Asthma is chronic lung disease that cannot be cured. Asthma can, however, be controlled with strategies such as self management, improved access to care, proper medication use, and environmental trigger awareness. While asthma deaths can theoretically be prevented using these strategies, deaths due to asthma continue to occur in Alabama and across the nation. This brief review of asthma mortality in Alabama will illustrate differences in asthma mortality rates in the last decade.

The data presented in this fact sheet were retrieved using the Centers for Disease Control and Prevention’s (CDC) website, Wide-ranging Online Data for Epidemiologic Research, better known as WONDER. Throughout this fact sheet, a disparity or statistical difference is defined as groups with higher rates of asthma deaths based on non-overlapping 95 percent confidence intervals. A primary cause of asthma death was determined by reviewing death certificates, whereby the single underlying cause of death was identified as asthma.

According to death certificate records from the years 2000-2010, an average of 66 people died each year in the state of Alabama due to asthma. As illustrated in Figure 1, the average asthma death rate in Alabama was 1.4 per 100,000 population, which is slightly higher when compared to the national asthma death rate of 1.3 per 100,000 population.

**Asthma Mortality by Gender**

Similar to the trend across the nation, asthma deaths among Alabamian women occur at higher rates than that of Alabamian men. While there is no statistical difference in asthma death rates by gender, Figure 2 illustrates the non-significant asthma death rates by gender in Alabama. Figure 2 excludes 2010 asthma death rates by gender due to an unreliably small number in the numerator.
Asthma Mortality by Age

Compared to their younger counterparts, from 2000-2010 Alabamians aged 65 years and older were at highest risk for asthma mortality, and accounted for roughly half of all asthma deaths. As shown in Figure 3, the most vulnerable individuals within this group were adults 85 years or older. With a mortality rate of 11.9 deaths per 100,000 population, adults who are 85 years or older have statistically significant higher rates of death due to asthma than the younger age groups.

The youngest age group, aged 0 to 14 years, accounted for approximately 2 percent of asthma deaths. However, due to confidentiality constraint criteria, the crude rate for this age group is unavailable.

Figure 3: Rates of Asthma Deaths in Alabama by Age, 2000-2010

Asthma Mortality by Race

In Alabama, asthma death rates are available for racial groups; minority racial groups are combined with black individuals to provide individual privacy. Black and other racial groups in Alabama have statistically significant higher rates of asthma deaths than white individuals, as shown in Figure 4.

Figure 4: Rates of Asthma Deaths in Alabama by Race, 2000-2010

If you have additional questions, please contact the epidemiologist, Aruna Rikhi, at aruna.rikhi@adph.state.al.us.

References

3. Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2010 on CDC WONDER Online Database, released 2012.