HEALTH

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

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

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

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

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

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

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

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

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

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

DRINKING WATER

Public Drinking Water Systems
17 Number of public drinking water systems

Private Drinking Water Wells
876 Number of private drinking water wells

At or Above State Rate
Below State Rate
* Counts less than 20 are considered unreliable.
Ø Non-zero counts less than 5 are suppressed for patient confidentiality.
## JOHNSON COUNTY
### ENVIRONMENTAL HEALTH PROFILE

## AIR QUALITY

<table>
<thead>
<tr>
<th>Asthma/ Lung Disease</th>
<th>Children and Elderly</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Air Monitors</strong></td>
<td><strong>No Air Monitors</strong></td>
</tr>
<tr>
<td>Number of unhealthy days for people with asthma/lung disease in 2016</td>
<td>Number of unhealthy days for children and the elderly in 2016</td>
</tr>
<tr>
<td>Maximum for counties with monitors: 12</td>
<td>Maximum for counties with monitors: 12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Heart Disease</th>
<th>Active People</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Air Monitors</strong></td>
<td><strong>No Air Monitors</strong></td>
</tr>
<tr>
<td>Number of unhealthy days for people with heart disease in 2016</td>
<td>Number of unhealthy days for people active outdoors in 2016</td>
</tr>
<tr>
<td>Maximum for counties with monitors: 1</td>
<td>Maximum for counties with monitors: 12</td>
</tr>
</tbody>
</table>

## CLIMATE

### Extreme Precipitation

<table>
<thead>
<tr>
<th><strong>Extreme Precipitation</strong></th>
<th>Number of days with more than 1 inch of precipitation in 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Number of days with more than 1 inch of precipitation in 2016</td>
</tr>
</tbody>
</table>

### Extreme Heat

<table>
<thead>
<tr>
<th><strong>Extreme Heat</strong></th>
<th>Number of days with a high temperature above 90°F in 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>Number of days with a high temperature above 90°F in 2016</td>
</tr>
</tbody>
</table>

### Severe Drought

<table>
<thead>
<tr>
<th><strong>Severe Drought</strong></th>
<th>Number of weeks with severe drought in 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Number of weeks with severe drought in 2016</td>
</tr>
</tbody>
</table>

## 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**^:
- **Lake Buteo**: Largemouth & Smallmouth Bass (All Sizes)- Do Not Eat; All other fish (All Sizes)- 1 serving/month

### 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 (\(>30\))" 1 serving/month.

## RADON

<table>
<thead>
<tr>
<th><strong>Percent Elevated</strong></th>
<th>Percent of homes tested between 2008-2018 with elevated radon levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.3%</td>
<td>Percent of homes tested between 2008-2018 with elevated radon levels</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Percent Tested</strong></th>
<th>Percent of homes tested between 2008-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1%</td>
<td>Percent of homes tested between 2008-2018</td>
</tr>
</tbody>
</table>
### LIFE EXPECTANCY

**Source**: DHSS-Life Expectancy  
**Years**: 2008-2016  
**Description**: Life expectancy from birth, based on 2008-2016 birth, death and population data. Statewide: 77.4 years. Source: DHSS – Data and Statistics, Life Expectancy.

### SMOKING

**Source**: MOPHIMS - County-Level Study Profile  
**Years**: 2016  
**Description**: Percentage of adults who currently smoke cigarettes. State rate: 21.9%. Source: DHSS – Missouri Public Health Information Management System (MOPHIMS), Missouri County Level Study.

### MINORITIES

**Source**: U.S. Census Bureau  
**Years**: 2010  
**Description**: Percentage of racial and ethnic minorities. State rate: 19%. Source: 2010 U.S. Census, Summary File 1, Table GCT-P3.

### POVERTY

**Source**: American Community Survey  
**Years**: 2013-2017  

### INCOME

**Source**: American Community Survey  
**Years**: 2013-2017  

### HEALTH

#### Asthma  
**Source**: MOPHIMS-EPHT  
**Years**: 2016  
**Description**: 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).

#### COPD  
**Source**: DHSS-EPHT  
**Years**: 2016  
**Description**: 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).

#### Heart Attack  
**Source**: MOPHIMS-EPHT  
**Years**: 2016  
**Description**: 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).

#### Carbon Monoxide  
**Source**: MOPHIMS-EPHT, MOPHIMS-MICA  
**Years**: 2016  
**Description**: 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).

#### Melanoma  
**Source**: MOPHIMS-MICA  
**Years**: 2016  
**Description**: 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).

#### Lung Cancer  
**Source**: MOPHIMS-EPHT  
**Years**: 2016  
**Description**: 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).

#### Heat Related Illness  
**Source**: DHSS-EPHT  
**Years**: 2016  
**Description**: 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.

### DRINKING WATER

#### Public Drinking Water Systems  
**Source**: Public Drinking Water, MOPHIMS-EPHT  
**Years**: 2019  
**Description**: Number of public drinking water systems. Source: Department of Natural Resources, Public Drinking Water Branch. Water quality data available from DHSS MOPHIMS-EPHT.

#### Private Drinking Water Wells  
**Source**: Private Drinking Water, DHSS-EPHT  
**Years**: 1978-2017  
**Description**: Number of private drinking water wells. Source: DHSS Bureau of Environmental Epidemiology, EPHT and Private Drinking Water Program.

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**ABOUT THE DATA**

**ENVIRONMENTAL HEALTH PROFILE**

**Source**  
**Years**  
**Description**

**Asthma**  
**COPD**  
**Heart Attack**  
**Carbon Monoxide**  
**Melanoma**  
**Lung Cancer**  
**Heat Related Illness**  
**Public Drinking Water Systems**  
**Private Drinking Water Wells**

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**MISSOURI ENVIRONMENTAL PUBLIC HEALTH TRACKING PROGRAM**

**Bureau of Environmental Epidemiology**

**Missouri Department of Health & Senior Services**

ephn.dhss.mo.gov | EPHTN@health.mo.gov
## AIR QUALITY

<table>
<thead>
<tr>
<th>Source</th>
<th>Years</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<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>
</tr>
<tr>
<td>Children and Elderly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart Disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active People</td>
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<td></td>
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## CLIMATE

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<tr>
<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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<tr>
<td>Extreme Heat</td>
<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>
</tr>
<tr>
<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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</table>

## ENVIRONMENT

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<th>Years</th>
<th>Description</th>
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<tbody>
<tr>
<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>
</tr>
<tr>
<td>Fish Consumption Advisories</td>
<td>2019</td>
<td>2019 Missouri Fish Advisories. Source: DHSS Bureau of Environmental Epidemiology.</td>
</tr>
</tbody>
</table>

## RADON

<table>
<thead>
<tr>
<th>Source</th>
<th>Years</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<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>
</tr>
<tr>
<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>
</tr>
</tbody>
</table>

## LEAD

<table>
<thead>
<tr>
<th>Source</th>
<th>Years</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<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>
</tr>
<tr>
<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>
</tr>
</tbody>
</table>