispanic adolescents.
- Among adolescent i.e. 7th and 8th graders, obesity is 2-3 times higher in Black, non-Hispanic, Hispanic and Other compared to White, non-Hispanic.

Figure 7 provides information on the disparities that exist regarding illicit drug use and is only available for the City of Cleveland.

Figure 7



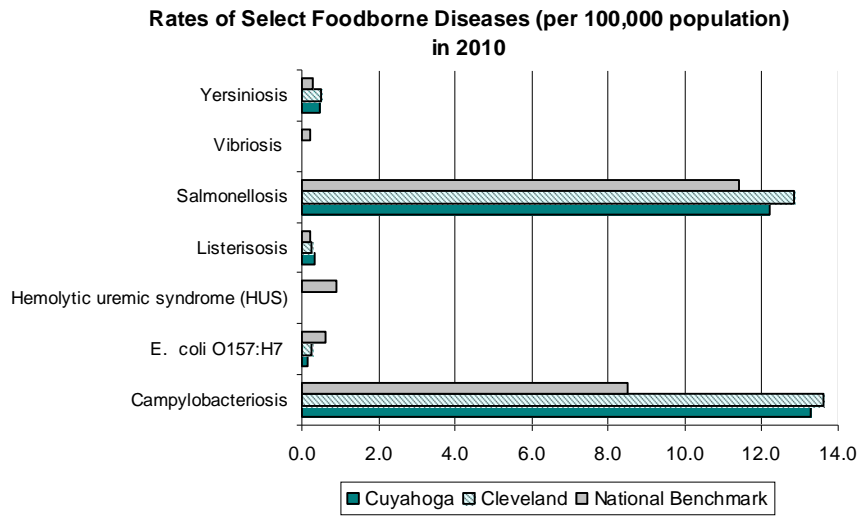
- Illicit drug arrests are highest among 18-34 year olds followed by 34-54 year olds.
- Illicit drug arrests are eight times higher among males compared to females.

Environmental Health Indicators

There are some significant challenges with respect to the physical environment for Cuyahoga County and the City of Cleveland. These challenges include:

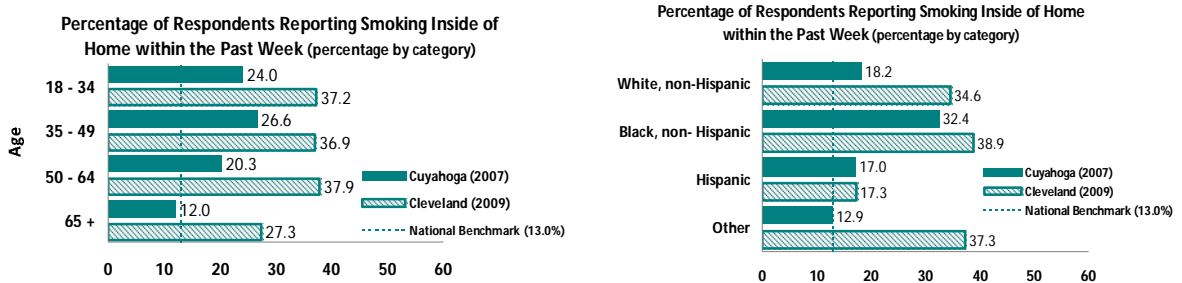
- A high percentage of housing built prior to 1950 exists for the county overall (42.2%) and the City of Cleveland (68.1%) which puts children at increased risk for lead poisoning due to exposure to lead based paint.
- The percent of children with elevated blood lead levels is 14.3% (county overall) and 18.7% (City of Cleveland) using ≥ 5 ug/dl and 4.2% and 5.6% respectively using ≥ 10 ug/dl. These percentages are higher than the ≥ 5 ug/dl and > 10 ug/dl for both the state of Ohio (9.9, 6.7 respectively) and the nation (1.3, 0.61 respectively). The national benchmark is 0.0% for both levels of lead exposure.
- The percent of people exposed to smoking inside the home for the county overall (21.4%) and the City of Cleveland (35.6%) is higher than the national benchmark (13.0%).
- The number of unhealthy air quality days for the county is 4 days due to fine particulate matter and 10 days due to ozone levels. This is higher than the national benchmark of 0 days.

Figure 8 presents the rates for foodborne diseases. Campylobacteriosis, listeriosis, salmonellosis, and yersiniosis rates are exceeding the applicable national benchmark. Figure 8



Age, Gender, and Race/Ethnic Disparities

Figure 9 displays disparities available for smoking inside the home. Figure 9



- Persons 18-64 are two times more likely to be exposed to smoking in the home compared to people 65 and older.
- Within Cuyahoga County overall, Black, non-Hispanic are one and a half times more likely to be exposed to smoking in the home compared to all other race/ethnic groups.
- Within the City of Cleveland, White, non-Hispanic, Black, non-Hispanic, and Other race/ethnic groups are twice as likely to be exposed to smoking in the home compared to Hispanic.

Social and Mental Health

Table 7 shows significant challenges with respect to social and mental health.

Table 7

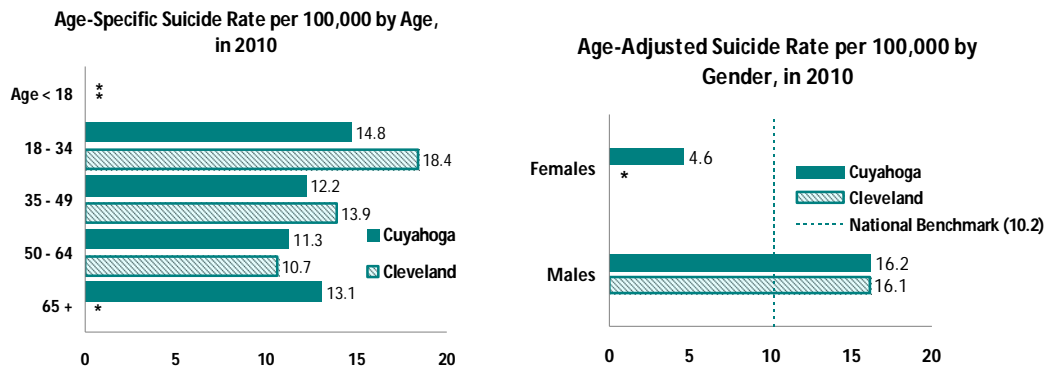
	Cuyahoga	Cleveland	National Benchmark
Suicide Rate (per 100,000 population)	9.9	9.8	10.2
Average number of poor mental health days within the past month	3.8	Data not available	2.3
Rate of Child Abuse and Neglect among Children (per 1,000 children)	5.8	11.2	Data not available
Violent Crime Rate (per 100,000 population)	663.0	1,507.0	73.0
Domestic Violence Rate (per 100,000 population)	Data not available	1,440.2	Data not available

- The rate of suicide meets the national benchmark for the Cuyahoga County overall and the City of Cleveland.
- The rate of child abuse and neglect among children is twice as high for the City of Cleveland compared to the county overall.
- For Cuyahoga County overall, the average number of poor mental health days per month is approximately one and a half times higher than the national benchmark.

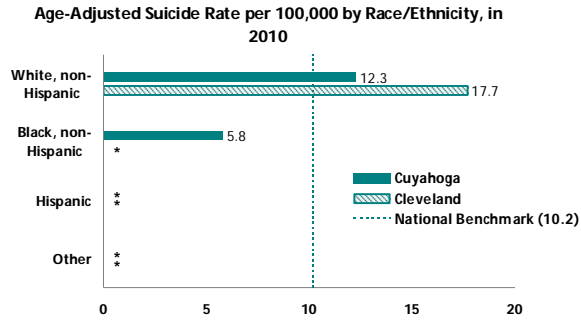
Age, Gender, and Race/Ethnic Disparities

Disparity information was limited to the rate of suicides with the following findings as shown in Figure 10.

Figure 10



Community Health Status Assessment: High Level Summary



*Age-specific and age-adjusted rates are not presented when there are less than 5 cases total or 20 cases total, respectively for the time period due to instability.

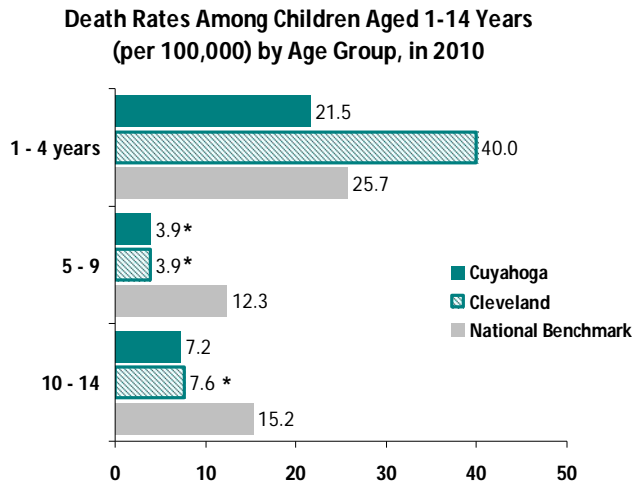
Maternal and Child Health

The information from Table 8 suggests that there is some progress and significant challenges with respect to maternal and child health. Figure 11 shows elevated differences in toddler death rates. Children 5-14 death rates were below the national benchmarks.

Table 8

	Cuyahoga	Cleveland	National Benchmark
Infant Mortality Rate (per 1,000 live births)	9.1	13.2	6.0
Births to Adolescents 15-17 years old (per 1,000 females aged 15-17 years old)	16.7	34.8	22.0 (for 15-19 year olds)
Premature Births (per 100 Live Births)	14.1	17.6	11.4
Percent of Women Receiving Prenatal Care in First Trimester	69.8%	60.6%	77.9%
Percent of Mothers Who Smoked during Pregnancy	13.2%	18.3%	1.4%

Figure 11



*Rate may be unstable because there were fewer than 5 cases identified for the time period analyzed.

- Child death rates among 1-4, 5-9, and 10-14 year olds are meeting the national benchmarks for Cuyahoga County overall. However, the rate of deaths among children ages 1-4 in the City of Cleveland is 1.5 times higher than the national benchmark. Additionally, for the City of Cleveland, death rates among children 5-9 and 10-14 years old are meeting the applicable benchmarks. However, the deaths among infants less than one year old for both geographies do not meet the national benchmark.
- The birth rates among adolescents 15-17 years old are meeting the national benchmark for Cuyahoga County overall but not for the City of Cleveland.
- The rate of premature births, the percentage of women receiving prenatal care in the first trimester, and the percentage of women smoking during pregnancy for Cuyahoga County overall and the City of Cleveland do not meet the applicable national benchmarks.

Age, Gender, and Race/Ethnic Disparities

Among residents of Cuyahoga County overall and the City of Cleveland, the following disparities exist as shown in Table 9 and Table 10.

Table 9

	Child Deaths aged 1-14 years old (per 100,000 children)		Infant Deaths (per 1,000 live births)		Neonatal Deaths (per 1,000 live births)		Post-Neonatal Deaths (per 1,000 live births)	
	Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland
White, non-Hispanic	8.2	13.0*	5.0	4.8	3.8	3.6	1.2	1.2*
Black, non-Hispanic	15.3	20.3	15.6	18.1	10.5	11.7	5.1	6.4
Hispanic	5.8*	9.0*	6.4	7.7	2.1*	1.5*	4.3*	6.2*
Other	0.0	0.0	1.7*	8.3*	1.7*	8.3*	0.0	0.0

*Rate may be unstable because there were fewer than 5 cases identified for the time period analyzed.

Table 10

	Premature Births (percent)		Smoking during Pregnancy (percent)		Prenatal Care in the First Trimester (percent)		Births to Adolescents 10-14 years old (per 1,000 females aged 10-14 years old)		Births to Adolescents 15-17 years old (per 1,000 females aged 15-17 years old)	
	Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland
White, non-Hispanic	10.7%	13.2%	15.4%	30.5%	77.2%	68.4%	0.1*	0.4*	6.0	23.7
Black, non- Hispanic	19.1%	20.4%	12.1%	14.6%	59.1%	55.3%	2.3	3.3	31.5	40.4
Hispanic	13.5%	14.4%	9.5%	10.2%	68.3%	66.9%	0.0	0.0	24.8	34.0
Other	9.6%	12.4%	2.8%	4.1%	71.4%	60.2%	0.0	0.0	1.4*	2.7*

*Rate may be unstable because there were fewer than 5 cases identified for the time period analyzed.

- Black, non-Hispanic and Hispanic have the highest infant and post-neonatal death rates as well as the highest adolescent (15-17 years old) birth rates compared to White, non Hispanic and Other race categories.
- Black, non-Hispanic have the highest: percent of premature births, neonatal death rate, and birth rate among children 10-14 years old compared to White, non-Hispanic, Hispanic, and Other race categories. Additionally, they have the lowest percent of woman receiving prenatal care in the first trimester.
- The percent of woman who smoked during pregnancy was highest among White, non-Hispanic compared to Black, non-Hispanic, Hispanic, and Other race categories.
- For Cuyahoga County overall and the City of Cleveland, the death rate for children 1-14 years old was greater among females compared to males.

Death, Illness, and Injury

Table 11 contains information from this category suggesting that there are challenges with respect to death, illness, and injury for Cuyahoga County and the City of Cleveland.

Table 11

	Cuyahoga	Cleveland	National Benchmark
Deaths from all Causes (per 100,000 population)	795.3	1,020.8	Data not available
Cardiovascular Death (per 100,000 population)	204.2	259.6	100.8
Cancer Death (per 100,000 population)	192.7	242.6	160.6
Years of Potential Life Lost (years)	7,716.5	11,327.7	5,466.0
Percent of respondents reporting their health status as fair or poor	15.1%	26.9%	10.0%
Number of Sick Days per Month (days)	3.3	n/a	2.6

- Death rates due to cancer and cardiovascular disease are higher than national benchmarks.
- Years of Potential Life Lost (a measure of premature death) are higher than the national benchmark.
- Self-reported fair and poor health status are higher than the national benchmark.
- The average number of sick days per month is higher than the national benchmark.
- Residents in the City of Cleveland are experiencing more death, illness, and injury across all measures in this category compared to Cuyahoga County overall.

Age, Gender, and Race/Ethnic Disparities

Table 12

	Deaths from all Causes (per 100,000 population)		Cardiovascular Deaths (per 100,000 population)		Cancer Deaths (per 100,000 population)		Premature Death (years)	
	Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland	Cuyahoga	Cleveland
White, non-Hispanic	750.7	1,099.2	199.1	300.8	184.1	248.2	6,628.4	11,730.4
Black, non- Hispanic	954.5	1,024.1	223.1	244.6	232.4	256.4	11,322.6	12,952.1
Hispanic	507.6	607.5	105.4	125.4	114.7	133.4	4,598.4	4,999.4
Other	345.4	406.3	71.9	75.9	84.2	95.1	1,739.2	3,091.2

- Overall deaths rates (i.e. due to all causes) and cardiovascular death rates: increase with age; are higher among males; and highest among Black, non-Hispanic for Cuyahoga County overall compared to White, non-Hispanic, Hispanic and Other race categories.
- In contrast, White, non-Hispanic persons in the City of Cleveland have higher death rates due to all causes and cardiovascular events compared to Black, non-Hispanic, Hispanic and Other race categories.
- Deaths due to cancer indicate the following: increased with age, are higher among males; and highest among Black, Non-Hispanics compared to White, non-Hispanic, Hispanic and Other race categories.
- Premature death is higher among: males and Black, non-Hispanic compared to White, non-Hispanic, Hispanic and Other race categories.

Communicable (Infectious) Disease

Table 13 contains information from this category suggesting that there are some significant challenges with respect to communicable disease for the county overall and the City of Cleveland.

Table 13

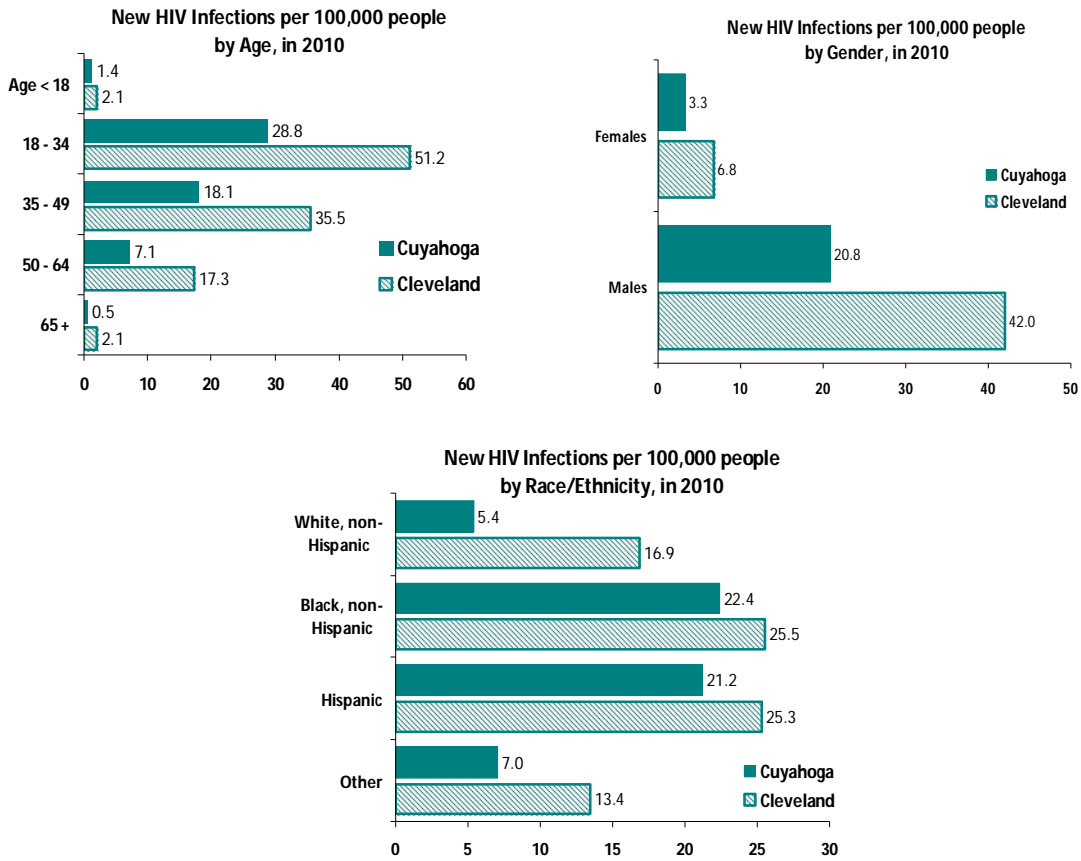
	Cuyahoga	Cleveland	National Benchmark
Incidence of HIV infections (per 100,000 population)	11.6	23.7	Data not available
Incidence of AIDS (per 100,000 population)	7.8	17.9	13.0
Percentage of adults aged 65+ immunized in past 12 months for influenza	66.5%	Data not available	90.0%
Percentage of Children with Up-To-Date*** 4:3:1:3 Vaccination Series by 24 Months of Age	64.0%	45.2%	80.0%
Percentage of Children with Up-To-Date*** 4:3:1:3 Vaccination Series by 36 Months of Age	73.2%	57.3%	80.0%
Percentage of Children with Up-To-Date*** 4:3:1:3:1 Vaccination Series by 24 Months of Age	55.6%	32.3%	80.0%
Percentage of Children with Up-To-Date*** 4:3:1:3:1 Vaccination Series by 36 Months of Age	64.0%	41.6%	80.0%

- The rate of new AIDS cases exceeds the national benchmark for the City of Cleveland.
- The rate of new HIV infections is twice as high in the City of Cleveland compared to Cuyahoga County overall.
- The percent of recommended childhood vaccinations as well as adult influenza vaccinations are not meeting respective national benchmarks.

Age, Gender, and Race/Ethnic Disparities

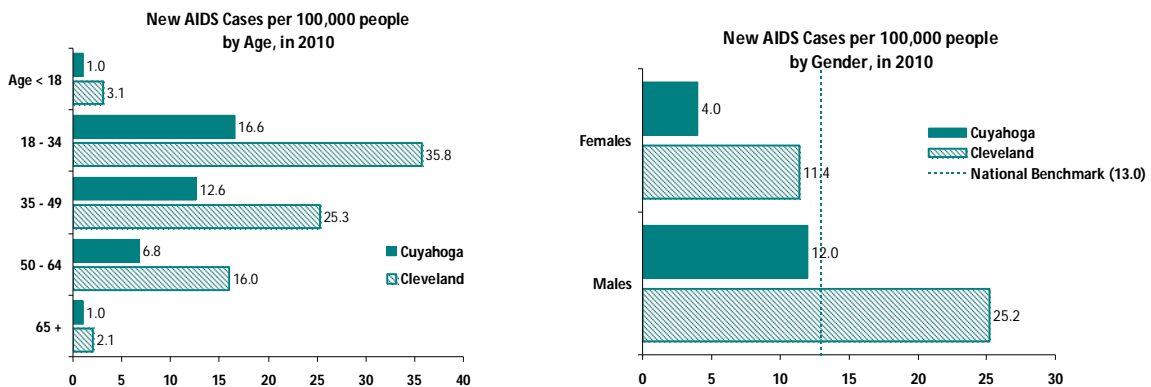
Disparity information was limited to the rates of new HIV and AIDS cases with the following findings shown in Figure 12 and Figure 13.

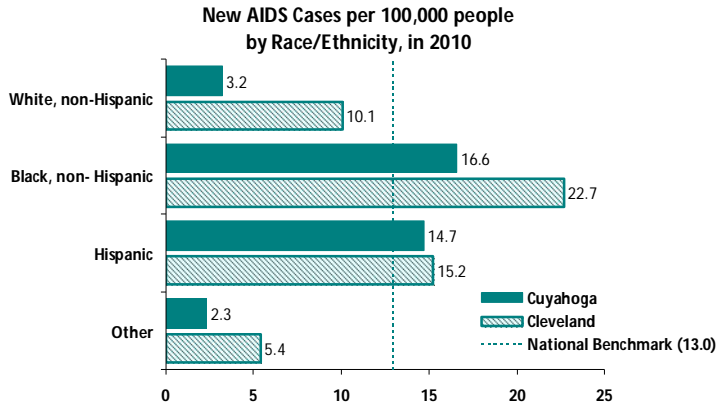
Figure 12



- Rates of new HIV cases are: highest in the 18-34 year old group and decrease with subsequent age groups; approximately six times higher among males compared to females; three to four times higher in Black, non-Hispanic and Hispanic compared to White, non-Hispanic and Other for Cuyahoga County overall and approximately one and a half times higher in Black, non-Hispanic and Hispanic compared to White, non-Hispanic and Other for the City of Cleveland.

Figure 13





- Rates of new AIDS cases are: highest in the 18-34 year old group and decrease with subsequent age groups; approximately two to three times higher among males compared to females; four to five times higher in Black, non-Hispanic and Hispanic compared to White, non-Hispanic and Other for Cuyahoga County overall and approximately one to four times higher in Black, non-Hispanic and Hispanic compared to White, non-Hispanic and Other for the City of Cleveland.

Sentinel Events

Table 14 contains information from this category suggesting that there is some progress as well as significant challenges with respect to sentinel events.

Table 14

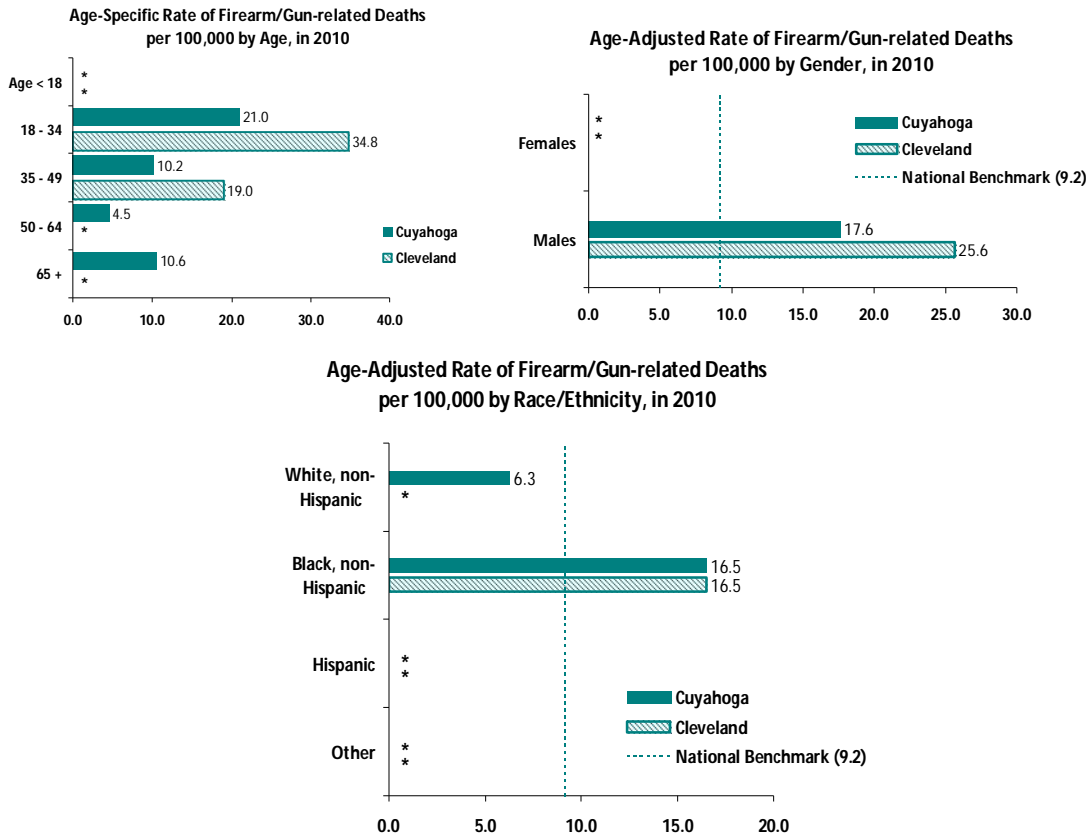
	Cuyahoga	Cleveland	National Benchmark
Rate of Gun-related Deaths (per 100,000 population)	9.5	13.6	9.2
Rate of Drug-induced Deaths (per 100,000 population)	13.6	22.5	11.3
Rate of Work Related Injury Deaths (per 100,000 population)	1.5	Data not sufficient	Data not available
Percent of Female Breast Cancer Cases Diagnosed at Late Stage	29.2%	Data not available	41.0%
Percent of Cervical Cancer Cases Diagnosed at Late Stage	48.1%	Data not available	Data not available
Number of Anthrax Cases	0	0	Data not available
Number of Smallpox Cases	0	0	Data not available

- For Cuyahoga County overall and the City of Cleveland, the percent of women with late stage breast cancer diagnoses is meeting the national benchmark.
- There have been no reports of diseases that are often associated with acts of bioterrorism (i.e. anthrax and small pox).
- The rate of gun-related deaths and rate of drug-induced deaths do not meet the respective national benchmarks.

Age, Gender, and Race/Ethnic Disparities

Disparity information for sentinel events was limited to firearm/gun-related deaths, and drug-induced deaths with the following findings shown in Figure 14 and Figure 15.

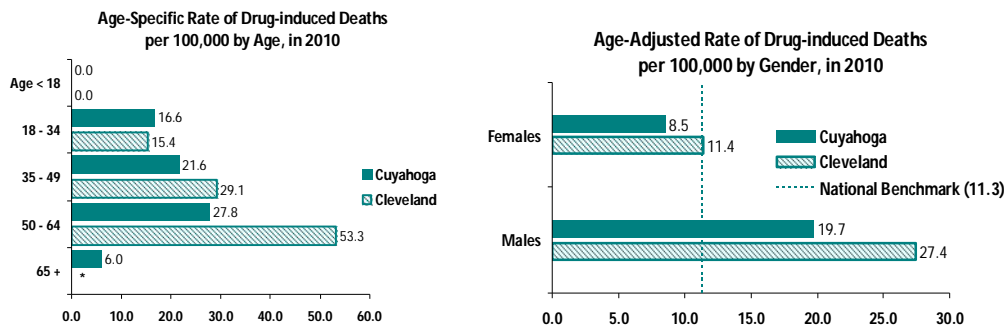
Figure 14



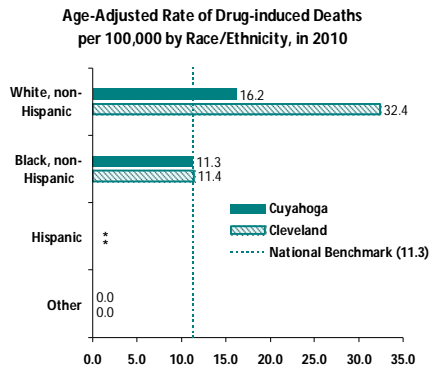
*Rates are not presented when there are less than 5 cases total for the time period due to instability.

- For gun-related deaths, the rate is: over two and a half times higher among Black, non-Hispanic compared to White, non-Hispanic; primarily occurring in males; and is highest among the 18-34 year old age group.

Figure 15



*Rates are not presented when there are less than 5 cases total for the time period due to instability.



*Rates are not presented when there are less than 5 cases total for the time period due to instability.

- For drug-induced deaths, the rate is higher among: White, non-Hispanics compared to Black, non-Hispanics; males (twice as high compared to females); and increases with age between 18-34, 35-49, and 50-64 year old groups.

References

1. Institute of Medicine (US) Committee on Assessing Interactions Among Social, Behavioral, and Genetic Factors in Health; Hernandez LM, Blazer DG, editors. Genes, Behavior, and the Social Environment: Moving Beyond the Nature/Nurture Debate. Washington (DC): National Academies Press (US); 2006. 2. The Impact of Social and Cultural Environment on Health. [Available from http://www.ncbi.nlm.nih.gov/books/NBK19924/](http://www.ncbi.nlm.nih.gov/books/NBK19924/)