RAY COUNTY
ENVIRONMENTAL HEALTH PROFILE

**HEALTH**

**Asthma Hospitalizations**
- Age-adjusted rate of hospitalizations per 10,000 people in 2016
  - *6.4*  
  - State Rate: 6.6

**COPD Hospitalizations**
- Age-adjusted rate of hospitalizations per 10,000 people in 2016
  - 47.1  
  - State Rate: 26.1

**Carbon Monoxide Hospitalizations**
- Age-adjusted rate of hospitalizations per 100,000 people in 2016
  - 0.0  
  - State Rate: 1.0

**Heart Attack Hospitalizations**
- Age-adjusted rate of hospitalizations per 10,000 people in 2016
  - 28.3  
  - State Rate: 23.4

**Melanoma Incidence**
- Age-adjusted rate of incidence per 100,000 people in 2016
  - Ø  
  - State Rate: 27.9

**Asthma ER Visits**
- Age-adjusted rate of ER visits per 10,000 people in 2016
  - 25.3  
  - State Rate: 50.9

**COPD ER Visits**
- Age-adjusted rate of ER visits per 10,000 people in 2016
  - 111.3  
  - State Rate: 75.5

**Carbon Monoxide ER Visits**
- Age-adjusted rate of ER visits per 100,000 people in 2016
  - Ø  
  - State Rate: 4.9

**Heat Related Illness**
- Age-adjusted rate of ER visits per 100,000 people in 2016
  - 128.5  
  - State Rate: 55.8

**Lung Cancer Incidence**
- Age-adjusted rate of incidence per 100,000 people in 2016
  - 94.2  
  - State Rate: 68.2

**DRINKING WATER**

**Public Drinking Water Systems**
- Number of public drinking water systems
  - 10

**Private Drinking Water Wells**
- Number of private drinking water wells
  - 89

Life expectancy is 75.8 years
- 29.7% of people smoke
- 4.9% of people are minorities
- 15.6% of people live in poverty
The median household income is $57,270

* Counts less than 20 are considered unreliable.
Ø Non-zero counts less than 5 are suppressed for patient confidentiality.

MISSOURI ENVIRONMENTAL PUBLIC HEALTH TRACKING PROGRAM
Bureau of Environmental Epidemiology
Missouri Department of Health & Senior Services
ephtn.dhss.mo.gov | EPHTN@health.mo.gov
### AIR QUALITY

#### Asthma/ Lung Disease
- **No Air Monitors**
  - Number of unhealthy days for people with asthma/lung disease in 2016
  - Maximum for counties with monitors: 12

#### Heart Disease
- **No Air Monitors**
  - Number of unhealthy days for people with heart disease in 2016
  - Maximum for counties with monitors: 1

#### Children and Elderly
- **No Air Monitors**
  - Number of unhealthy days for children and the elderly in 2016
  - Maximum for counties with monitors: 12

#### Active People
- **No Air Monitors**
  - Number of unhealthy days for people active outdoors in 2016
  - Maximum for counties with monitors: 12

### CLIMATE

#### Extreme Precipitation
- 13
  - Number of days with more than 1 inch of precipitation in 2016

#### Extreme Heat
- 52
  - Number of days with a high temperature above 90°F in 2016

#### Severe Drought
- 0
  - Number of weeks with severe drought in 2016

### RADON

#### Percent Elevated
- 35.5%
  - Percent of homes tested between 2008-2018 with elevated radon levels

#### Percent Tested
- 0.8%
  - Percent of homes tested between 2008-2018

### LEAD

#### Lead Exposure Risk Factors:
- Elevated blood lead confirmation rate below state average
- Pre 1980 Housing Rate above state average

#### Missouri Lead Exposure Risk Tool
- Women who are pregnant, nursing, or of childbearing age, and children younger than 13. All U.S. water bodies: All Fish (All Sizes)- 1 serving/week. All MO water bodies: Walleye, Largemouth, Smallmouth, & Spotted Bass (>12")- 1 serving/month; Flathead, Channel, & Blue Catfish (>17")- 1 serving/week; Buffalo (All Sizes)- 1 serving/month; Common Carp (>21")- 1 serving/week

### ENVIRONMENT

#### Environmental Remediation Program
- Follow this link to the Missouri Department of Natural Resources website to view a map and find information about hazardous substance investigation and cleanup sites.

#### Fish Consumption Advisories
- • Statewide Advisory for Sensitive Populations^  
  - Missouri River: Shovelnose Sturgeon (All Sizes)- 1 serving/month; Sturgeon Eggs- Do Not Eat; Flathead, Channel, & Blue Catfish (>17")- 1 serving/week; Buffalo (All Sizes)- 1 serving/month; Common Carp (>21")- 1 serving/week

^Women who are pregnant, nursing, or of childbearing age, and children younger than 13. All U.S. water bodies: All Fish (All Sizes)- 1 serving/week. All MO water bodies: Walleye, Largemouth, Smallmouth, & Spotted Bass (>12")- 1 serving/month; Flathead, Channel, & Blue Catfish (>30")- 1 serving/month.
<table>
<thead>
<tr>
<th>Source</th>
<th>Years</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Smoking</strong></td>
<td>2016</td>
<td>Percentage of adults who currently smoke cigarettes. State rate: 21.9%. Source: DHSS – Missouri Public Health Information Management System (MOPHIMS), Missouri County Level Study.</td>
</tr>
<tr>
<td><strong>Minorities</strong></td>
<td>2010</td>
<td>Percentage of racial and ethnic minorities. State rate: 19%. Source: 2010 U.S. Census, Summary File 1, Table GCT-P3.</td>
</tr>
<tr>
<td><strong>Asthma</strong></td>
<td>2016</td>
<td>Age-adjusted rates of emergency room (ER) visits and hospitalizations for asthma and COPD; and hospitalizations for heart attack per 10,000 people, based on the 2000 U.S. Census standard population. Source: DHSS MOPHIMS-Environmental Public Health Tracking (EPHT).</td>
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<tr>
<td><strong>Carbon Monoxide</strong></td>
<td>2016</td>
<td>Age-adjusted rates of ER visits and hospitalizations for carbon monoxide poisoning; incidence of melanoma; and incidence of lung cancer per 100,000 people, based on the 2000 U.S. Census standard population. Source: DHSS MOPHIMS-EPHT (carbon monoxide and heart attack data); DHSS MOPHIMS-Missouri Information for Community Assessment (MICA) (cancer incidence).</td>
</tr>
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<td><strong>Heat Related Illness</strong></td>
<td>2016</td>
<td>Age-adjusted rate of ER visits per 100,000 people, based on the 2000 U.S. Census standard population. Source: DHSS Bureau of Environmental Epidemiology, EPHT.</td>
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**HEALTH**

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<td><strong>Public Drinking Water Systems</strong></td>
<td>2019</td>
<td>Number of public drinking water systems. Source: Department of Natural Resources, Public Drinking Water Branch. Water quality data available from DHSS MOPHIMS-EPHT.</td>
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<td><strong>Private Drinking Water Wells</strong></td>
<td>1978-2017</td>
<td>Number of private drinking water wells. Source: DHSS Bureau of Environmental Epidemiology, EPHT and Private Drinking Water Program.</td>
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<td>Asthma/ Lung Disease</td>
<td>2016</td>
<td>Number of unhealthy days for populations with asthma or other chronic lung disease; children and the elderly; populations with heart disease; and active people. Source: EPA AirCompare tool, based on air quality data collected from air monitors in 24 counties. Air quality data available from DHSS MOPHIMS-EPHT.</td>
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<td>Extreme Precipitation</td>
<td>2016</td>
<td>Number of days with one or more inches of precipitation. Source: CDC, National Environmental Public Health Tracking Data Explorer.</td>
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<td>2016</td>
<td>Number of days with a high temperature at or above 90°F. Source: CDC, National Environmental Public Health Tracking Data Explorer.</td>
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<td>Severe Drought</td>
<td>2016</td>
<td>Number of weeks with severe drought. Source: CDC, National Environmental Public Health Tracking Data Explorer.</td>
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<td>Environmental Remediation</td>
<td>2019</td>
<td>The Missouri Department of Natural Resources, Environmental Remediation Program maintains a map and logs information on all hazardous substance investigation and cleanup sites in the state.</td>
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<td>Fish Consumption Advisories</td>
<td>2019</td>
<td>2019 Missouri Fish Advisories. Source: DHSS Bureau of Environmental Epidemiology.</td>
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<td>Percent Elevated</td>
<td>2008-2018</td>
<td>Percentage of homes with test results showing elevated (&gt; 4 pCi/L) radon levels. Source: DHSS Bureau of Environmental Epidemiology, Indoor Air Quality Database.</td>
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<td>Percent Tested</td>
<td>2008-2018</td>
<td>Percentage of homes tested for radon. Source: DHSS Bureau of Environmental Epidemiology, Indoor Air Quality Database (radon data); American Community Survey, 2018 Population Estimates, Table PEPANNHU (housing data).</td>
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<td>Lead Exposure Risk Factors</td>
<td>2018</td>
<td>Lead exposure risk factors contributing to the overall exposure risk. Source: DHSS Bureau of Environmental Epidemiology, EPHT.</td>
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<td>Missouri Lead Exposure Risk Tool</td>
<td>2018</td>
<td>Statewide break down of lead exposure risk factors by county and zip code. Source: DHSS Bureau of Environmental Epidemiology, EPHT.</td>
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