

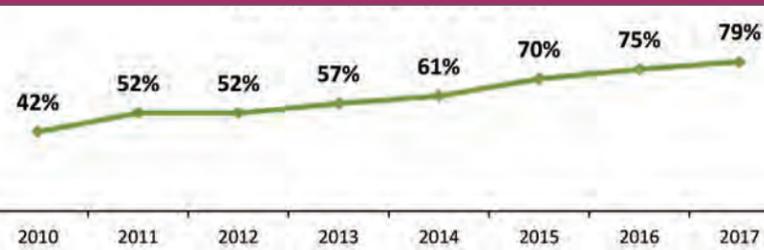


## PHI PUBLIC HEALTH IMPORTANCE:

High ozone levels can aggravate the lungs and respiratory system of young children and older adults, affecting those with chronic lung conditions such as asthma, chronic bronchitis, and emphysema.

Air Quality Index (AQI) Guide		
Air Quality Index Levels	Numerical Value	Health Concern
Good	0 to 50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate	51 to 100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy for Sensitive Groups	151 to 200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	Health warnings of emergency conditions. The entire population is more likely affected.
Hazardous	301 to 500	Health alert: everyone may experience some effects.

### Percent of Days per Year with AQI Level of "Good" Montgomery County, 2010-2017

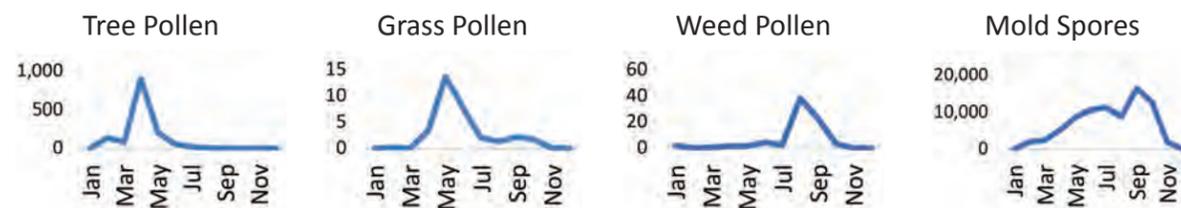


Source: Environmental Protection Agency (EPA)

### KEY FINDINGS

- ▶ The percent of days with a "Good" AQI level increased between 2010 and 2017.
- ▶ In the last 10 years, the AQI for Montgomery County reached the "Unhealthy" level on only three days in 2011 and 2012 (data not shown).

### Average Pollen and Mold Count by Month, Montgomery County, 2017



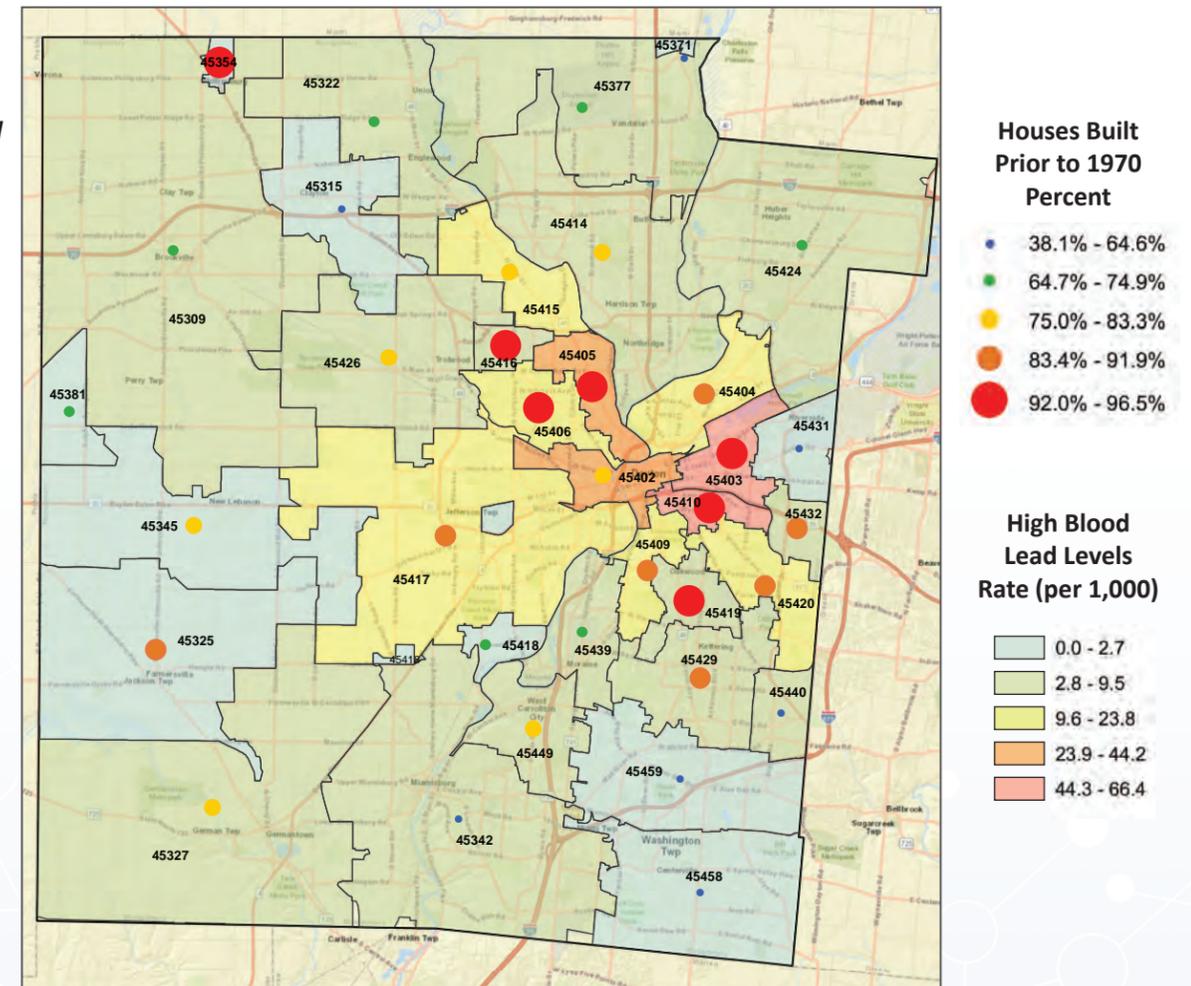
Source: Regional Air Pollution Control Agency (RAPCA), PHDMC

### KEY FINDINGS

- ▶ The pollen counts are highest for trees in April, for grasses in May, and for weeds in August.
- ▶ The mold counts begin increasing in April, peak in September, and begin to decline in October.

## Rate of High Blood Lead Levels Among Children, 0 to 15 years (2014-2017) & Percent of Houses Built Prior to 1970 (2013-2017), Montgomery County

High blood lead levels are levels greater than 5 micrograms per deciliter (µg/dL).



Source: Ohio Healthy Homes and Lead Poisoning Prevention Program & U.S. Census Bureau

## SDOH SOCIAL DETERMINANTS OF HEALTH:

A child's home environment serves as a significant source of lead exposure. Lead can be found in certain toys, lead pipes, soil, and within the paint used on homes built before 1978. Lead paint can break down, peel, and flake spreading lead dust throughout the home. Young children are at high risk of poisoning when they put objects or their hands in their mouths that have been exposed to lead. Lead is harmful to the developing brain and nervous system as it can cause irreversible effects in young children. Some of these health effects include aggressive behavior, hyperactivity, impaired growth, hearing loss, learning disabilities, mental retardation, coma, and, in extreme cases, death. Children that are at a higher risk for lead exposure are poor, members of racial or ethnic minority groups, recent immigrants, or live in older, poorly maintained rental property (CDC, 2015).

