Letter to the Community

To effectively respond to the health needs of our community, we must have a deep understanding of the challenges we face. This report, which outlines the priority health issues for Knox County, is the culmination of more than one and half years of data collection and evaluation. This extensive process, based on a national model, involved dozens of partners and thousands of residents.

We are uniquely positioned to conduct this work because of our expertise in this area, namely in our epidemiology division. Even so, we devote time and resources to this for a variety of reasons. This assessment is not only a crucial part of our own strategic approach to improve health, but it also informs the work of our partners, medical providers, nonprofits and many others. In addition, we produce this report in support of the Community Health Council’s health improvement plan, which brings together a diverse group of organizations from across the community.

The Community Health Assessment draws on data and information gathered from four assessments recommended under the national Mobilizing for Action through Planning and Partnerships (MAPP) framework. All of the information gathered from the assessments was then synthesized by our epidemiologists, resulting in the 14 topic areas outlined. The topic areas were determined either by statistical relevance using a variety of valid sources, or were cited repeatedly during key informant interviews and focus groups.

As you’ll read in this report, some groups of people have higher rates of certain diseases compared to others. We have noted these differences when they are statistically significant. It is important to recognize these disparities because race, ethnicity, gender, socioeconomic status and other social factors can play a major role in an individual’s health. Therefore, to improve the health of everyone in our community, we must be aware of and address these social determinants of health.

This is the second Community Health Assessment we’ve conducted; the first was in 2010. As part of our commitment to improving the health of our community, we plan to release a similar assessment every few years, and we hope they serve as useful tools and references for all readers. If you have any questions or suggestions for future reports, please contact our Director of Community Assessment at 865-215-5095.

Sincerely,

Dr. Martha Buchanan
Director, Knox County Health Department
Acknowledgements

The Knox County Health Department thanks the following individuals and organizations for their invaluable contributions to this report.

Financial Contributors
$10,000
Fort Sanders Regional Medical Center/Parkwest Medical Center
University of Tennessee Medical Center

$240
University of Tennessee Department of Public Health

Community Health Council 2014-15
Kendall Aaron, Coalition on Childhood Obesity
Katy Altman, Knoxville Track Club
David Bruce, City of Knoxville
Martha Buchanan, Knox County Health Department
Jim Dickson, YMCA of East Tennessee

Data Collaborative Group
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Linda Daugherty, University of Tennessee Center for Applied Research and Evaluation
Mike Dunthorn, City of Knoxville
Gene Fitzhugh, University of Tennessee Department of Kinesiology, Recreation & Sport Studies
Terry Geiser, Knox County Health Department
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Ali Innoacene, Knox County Health Department
Jennifer Iatsos, University of Tennessee Department of Public Health
Pat Kelly, East Tennessee Children’s Hospital
Margaret Knight, Knox County Health Department
Tim Kuhn, Metropolitan Planning Commission
Alicia Mastrogiudici, Knox County Health Department
Rhonda McAnally, University of Tennessee Medical Center
Patricia McArthur, University of Tennessee College of Nursing
Clea McNeely, University of Tennessee Department of Public Health

Warren Sayre, Summit Medical Group
Eve Thomas, Knoxville Police Department
Rosalyn Tillman, Pellissippi State Community College
Karen Tirindelli, community volunteer
Lisa Wagner, Knox County Schools
Regina Washington, South College
Amenda Weber, Remote Area Medical
Carlos Yunsan, Kizer & Black, Attorneys
Ellen Zavisca, Knox County Regional Transportation Planning Organization

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Christi Branscom, City of Knoxville
Robert (Buzz) Buswell, Knox County Veterans Service Officer
Rev. John Butler, Faith Coalition and Police Advisory Review Commission
Mark Donaldson, Metropolitan Planning Commission
Carol Evans, Legacy Parks Foundation
Rabbi Alon Ferency, Heska Amuna Synagogue
Stephanie Hall, Cherokee Health System
Jerry Harris, Rural/Metro
Brandon Hollingsworth, WUOT 91.9 FM
Renee Hoyos, Tennessee Clean Water Network
Barbara Kelly, Knoxville-Knox County Community Action Committee
Lauderdale, United Way of Greater Knoxville
Betty Jo Mahan, Inskip Neighborhood Organization
Tomato Head Restaurants
Lisa Wagner, Knox County Schools
Doug Minter, Knoxville Chamber

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Michelle Moyers, Knox County Health Department
Agnikola Odisi, University of Tennessee College of Veterinary Medicine
Karen Pershing, Metropolitan Drug Commission
Mark Prather, Knox County Health Department
Erin Read, Knox County Health Department
Warren Sayre, Summit Medical Group
Roberta Sturm, Knox County Health Department
Regina Washington, South College
Gary Young, Covenant Health

Leadership Knoxville
Mayor’s Council on Disability Issues – City of Knoxville
St. John’s Lutheran Church
Town of Farragut
University of Tennessee Medical Center

Host Sites for Focus Groups
Cherokee Health Systems
City County Building
The Community of St. Ninian
Compassion Coalition
Holy Ghost Catholic Church
Knox County Senior Center
Knoxville-Knox County Community Action Committee
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2014-2015 Community Health Assessment

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Introduction
The 2014-2015 Community Health Assessment was conducted by the Knox County Health Department in support of Together Healthy Knox, an initiative of the Community Health Council. Created in part to guide a community health improvement process, the council is an independent entity made up of various community members that serves the City of Knoxville, Knox County and the Town of Farragut.

This assessment details the priority health issues for Knox County after consideration of all the data collected. The Community Health Council will select four top issues from this assessment to integrate into a Community Health Improvement Plan.

Methodology
In 2014, the Knox County Health Department held monthly meetings with partner agencies to organize and coordinate the assessment data collection process (12 focus groups, 26 key informant interviews, a quality of life survey with more than 2,000 responses, etc.). Once the qualitative assessments were underway, the meetings were used to review the 2010 Knox County Community Health Assessment to determine any new data needs. Additionally, the Knox County Health Department epidemiology staff reviewed local and state health assessments for methodology and data collection comparisons.

Information from the Behavior Risk Factor Survey (BRFS), conducted every three years in Knox County, and the Youth Risk Behavior Survey (YRBS), conducted every two years in Knox County public middle and high schools, was utilized. Three years in Knox County, and the Youth Risk Behavior Survey (YRBS), conducted every two years in Knox County public middle and high schools, was conducted every three years in Knox County, and the Youth Risk Behavior Survey (YRBS), conducted every two years in Knox County public middle and high schools, was combined with local birth, mortality and disease prevalence data. To set a benchmark, the data were compared to the applicable targets outlined in Healthy People 2020.

The health department’s epidemiology staff also noted areas of limitation in the Knox County Health Department epidemiology staff reported limitations and had identified areas of limitation in the Knox County Health Department epidemiology staff reviewed local and state health assessments for methodology and data collection comparisons. In 2014, the Knox County Health Department held monthly meetings with partner agencies to organize and coordinate the assessment data collection process (12 focus groups, 26 key informant interviews, a quality of life survey with more than 2,000 responses, etc.). Once the qualitative assessments were underway, the meetings were used to review the 2010 Knox County Community Health Assessment to determine any new data needs. Additionally, the Knox County Health Department epidemiology staff reviewed local and state health assessments for methodology and data collection comparisons. Information from the Behavioral Risk Factor Survey (BRFS), conducted every three years in Knox County, and the Youth Risk Behavior Survey (YRBS), conducted every two years in Knox County public middle and high schools, was combined with local birth, mortality and disease prevalence data. To set a benchmark, the data were compared to the applicable targets outlined in Healthy People 2020.

There are no tables or figures in the document. However, the information is presented in a narrative format. The document mentions the 2014-2015 Community Health Assessment conducted by the Knox County Health Department. The assessment identified the following health priorities for the county:

1. Substance Use: Increase access to oral health services for youth, the unemployed and those unable to work.
2. Reproductive and Sexual Health: Increase birth control education.
4. Tobacco Use: Decrease tobacco use, particularly in youth and pregnant women.

These priorities are presented to inform the Community Health Council and the general public about the most pressing health issues in Knox County. The document also mentions that the Knox County Health Department’s epidemiology staff identified the following health priorities for the county, based on all data collected.

The information was presented to the Community Health Council for review.
have public health insurance (Medicare, TennCare, Medicaid). Of the unemployed, 15.5% reported they couldn’t see a doctor in the past year due to cost, compared to 15.9% of employed adults.

## Significant Facts

- **66%** of Knox County adults aged 40+ reported having insurance for eye care.
- **43.8%** of unemployed adults reported they were unable to see a doctor in the past year due to cost (compared to 15.9% of employed adults).

## Access to Health Services

**Health Priorities and Areas of Concern**
- Increase health care coverage for Knox County residents (emphasis on unemployed)
- Impact of the Affordable Care Act

### Benchmark

Persons with medical insurance:
- Healthy People 2020 target: 100 percent
- Knox County: 86.4 percent

### Disparities

#### Percent of adults who reported they have health coverage:

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Less than $15,000</td>
<td>72.1%</td>
<td>74.2%</td>
<td>77.8%</td>
<td>92.8%</td>
</tr>
<tr>
<td>$15,000-$24,999</td>
<td>29.2%</td>
<td>27.6%</td>
<td>23.9%</td>
<td>15.1%</td>
</tr>
<tr>
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<td>23.9%</td>
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<tr>
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<td>15.1%</td>
</tr>
<tr>
<td>More than $50,000</td>
<td>29.2%</td>
<td>27.6%</td>
<td>23.9%</td>
<td>15.1%</td>
</tr>
</tbody>
</table>

### Education

| Less than high school | 76.0%   |
| High schoool         | 77.6%   |
| Some college         | 86.0%   |
| College grad         | 95.7%   |

Source: BRFS, 2014

### Percent of adults who reported they couldn’t see a doctor in the past 12 months due to cost:

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
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<td>23.9%</td>
<td>15.1%</td>
</tr>
</tbody>
</table>

### Education

| Less than high school | 25.4%   |
| High school          | 21.8%   |
| Some college         | 18.2%   |
| College grad         | 7.0%    |

Source: BRFS, 2014

**Contributing Factors**

- Hospitals/physicians per capita
- TennCare system
- Knox County Indigent Care Program
- City of Knoxville Office on Homelessness
- Cherokee Health Systems integrated care
- InterFaith Health Clinic
- The Free Medical Clinic
- Knox Area Project Access

I think a healthy community is where everyone can get health care, whether it’s mental health care or physical, but ... where everyone can get some health care.

--- Focus Group, 2014
Cancer Health Priorities and Areas of Concern

- Lung cancer mortality
- See Obesity, Tobacco, Nutrition and Physical Activity
- Radon awareness

**Benchmarks**

**Death rates for all types of cancer**
- **Healthy People 2020 target:** 179.3 deaths per 100,000
- **Knox County:** 197.5 deaths per 100,000
- **White:** 211.0 per 100,000
- **Black:** 151.5 per 100,000

**Lung cancer death rate**
- **Healthy People 2020 target:** 45.5 deaths per 100,000
- **Knox County:** 58.9 deaths per 100,000
- **White:** 65.8 per 100,000
- **Black:** 52.0 per 100,000

**Breast cancer death rate**
- **Healthy People 2020 target:** 20.7 deaths per 100,000
- **Knox County:** 22.7 deaths per 100,000

**Colorectal cancer death rate**
- **Healthy People 2020 target:** 14.5 deaths per 100,000
- **Knox County:** 15.2 deaths per 100,000

Sources: Health Information Tennessee, 2009; 2010-2013 vital records provided by the Office of Policy, Planning and Assessment, Tennessee Department of Health; Centers for Disease Control and Prevention

**Causes of Cancer Include**

- Tobacco use
- Poor diet and physical inactivity
- Sun and UV exposure
- Radiation exposure
- Genetics
- Environmental carcinogens (including radon exposure)

Source: American Cancer Society website, 2015

**Screening for cervical, colorectal, and breast cancers helps find these diseases at an early, often highly treatable stage.**

Knox County adults met the Healthy People 2020 target for breast cancer and colon cancer screening.

**Disparities**

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>Black males</th>
<th>White males</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung cancer</td>
<td>95.8 deaths</td>
<td>79.5 deaths</td>
</tr>
<tr>
<td>Breast cancer</td>
<td>27.6 deaths</td>
<td>22.4 deaths</td>
</tr>
<tr>
<td>Colon cancer</td>
<td>25.6 deaths</td>
<td>19.4 deaths</td>
</tr>
</tbody>
</table>

Source: 2010-2013 vital records provided by the Office of Policy, Planning and Assessment, Tennessee Department of Health

**Knox County Rates of Diagnosis**

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>Rate per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cancer</td>
<td>497.9</td>
</tr>
<tr>
<td>Prostate cancer</td>
<td>165.5</td>
</tr>
<tr>
<td>All childhood cancer (0-19 years)</td>
<td>196.5</td>
</tr>
<tr>
<td>Female breast cancer</td>
<td>130.9</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>78.9</td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>39.1</td>
</tr>
<tr>
<td>Skin melanoma</td>
<td>30.0</td>
</tr>
<tr>
<td>Pancreatic cancer</td>
<td>12.6</td>
</tr>
</tbody>
</table>

Source: Cancer in Tennessee, 2007-2011

**Health Priorities and Areas of Concern**

- Lung cancer mortality
- See Obesity, Tobacco, Nutrition and Physical Activity
- Radon awareness

**Contributing Factors**

- Tobacco use
- Poor diet and physical inactivity
- Sun and UV exposure
- Radiation exposure
- Genetics
- Environmental carcinogens (including radon exposure)

**Knox County** was the leading cause of death in Knox County in 2013.

**FACT**

- **Cancer (all types)** was the **leading cause of death** in Knox County in 2013.

Source: 2013 vital records provided by the Office of Policy, Planning and Assessment, Tennessee Department of Health

**Positive/Resources**

- The number of adults who reported they smoked is gradually decreasing in Knox County.
- American Cancer Society
- Hospitals and oncologists in community for treatment
- Cancer Support Community of East Tennessee
- Reported cancer screening rates in Knox County meets Healthy People 2020 targets.
The proportion of adults with diabetes who perform self-blood glucose monitoring at least once daily.

- Healthy People 2020 target: 70.4 percent
- Knox County: 65 percent

The proportion of persons with diagnosed diabetes who receive formal diabetes education.

- Healthy People 2020 target: 62.5 percent
- Knox County: 52 percent

Source: BRFS, 2014

We should also mention affordable medications for people that require them. I have Type 1 diabetes. I spend lots of money on medications and pump supplies and things in a year. To survive, to live another day, I must buy these things. So I am at the mercy of a whole lot of systems, insurance companies, physicians, on what I can take, what I can't, what is regulated. – Focus Group, 2014

Diabetes can cause serious health complications including heart disease, blindness, kidney failure and lower-extremity amputations. Diabetes is the seventh leading cause of death in the U.S. and the eighth leading cause of death in Knox County.
A 2014 study found that, excluding the elderly, residents of neighborhoods with greater walkability had on average 13 percent lower development of diabetes over 10 years versus those in less walkable neighborhoods. Obesity was also lowest in the most walkable neighborhoods.

People living in highly walkable neighborhoods are three times more likely to walk or bicycle and half as likely to drive as a means of transportation.

Environmental Health

Contributing Factors

- **Air Quality**
  Knox County has met Healthy People 2020 goals in 2013 and 2014. Prior to that, air quality was slowly improving despite a growing population.

- **Drinking water**
  In the past decade, there have been no reported waterborne disease outbreaks connected to any of our utility providers in Knox County.

- **Waterways**
  Since 2004, 500 miles of waterways have been added to the region’s list of impaired waterbodies in East Tennessee, meaning they are not safe for swimming or fishing.

Safety

The Knox County Health Department performed an analysis of automobile-pedestrian and automobile-bicycle crashes in Knox County that occurred Dec. 2006 - June 2011, based on data provided by the Knoxville Regional Transportation Planning Organization (TPO).

In that time period, there were 494 crashes involving pedestrians or bicyclists. Of those:

- 348 involved pedestrians
- 145 involved bicyclists
- 1 crash involved both

Drinking water demand

While there is a sufficient water supply available in East Tennessee at present, there is a rapidly increasing demand for drinking water that must be addressed in planning for the future.

Benchmarks

- Knox County meets several goals for healthy drinking water supplies addressed in Healthy People 2020.
- Knox County also meets the Healthy People 2020 target for air quality, which aims to reduce the number of days the Air Quality Index (a figure created to measure outdoor air pollution) exceeds 100. In 2013 and 2014, Knox County Air Quality Management’s monitoring stations recorded no days with AQI over 100.

Walkability

A 2014 study found that, excluding the elderly, residents of neighborhoods with greater walkability had on average 13 percent lower development of diabetes over 10 years versus those in less walkable neighborhoods. Obesity was also lowest in the most walkable neighborhoods.

- People living in highly walkable neighborhoods are three times more likely to walk or bicycle and half as likely to drive as a means of transportation.

Health Priorities and Areas of Concern

- Access and availability of safe greenways, sidewalks
- Built environment factors contributing to poor health

Walkability

A 2014 study found that, excluding the elderly, residents of neighborhoods with greater walkability had on average 13 percent lower development of diabetes over 10 years versus those in less walkable neighborhoods. Obesity was also lowest in the most walkable neighborhoods.

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- People living in highly walkable neighborhoods are three times more likely to walk or bicycle and half as likely to drive as a means of transportation.
Additional information on food choice behaviors of Knox County residents and students are reported in the section on Nutrition and Physical Activity, pages 26-27.

**Benchmarks**

- **Diet Choices/Food Deserts**
  - Knox County high school students surveyed consistently eat fewer fruits and vegetables than state or national averages, a risk factor for obesity.
  - In the YRBS, when high school students were asked if they ate five or more servings of fruit or vegetables during the previous week, the percent answering "yes" consistently fell 1-2 percent below state percentages and 4-5 percent below national percentages.

**Health Priorities and Areas of Concern**

- **Access and availability of healthy food versus unhealthy food**
- **Potential misconceptions around perceived cost of healthy food versus unhealthy food**

According to the USDA, food deserts are communities without ready access to fresh, healthy, and affordable food. The low-income neighborhoods shaded in dark green on the map at right have less access to markets where their families can obtain fresh fruits and vegetables.

**Disparities**

- 18.2% of black adults versus 13.1% of white adults reported always or usually feeling stressed about preparing nutritious meals.
- 38.9% of those with income less than $15,000 per year reported being stressed about preparing nutritious meals, and 4.2 percent of those with income greater than $50,000 per year reports the same.
- 37.2% of adults unable to work reported always or usually feeling stressed about preparing nutritious meals.

**Eating fruits and vegetables lowers the risk of developing many chronic diseases, and can also help with weight management.**

---

**PRODUCTION OF AND ACCESS TO FRUITS AND VEGETABLES**

<table>
<thead>
<tr>
<th>U.S.</th>
<th>Tenn.</th>
<th>Knox County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of cropland acreage harvested for fruits and vegetables (vegetables + orchards + berries)</td>
<td>2.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Percentage of total land acreage harvested for fruits and vegetables (vegetables + orchards + berries)</td>
<td>0.4</td>
<td>0.1</td>
</tr>
</tbody>
</table>

**Food Access**

- Number of farmers markets per 100,000 residents: 2.5 (U.S.), 1.5 (Tenn.), 1.60 (Knox County)
- Percentage of farmers markets that accept SNAP: 21.0 (U.S.), 11.8 (Tenn.), 29.00 (Knox County)

**High schoolers and green vegetables**

- Percentage of high school students surveyed who ate green salad, carrots or other vegetables (excluding potatoes) three or more times per day during the seven days before the survey, 2013:
  - **Black**: 12.3
  - **White**: 13.4
  - **Female**: 76
  - **Male**: 11.7
  - **Total**: 8.7

* Limited reliability – interpret with extreme caution

**Source**: High School YRBS, 2013

**Contributing Factors**

- **Emergency food resources**
- **Knox County Schools Nutrition Program**
- **Increase in farmers markets and those that accept SNAP/EBT.**

**The Knoxville-Knox County Food Policy Council is the oldest municipal food policy council in the U.S., formed in 1982 as a result of efforts of the then Department of Planning at the University of Tennessee.**
**Heart Disease**

**Health Priorities and Areas of Concern**
- See Obesity, Nutrition and Physical Activity.
- Race, income and education disparities for hypertension and heart disease

**Benchmarks**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Healthy People 2020 Target</th>
<th>Knox County: 133.5 deaths per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronary heart disease deaths</td>
<td>103.4 deaths per 100,000</td>
<td>133.5 deaths per 100,000</td>
</tr>
</tbody>
</table>

**Source:** Health Information Tennessee, 2012

**Proportion of adults with hypertension**
- Healthy People 2020 target: 29.9 percent
- Knox County: 33.4 percent

**Source:** BRFS, 2014

---

**FACT**

Diseases of the heart are the second leading cause of death in Knox County.

---

**Contributing Factors**

- High blood pressure
- High LDL cholesterol
- Smoking
- Diabetes
- Excessive weight
- Obesity
- Excessive alcohol use

---

**Disparities**

**Education**
- Individuals who did not achieve a high school education were most likely to report being told by a health professional that they had angina or coronary heart disease (11 percent) than college graduates (5.2 percent).

**Wealth**
- Individuals who had an annual household income less than $15,000 were most likely to report having a heart attack (8.4 percent) than individuals with a household income greater than $50,000 (2.9 percent).

**Race**
- Blacks (46.3 percent) were more likely to report that they were told by a health professional that they have hypertension than whites (34 percent) or individuals of other races/ethnicities (13.9 percent).

---

**TREND:**

- STABLE

**TREND-STEADY**

- 2005: 29.3%
- 2008: 28.6%
- 2011: 34.4%
- 2014: 33.3%

**Comparison:**
- Compared to 14.2 percent of individuals who are unable to work.

---

**Wealth Priorities and Areas of Concern**

- See Obesity, Nutrition and Physical Activity.
- Race, income and education disparities for hypertension and heart disease

---

**Target Knox**

- Coronary heart disease deaths
- Proportion of adults with hypertension

---

**Key Risk Factors**

- About half of Americans have at least one of the following three risk factors:
  - High blood pressure
  - High LDL cholesterol
  - Smoking

---

**Source:** Centers for Disease Control and Prevention; Heart Disease Facts, 2015

---

**Positive/Resources**

- Hospitals/physicians in area
- Awareness in community
- Education
- Healthy People 2020
- Early detection/cessation
- Supportive environment
- Multidisciplinary care
### Health Priorities and Areas of Concern

- Bullying among adolescents
- Poisoning deaths (often related to opioid and meth use)
- Falls among adults 65 and older
- Motor vehicle accidents

### Prevalence - Youth Violence

- 1 in 5 high school students surveyed reported being bullied.
- Nearly half of middle school students surveyed reported being bullied

- 13.9% of middle school students surveyed said they rarely or never felt safe and secure at school.
- Broken down by race: White 11.4%, Black 14.1%, Other race/ethnicity 15.7%

### Accidents

Accidents are the third leading cause of death in Knox County after cancer and heart disease. The majority of these accidents are related to poisonings and motor vehicle incidents.

#### Motorcycle vehicle accidents

<table>
<thead>
<tr>
<th>Year</th>
<th>Knox County</th>
<th>Healthy People 2020</th>
<th>PoSITIVES/RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>17.4 deaths per 100,000</td>
<td>13.9 deaths per 100,000</td>
<td>Metropolitan Drug Commission, Knox County Sheriff’s Office, Knox County Health Department</td>
</tr>
</tbody>
</table>

### Poisoning deaths among all persons

- Healthy People 2020 target: 13.2 deaths per 100,000
- Knox County (2007-2009, 3 year average): 17.4 deaths per 100,000 deaths due to accidental poisoning and exposure to noxious substances.

### Unintentional injuries

- Healthy People 2020 target: 36.4 deaths per 100,000
- Knox County: 52.6 deaths per 100,000

### Reported Crimes

- Knox County Sheriff’s Office and Knoxville Police Department

#### Crime 2010-2014

<table>
<thead>
<tr>
<th>Crime</th>
<th>2010</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic violence</td>
<td>3,772</td>
<td>3,922</td>
</tr>
<tr>
<td>Rape</td>
<td>7,517</td>
<td>7,169</td>
</tr>
</tbody>
</table>

#### Arrests

- More juveniles were arrested for simple assault than any other crime committed by juveniles.

### Disparities

#### Youth Violence

- 7.9 percent of high school students surveyed reported being physically forced to have unwanted sexual intercourse.
- Students receiving grades of mostly D's or F's were most likely to report being electronically bullied.

#### Reported youth violence

- 7.3 percent of high school students surveyed reported being physically forced to have unwanted sexual intercourse.

#### Percentage of high school students surveyed who reported they had carried a weapon (gun, knife or club) in the past 30 days:

<table>
<thead>
<tr>
<th>Race</th>
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<th>Black</th>
<th>Other race/ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>20.5%</td>
<td>30.8%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Females</td>
<td>12.8%</td>
<td>14.7%</td>
<td>28.8%</td>
</tr>
</tbody>
</table>

#### Percentage of high school students who reported they were physically forced to have unwanted sexual intercourse:

- Males: 4.0%
- Females: 10.7%

### Preventing Violence

- Law enforcement community
- Education about bullying is available to Knox County Schools teachers
- Knoxville-Knox County Senior Safety Task Force
- Knox County Health Department’s Senior Fall Prevention Program

### Accidents

Poisoning deaths (often related to opioid and meth use) have surpassed motor vehicle deaths (ages 12 and older).

### Injuries

- Knox County Sheriff’s Office and Knoxville Police Department

#### Accident rates

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<th>Healthy People 2020</th>
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<td>17.4 deaths per 100,000</td>
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### Motor vehicle deaths

- Knox County Health Department’s Senior Fall Prevention Program
- Knox County Sheriff’s Office and Knoxville Police Department
Maternal, Infant and Child Health

**Health Priorities and Areas of Concern**
- Barriers or gaps in service for preconception care/prenatal care access
- Neonatal Abstinence Syndrome (NAS) and substance use among pregnant women

### Prevalence

- In 2013, 70 percent of new mothers in Knox County received adequate prenatal care.
- In 2014, there were 20.2 reported abuse and neglect cases per 1,000 child, down from 6 cases/youth in 2013.
- There were 4.3 substantiated cases of neglect and 10.3 substantiated cases of abuse.

### Neonatal Abstinence Syndrome in Tennessee, 1999-2014

**Neonatal Abstinence Syndrome (NAS) occurs when an infant is born dependent on drugs.** As of Jan. 1, 2013, NAS is a reportable disease in Tennessee, a designation which is important in the planning and evaluation of prevention programs.

### Distribution of NAS Cases by Region, 2013

- As percentage of total infants born in 2013

### Neoprenatal Care Access

- 70% of new mothers in Knox County received adequate prenatal care.

### Distribution of NAS Cases by Region, 2013

- Knox County: 8.4 percent (2013)
- Total preterm births: 11.4 percent (2013)
- Health problems of women were at greatest risk for having a low birth weight and/or pre-term delivery compared to women of other races/ethnicities.

### Preterm Births

- In 2014, 36.6 percent of NAS cases in Knox County were attributed to illicit drug use, 27.7 percent were attributed to prescription drugs, and 35.7 percent are a combination of the two.

### POSITIVES/RESOURCES

- Metropolitan Drug Commission
- Great Starts and Susannah’s House treatment programs
- Area prenatal care providers
- Local child abuse prevention agencies

### Contributing Factors

- That same year, the rate of infant deaths due to prematurity was 145.9 deaths / 100,000 live births for Tennessee, compared to 103.8 deaths / 100,000 live births in the U.S.

### Neonatal Abstinence Syndrome (NAS) in Tennessee

- NAS cases in Knox County were 8.4 percent (2013)
- Knox County: 10.8 percent (2013)

### Distribution of NAS Cases by Race, 2013

- Black: 14.1%
- White: 7.7%

### Benchmarks

- Health Care for America Program
- Tennessee Department of Health
- Knox County:
  - Infant mortality rate: 7.8 percent (2013)
  - Low Birth Weight: 8.4 percent (2013)

### Summary

- In 2014, 8.4 percent of NAS cases in Knox County were attributed to illicit drug use, 27.7 percent were attributed to prescription drugs, and 35.7 percent are a combination of the two.

### Facts

- The average monetary cost to stabilize a newborn with Neonatal Abstinence Syndrome (NAS) is $62,973 versus $7,258 to stabilize a newborn not suffering withdrawals.
- The Tennessee Department of Health estimates that from January to October 13, 2013, NAS cost the state $36,711,900.

### Preterm Births

- In the 2014 NAS report, Knox County had the highest percentage (11 percent) of NAS cases.
- In 2014, 36.6 percent of NAS cases in Knox County were attributed to illicit drug use, 27.7 percent were attributed to prescription drugs, and 35.7 percent are a combination of the two.

### Source:

- Tennessee Department of Health
- Knox County Health Commission
- March of Dimes Birth Defects Foundation
- Preventing Preterm Birth: A National Imperative
Health Priorities and Areas of Concern

• Access to mental health services
• Depression/suicidal thoughts among adolescents

Middle School
19% of Knox County middle school students who seriously considered suicide in past 12 months

High School
14.5% of high school students who seriously considered suicide in past 12 months

Kids Health
19.2% of individuals who reported their household income was less than $15,000 reported attempting suicide.

• Individuals who did not complete high school reported more days of poor mental health in the past 30 days than those who did complete high school.

• Middle school students surveyed reported seriously thinking about suicide:

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
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<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle school 27.0%</td>
<td>16.1%</td>
<td>19.2%</td>
</tr>
</tbody>
</table>

Other race/ethnicity:
Black 14.2% White 11.1%

• Other race/ethnicity:
Black 5.1% White 6.2%

Disparities

20 percent of individuals with a household income less than $15,000 reported feeling disassficted or very disassficted with their lives.

Individuals with a household income less than $15,000 reported more days of poor mental health* in the past 30 days (10.3 days) compared to individuals whose income was greater than $50,000 (2.7 days).

Source: YRBS, 2014

2% of all households with a child under 18 included stress, depression or mental health days.

3.7% of individuals with a household income less than $15,000 reported attempting suicide.

*Mental Health

Mental Health

High school students who seriously considered suicide in past 12 months

11.8% 2007
14.6% 2008
13.3% 2009
14.5% 2010
8.7% 2011
6.2% 2012

High school students who attempted suicide one or more times in past 12 months

4.7% 2007
4.7% 2008
8.7% 2009
8.7% 2010
6.2% 2011

Middle school students who seriously considered suicide in past 12 months

NA 2007
17.2% 2008
16.5% 2009
19.0% 2010

Middle school students who reported ever attempting suicide

NA 2007
6.7% 2008
7.2% 2009
6.8% 2010

Tokens/Reports

• Middle school and high school females were more likely to report seriously thinking about suicide than males.

• Middle school students surveyed reported ever attempting suicide:

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Other race/ethnicity:
Black 10.4% White 12.1%

• Other race/ethnicity:
Black 11.1% White 14.2%

No High School Diploma

62% of those in the Knox County Homeless Management Information System who have received treatment for a mental illness while homeless.

Source: Homelessness Information Systems, 2014

• Middle school and high school females were more likely to report seriously thinking about suicide than males.

CONSISTENCY/RESOURCES:
• Cherokee Health Systems
• Helen Ross McNabb Center
• Mental Health Association of East Tennessee

• Individuals who did not complete high school who reported more days of poor mental health reported less than four of every ten people in need of mental health treatment receive care in any given year.

Untreated mental illness will worsen over time leading to impairment and disability. Mental illness is the leading cause of disability in people ages 15-44.

Source: World Health Organization, Strengthening Mental Health Promotion, Geneva, WHO (Fact Sheet 225, 2001), Mental Health Association of East Tennessee

• Disparities:

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<thead>
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Other race/ethnicity:
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• Other race/ethnicity:
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• Middle school students surveyed reported ever attempting suicide:

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Other race/ethnicity:
Black 10.4% White 12.1%

• Other race/ethnicity:
Black 11.1% White 14.2%

Disparities

17% of U.S. adults (estimated) are considered to be in a state of optimal mental health. There is emerging evidence that positive mental health is associated with improved health outcomes.

East Tennessee is home to more than one million residents, of whom 26.2 percent will need mental health treatment in any single year, and 51 percent will need mental health treatment in their lifetime according to the National Institute of Mental Health.

• Middle school and high school females were more likely to report seriously thinking about suicide than males.

Facts/Reports

• Middle school and high school females were more likely to report seriously thinking about suicide than males.

Benchmarks

Suicide attempts by adolescents

• Healthy People 2020 target: 1.7 percent of adolescents attempting suicide.

Knox County: 6.2 percent of high school students surveyed reported they attempted suicide in the past 12 months.

Source: Knox County Schools, 2013

• Middle school and high school females were more likely to report seriously thinking about suicide than males.

• Individuals who did not complete high school reported more days of poor mental health in the past 30 days (10.3 days) compared to those who graduated from college (4.2 days).

Source: YRBS, 2014

• Middle school students surveyed reported seriously thinking about suicide:

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<tr>
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<th>White</th>
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<tr>
<td>Middle school 27.0%</td>
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Other race/ethnicity:
Black 14.2% White 11.1%

• Other race/ethnicity:
Black 5.1% White 6.2%

• Middle school and high school females were more likely to report seriously thinking about suicide than males.

Factors Contributing to Disparities of U.S. adults:

• Access to mental health services
• Depression/suicidal thoughts among adolescents

Health Income

• Middle school and high school females were more likely to report seriously thinking about suicide than males.

• Individuals who did not complete high school reported more days of poor mental health in the past 30 days (10.3 days) compared to those who graduated from college (4.2 days).

Source: YRBS, 2014

• Middle school and high school females were more likely to report seriously thinking about suicide than males.

• Individuals who did not complete high school reported more days of poor mental health in the past 30 days (10.3 days) compared to those who graduated from college (4.2 days).

Source: YRBS, 2014

• Middle school and high school females were more likely to report seriously thinking about suicide than males.
Most of the health problems I see amongst my neighbors are related to poverty. Just literally not having cash to make good food choices.

– Focus Group, 2014

Prevalence

- 35.8 percent of high school students reported playing video games or using the computer for three or more hours per day during the school week.
- 12.8 percent of high school students surveyed reported attending physical education classes every day during the school week.
- Only 9.7 percent of high school students surveyed reported eating vegetables three or more times per day during the seven days before the survey.
- 23.8 percent of high school students reported watching TV for three or more hours on an average school day.
- 56.5 percent of high school students surveyed played on at least one sports team in the previous year.

Contribute Factors

Poorest

Wealthier

Health Priorities and Areas of Concern

- Physical education in schools
- Vegetable and fruit consumption by children/adolescents
- Access to healthy foods
- Screen time in youth

See Environmental Health

Nutrition and Physical Activity

The Centers for Disease Control and Prevention estimates that more than $75 billion in health care costs can be linked to lack of physical activity.

Disparities

21.6% of female middle school students reported eating vegetables three or more times per day during the seven days before the survey.

8.8% of male middle school students reported eating vegetables three or more times per day during the seven days before the survey.

This was also more common in students reporting D’s and F’s (27.6 percent) versus students reporting A’s (12.7 percent).

High school students surveyed reported attending physical education classes every day during the school week:

- 2005: 17.3%
- 2007: 19.3%
- 2009: 22.2%
- 2011: 20.8%
- 2013: 17.8%

High school students surveyed who played video games or used the computer for something other than school work for three or more hours on an average school day:

- 2005: No data
- 2007: 18.9%
- 2009: 18.7%
- 2011: 26.2%
- 2013: 35.9%

Knox County adults who reported no leisure time physical activity in the past 30 days:

- 2005: No data
- 2007: No data
- 2009: No data
- 2011: 23.7%
- 2013: 21.1%

Knox County adults who reported they always or usually stress about having enough money to pay for nutritious meals:

- 2005: No data
- 2007: No data
- 2009: No data
- 2011: 8.1%
- 2013: 8.8%

Contributing Factors

- Adults earning less than $15,000 per year reported they were always or usually stressed about preparing nutritious meals at a far greater rate than those with incomes between $35,000 and $49,999.

Source: CDC Preventing Obesity and Chronic Diseases Through Local Nutrition and Physical Activity, 2008

Source: YRBS, 2013

Source: BRFS, 2014

Source: BRFS, 2014

Source: CDC, 2008

28.9% of black adults reported no leisure time physical activity in the past 30 days.

20.6% of white adults reported the same.

Source: YRBS, 2013

Source: BRFS, 2014

The Centers for Disease Control and Prevention estimates that more than $75 billion in health care costs can be linked to lack of physical activity.

TREND:

STABLE

TREND:

STABLE

Most of the health problems I see amongst my neighbors are related to poverty. Just literally not having cash to make good food choices.

– Focus Group, 2014

Source: BRFS, 2014

Source: BRFS, 2014

Source: CDC Preventing Obesity and Chronic Diseases Through Local Nutrition and Physical Activity, 2008

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Source: BRFS, 2014

The Centers for Disease Control and Prevention estimates that more than $75 billion in health care costs can be linked to lack of physical activity.
• 13.5 percent of high school students surveyed were obese, based on self-reported height and weight.

• 24.0 percent of middle school students surveyed described their weight to be slightly overweight or overweight.

• 45.3 percent of middle school students surveyed reported they are trying to lose weight.

• 28.6 percent of Knox County adults are obese based on self-reported height and weight.

• 32.9 percent of Knox County adults are overweight based on self-reported height and weight.

**Contributing Factors**

Obesity-related health issues include but are not limited to hypertension, heart disease, stroke, certain cancers, asthma, diabetes, and osteoarthritis.

**Health Priorities and Areas of Concern**

• See Nutrition and Physical Activity

• See Food Access

• See Environmental Health

**Health Priorities and Areas of Concern**

- See Nutrition and Physical Activity
- See Food Access
- See Environmental Health

**Prevalence**

- Students
  - 13.5 percent of high school students surveyed were obese, based on self-reported height and weight.
  - 24.0 percent of middle school students surveyed described their weight to be slightly overweight or overweight.
  - 45.3 percent of middle school students surveyed reported they are trying to lose weight.

- Adults
  - 28.6 percent of Knox County adults are obese based on self-reported height and weight.
  - 32.9 percent of Knox County adults are overweight based on self-reported height and weight.

**Disparities**

- High school males surveyed were more likely than females to be obese.

- Female middle school students surveyed were more likely than males to report trying to lose weight.

- College graduates were more likely than those with less than a high school education to report being at a healthy weight.

- Middle school students surveyed who reported trying to lose weight:
  - Students with lower grades reported trying to lose weight more often than students with higher grades.

- College graduates were more likely than those with less than a high school education to report being at a healthy weight.

**Benchmarks**

- Proportion of children and adolescents ages 2 to 19 who are obese:
  - Healthy People 2020 target: 14.5 percent
  - Knox County: 17 percent

- Proportion of adolescents age 12 to 19 who are obese:
  - Healthy People 2020 target: 16.1 percent
  - Knox County: 13.5 percent (self-reported data only)

- Proportion of adults who are obese:
  - Healthy People 2020 target: 30.5 percent
  - Knox County: 28.6 percent (self-reported data only)

- Proportion of adults who are at a healthy weight:
  - Healthy People 2020 target: 33.9 percent
  - Knox County: 38.5 percent (self-reported data only)

- Proportion of children assessed in grades K, 2, 4, 8 and 10 who were obese:
  - 17.4% of students assessed in grades K, 2, 4, 8 and 10 were obese.

- Proportion of children and adolescents ages 2 to 19 who are obese:
  - Healthy People 2020 target: 14.5 percent
  - Knox County: 17 percent

- Proportion of adolescents age 12 to 19 who are obese:
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- Proportion of children assessed in grades K, 2, 4, 8 and 10 who were obese:
  - 17.4% of students assessed in grades K, 2, 4, 8 and 10 were obese.
Oral Health

Health Priorities and Areas of Concern

- Access to oral health services for the unemployed and those unable to work
- Disabilities in receiving oral health services
- Dental health in youth

Contributing Factors

- Knox County dentist/resident ratio: 55.8/100,000

Prevalence

- Percent of Knox County adults over 65 who reported they had all teeth extracted due to infection, tooth decay or gum disease: 21.4%
- Percent of Knox County adults who reported visiting a dentist in the past year: 62.7%

Income, health status and oral health literacy are some of the barriers to accessing oral health care. Poor dental health impacts the quality of life for those affected. Pain, diet, social interaction, speech, physical appearance and self-esteem are issues that many face.

Prevalence Trends

- Percentage of adults who have had one or more tooth extractions due to infection:
  - Source: Annie E. Casey Foundation’s Kids Count data for Knox County, 2014
  - 2005: 41.7%, 2008: 40.7%, 2011: 43.8%

- Percentage of adults who have had all of their teeth extracted:
  - 2005: 68.7%, 2008: 66.8%, 2011: 70.4%, 2014: 62.7%

- Percentage of adults 65 years and older who reported they had all of their teeth extracted due to infection, tooth decay or gum disease:

Disparities

- Percent of adults over 65 who reported they had all teeth extracted:
  - Black non-Hispanic: 19.3%, White non-Hispanic: 36.6%

- Percent of adults over 65 with less than a high school education who reported they had all teeth extracted compared to 6.7 percent of those with a college degree.

- Percent of adults reporting they visited a dentist in the past year:
  - Other race/ethnicity: 41.2%
  - Black: 48.2%
  - White: 65.7%

- Percent of Knox County adults who reported seeing a dentist within the past year:
  - Adults with household income greater than $50,000: 84.6%
  - Adults with household income less than $15,000: 34%

Positives/Resources

- Comparable number of dentists per 100,000 residents with other Tennessee metropolitan areas
- Knox County Health Department dental clinic and in-school sealant program
- Elgin Foundation Dental Program at Knox County’s Community Schools

Sources:

- BRFS, 2014
- Annie E. Casey Foundation’s Kids Count data for Knox County, 2005
- Source: Annie E. Casey Foundation’s Kids Count data for Knox County, 2014
Reproductive and Sexual Health

Health Priorities and Areas of Concern

- Birth control education
- Increase in sexually transmitted infection rates

Benchmarks

- Percentage of males and females 15-17 who have never had sexual intercourse:
- The proportion of sexually active males and females ages 15-19 who used a condom at last intercourse:
- The proportion of males and females who received formal instruction on sexually transmitted diseases before they are 18 years old:

Healthy People 2020

- Target, females: 95.8%
- Target, males: 93.8%
- Knox County: 89.9% among high school students

Reproductive and Sexual Health

High school students who have had sexual intercourse

2007 2009 2011 2013

- High school students who have had sex with four or more partners in their lifetime
- High school students who used a condom the last time they had sexual intercourse

Trends

- 30.0%
- 44.7%
- 42.6%
- 37.8%
- 10.5%
- 14.6%
- 8.5%
- 7.0%
- 60.1%
- 54.8%
- 58.0%
- 54.4%

Contribution Factors

- Hospitals and physicians in the area
- Lisa Ross Birth and Women’s Center
- Health department programs to track, prevent and treat sexually transmitted infections
- Knox Adolescent Partners in Prevention Initiative (KAPPI)
- Women’s Health Clinic at the Knox County Health Department

Disparities

- Knox County high school students who reported grades of mostly D’s or F’s were most likely to report having sexual intercourse with one or more people during the past three months compared to students making mostly A’s.

Grades:

- D/F’s: 37.9%
- A’s: 16.7%

Source: Healthy High School YRBS, 2013

- In 2013, 30.8% of white infants were born to unmarried women while 75.4% of black infants were born to unmarried women.

Source: 2013 vital records provided by the Office of Policy, Planning and Assessment, Tennessee Department of Health

- Sexually active students reporting condom use:

9th Graders

- Females: 48.4%
- Males: 60.2%

Seniors

- Females: 75.4%
- Males: 75.4%

Source: Knox County Patient Reporting Investigating Surveillance Manager data (PRISM), 2013

- Chlamydia incidence is stable over the past several years, but remains consistently high in teens and young adults.

CHLAMYDIA: BLACKS & WHITES, 2013

(Source: Knox County Patient Reporting Investigating Surveillance Manager data (PRISM), 2013)

- CHLAMYDIA: BLACKS VS. WHITES

- Incidence rates of chlamydia are greatest among block females and males between the ages of 15 and 34. The incidence of chlamydia among blacks is six times greater than incidence among whites.

Source: 2013 vital records provided by the Office of Policy, Planning and Assessment, Tennessee Department of Health

- Gonorrhea rates among males and females ages 15-44, per 100,000 population:

<table>
<thead>
<tr>
<th>Ages</th>
<th>CHLAMYDIA: BLACKS</th>
<th>CHLAMYDIA: WHITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>2,773</td>
<td>4,797</td>
</tr>
<tr>
<td>20-24</td>
<td>2,773</td>
<td>4,797</td>
</tr>
<tr>
<td>25-29</td>
<td>1,891</td>
<td>3,159</td>
</tr>
<tr>
<td>30-34</td>
<td>1,540</td>
<td>2,773</td>
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<tr>
<td>35-39</td>
<td>1,288</td>
<td>2,773</td>
</tr>
<tr>
<td>40-44</td>
<td>1,046</td>
<td>2,773</td>
</tr>
<tr>
<td>45-54</td>
<td>718</td>
<td>1,398</td>
</tr>
<tr>
<td>55+</td>
<td>69</td>
<td>69</td>
</tr>
</tbody>
</table>

Source: Knox County Patient Reporting Investigating Surveillance Manager data (PRISM), 2013

(CHLAMYDIA: BLACKS & WHITES, 2013)

- Chlamydia incidence is stable over the past several years, but remains consistently high in teens and young adults.

- They hear everybody talking about it, and they think it’s some big great thing, and it can be, but when you’re 12, 13, and 14 years old you’re not ready for the consequences ... and the kids need that in school. I think it should be a class, and you can consent to take it or not.

- Focus Group, 2014

- In 2013, 30.8% of white infants were born to unmarried women while 75.4% of black infants were born to unmarried women.

- Knox County high school students who reported grades of mostly D’s or F’s were most likely to report having sexual intercourse with one or more people during the past three months compared to students making mostly A’s.

- Disparities:

Grades:

- D/F’s: 37.9%
- A’s: 16.7%

- In 2013, 30.8% of white infants were born to unmarried women while 75.4% of black infants were born to unmarried women.

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- Disparities:

Grades:

- D/F’s: 37.9%
- A’s: 16.7%
Health Priorities and Areas of Concern

- Marijuana access/use among youth
- Opioid access and use
- Binge drinking among youth

Benchmarks

High school students

| Reported binge drinking in the past 30 days: | 16.5% | No data | 19.3% | 18.3% |
| Reported non-medical use of prescription drugs: | 19.5% | No data | 18.6% | 15.9% |
| Were offered, given, or sold illegal drugs on school property year before: | 19.6% | 20.7% | 29.0% | 22.5% |
| Reported marijuana use in the past 30 days: | 19.3% | 23.3% | 22.2% | 23.3% |

Source: YRBS for appropriate years.

Proportion of adolescents who reported using alcohol or any illicit drugs in the past 30 days

- Healthy People 2020 target: 16.6 percent
- Knox County: 20.8 percent report alcohol use; 23.3 percent report marijuana use

Proportion of adolescents who reported using marijuana in the past 30 days

- Healthy People 2020 target: 6 percent
- Knox County: 23.3 percent

Proportion of students who reported being offered, given or sold illegal drugs on school property

- Healthy People 2020 target: 20.4 percent
- Knox County: 22.5 percent

Proportion of adolescents ages 12 to 17 who reported engaging in binge drinking in the past month

- Healthy People 2020 target: 8.6 percent
- Knox County: 18.3 percent

Neonatal Abstinence Syndrome (NAS)

From 2000 to 2010, there was a 10-fold increase in NAS cases in Tennessee. East Tennessee has the highest NAS rates in the state.

In 2014, 36.6 percent of NAS cases in Knox County were attributed to illicit drug use, 27.7 percent were attributed to prescription drugs, and 35.7 percent are a combination of the two.

11 percent of students who reported grades of mostly A’s.

40.3 percent of high school students surveyed who reported grades of mostly D’s and F’s reported using marijuana in the past 30 days compared to ...

47.1 percent of high school students surveyed who reported grades of mostly D’s and F’s reported drinking alcohol in the past 30 days compared to ...

8.9 percent of students who reported grades of mostly A’s.

37.4 percent of high school students surveyed who reported grades of mostly D’s and F’s reported taking prescription drugs not prescribed to them compared to ...

21.8 percent of students who reported grades of mostly A’s.

Source: High School YRBS, 2013

TennCare paid $78 million in claims for people with drug-related diagnoses in FY 2011 (an increase of 20 percent over FY 2010) with an average per member, per year payment of $8,122.

The costs associated with a TennCare member with drug abuse-related diagnosis is twice that of the average TennCare member.

Source: Actuarial Review of the TennCare Program, January 2012

• Tennessee ranks No. 2 per capita in the number of Schedule II controlled substances (medications with a high potential for abuse) prescribed in the United States, with the 8th highest drug overdose mortality rate (16.9 per 100,000 people).


POSITES/RESOURCES

- Metropolitan Drug Commission
- Law enforcement agencies
- Coalition for medication collection events.
- Area treatment facilities

Source: High School YRBS, 2013

Substance Use

Contributing Factors

- Metropolitan Drug Commission
- Law enforcement agencies
- Coalition for medication collection events.
- Area treatment facilities
Tobacco use increases the risk of cancer, heart disease, stroke, and respiratory illnesses to name a few, but the list is exhaustive as tobacco use impacts every organ of the body. Half of all current smokers who continue smoking will die from a tobacco-related illness. Diseases of the respiratory system are the No. 1 reason for hospitalization among children 1-19 years old. Secondhand smoke exposure has a significant impact on the occurrence of respiratory illness, especially among youth.

**Prevalence**

- **High school students surveyed**
  - 18.2% reported smoking cigarettes in the past 30 days.
  - 9.9% reported using smokeless tobacco in past 30 days.
  - 17.6% reported smoking cigarettes in past 30 days.
  - 54.4% of those who smoked reported cessation attempts year before survey.

- **Knox County Adults**
  - 21.2% of adults reported smoking cigarettes some days or every day.
  - 11.9% of women reported smoking some time during pregnancy in 2013.

- **17.4%** of male high school students surveyed reported using smokeless tobacco products in past 30 days.

According to the Centers for Disease Control and Prevention, e-cigarette use among middle and high school students **tripled** from 2013 to 2014. The 2015 Knox County YRBS will collect data about e-cigarette use. Previously, local data were not available.

**Disparities**

- **Almost half of adults** with less than a high school education reported they were smokers while only 7.7 percent of college graduates reported they were smokers.
  - **49.9% smokers**
  - **7.7% smokers**

  **High school dropout:**
  - **29.3% Black**
  - **20.9% White**

  **College graduates:**
  - **7.7%**

- **Percent of adults** who reported they were smokers:
  - **29.3% Black**
  - **20.9% White**

- **Adults who were unable to work** reported they were smokers at more than twice the proportion of employed adults.

**Moms who smoke during pregnancy are at a greater risk for having a low birth weight and/ or preterm delivery compared to moms who do not smoke during pregnancy.**

**Contributing Factors**

- **Non-Smoker Protection Act**
- **Tobacco settlement funding for prevention efforts**
- **Tennessee Tobacco Quitline**
- **Smoke-Free Knoxville Coalition**