

# 24

## Respiratory Diseases

### Goal

Increase education and awareness in Kentucky about the signs and symptoms of lung diseases, specifically asthma, chronic lower respiratory disease (CLRD), and obstructive sleep apnea (OSA). Promote lung health through better detection, treatment, and management.

### Overview

Asthma is one of the most common chronic diseases in the United States, affecting more than 20 million people. In Kentucky it affects 9.8 percent of the adult population, approximately 400,000 Kentuckians. Additionally, asthma affects nearly 10 percent of the population younger than 18 years of age. The exact cause or causes of asthma are not yet known; however, genetic and environmental factors can exacerbate symptoms and lead to an asthma episode or attack. Factors that can trigger an asthma attack include allergens (such as pet dander, dust mites, mold, pollen, and food allergies), secondhand tobacco smoke, exercise, strong odors, and cold weather.

The successful management and control of asthma leads to improved quality of life and decreased adverse outcomes, including asthma episodes and attacks, hospitalizations, emergency room visits, and missed school or work days. This reduction in adverse outcomes also translates into a reduction in the economic impact of asthma. The effective management of asthma includes reducing exposure to asthma triggers, adequately managing asthma with medicine, monitoring asthma using objective measures of lung function, and education of asthma patients to be responsible for their own care.

CLRD, also referred to as chronic obstructive pulmonary disease (COPD), continues to affect the health of Kentuckians. COPD was changed to chronic lower respiratory disease (CLRD) in 1999 with the introduction of ICD-10 codes. CLRD is used in vital statistics reporting, but COPD is still widely used and commonly found in surveillance reports. CLRD is characterized by the presence of airflow obstruction due to chronic bronchitis and emphysema, two diseases that often coexist. Most people with CLRD are current or former smokers. There is no cure for CLRD. It is one of the most common respiratory conditions of adults and is the fourth leading cause of death in the United States. Obstructive sleep apnea (OSA) is an illness characterized by snoring, partial or complete cessation of breathing during sleep, reductions in blood oxygen levels, severe sleep fragmentation, and excessive daytime sleepiness. If left untreated, sleep apnea can increase the risk for high blood pressure, diabetes, a heart attack or stroke, work-related accidents, and driving accidents.

### Summary of Progress

The burden of asthma in Kentucky remains as evidenced by the increase in adult asthma prevalence from 7.8% in 2000 to 8.3% in 2004. However, the target was achieved for objective 24.1, which measures asthma mortality. The age-adjusted asthma death rate declined from 20 per million in 1997 to 13 per million in 2003. Objective 24.3R requires that a statewide surveillance system be established for asthma, and data sources have been identified and utilized to develop several surveillance documents. The CLRD hospitalization rate, Objective 24.4R, is well below the 2010 target. The asthma hospitalization rate and asthma prevalence (Objective 24.2R) have both increased since this document was originally developed, but the Department for Public Health, the Kentucky Asthma Partnership, and other partner agencies are dedicated to securing re-

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sources that will help support a reduction in these outcomes. Resources to address the remaining objectives are limited; however, strategies are provided that will move these objectives toward the 2010 targets. The Kentucky Asthma Partnership, its member agencies, and its partners continue to seek funding, educational and awareness materials, and other resources that will help reduce the burden of asthma in Kentucky.

**Progress toward Achieving Each HK 2010 Objective**

Summary of Objectives for Respiratory Diseases	Baseline	HK 2010 Target	Mid-Decade Status	Progress	Data Source
24.1. Reduce the asthma death rate to no more than 14 per million population.	20/ million (1997)	≤14/ million	13/ million (2003)	Target Achieved	Vital Statistics
24.2.1R. Reduce the asthma hospitalization rate to 10 per 10,000 population.	15.5/ 10,000 (2000)	≤10/ 10,000	17.6/ 10,000 (2004)	No	HOSP
24.2.2R. (Developmental) Reduce the adult asthma prevalence to 6.8 percent.	7.8% (2000)	≤6.8%	8.3% (2004)	No	BRFSS
24.3R. (Developmental) Establish an asthma surveillance system for tracking asthma morbidity, hospitalizations, and mortality.	No system	System in place	Partial system in place	Yes	
24.4R. (Developmental) Reduce the Chronic Lower Respiratory Disease (CLRD) hospitalization rate to no more than 56 per 10,000 population.	57/ 10,000 (2000)	≤56/ 10,000	68.3/ 10,000 (2003)	No	HOSP
24.5R. (Developmental) Reduce the CLRD death rate for adults to no more than 55 per 100,000 population.	52.4/ 100,000 (2001)	≤51.4/ 100,000	58.9/ 100,000 (2002)	No	Vital Statistics
24.6. - 24.8. (DELETED)					

R = Revised objective