Asthma Emergency Department Visits

Figure 6: Hawaii asthma-related emergency department visits per 10,000 population by age group, HHIC, 2000-2002.

Finding: Very young children (0-4 years) had the highest asthma related ED utilization rate among all age groups. Individuals between the ages of 5-64 were closest to meeting the Healthy People 2010 goal. For the years 2000-2002, the asthma related ED utilization rate appears to have slightly increased, especially among children aged 0-4 years.

Figure 7: Hawaii asthma-related emergency department visits per 10,000 population by sex and country, HHIC, 2000-2002.

Finding: Females had a slightly higher asthma related ED utilization rate compared to males. On average, Hawaii County had the highest asthma related ED utilization rate, whereas Honolulu County had the lowest. For the years 2000-2002, the asthma related ED utilization rate appears to have slightly increased in Kauai and Maui Counties.

Asthma Mortality

Figure 8: Hawaii statewide asthma mortality rates per 1,000,000 population from 1995 to 2004.

Finding: There is an overall non-significant downward trend in asthma mortality rates from 1995 to 2004 averaging around 0.6 deaths per year.

Data depicted in Figure 6 - 8 are from the Hawaii State Department of Health, Office of Health Status Monitoring and US Census Estimates.

References:
3 Source: Hawaii Health Information Corporation, Emergency Department Database. Data are based on ER visit data received from Hawaii’s non-federal hospital-based Emergency Departments, with the exception of Kahuku ED (Kahuku ED does not available until calendar year 2005). Kahuku ED data are used to estimate the years 2000-2002.
4 Out of state residents were included.
5 Data, including sex values, were inflated by Hawaii Health Information Corporation (HHIC) and US Census Estimates.
6 The horizontal line represents the Healthy People 2010 Goal (for ages 0-5 the goal is reduce ED visits to 80 per 10,000, for ages 5-64 the goal is 50 per 10,000, and for ages over 65 year the goal is 15 per 10,000).
8 Asthma-mortality rates in terms of underestimating cause of death according to the International Classification of Diseases, 10th Revision (ICD-10) and 9th Revision (ICD-9) and US Census Estimates (2006).

Suggested Citation:
Asthma by Gender and Ethnicity

Finding: Female adults are more likely to report being diagnosed with current asthma than males. The prevalence of current asthma for females seems to be increasing although this is not statistically significant. From 2001 - 2005, this appears to be an increase, although this is not statistically significant.

Finding: Native Hawaiian adults have the highest rate of current asthma when compared with the other major ethnic groups; and the trend seems to show an increase, although this is not statistically significant.

Based on the Hawaii BRFSS 2005, approximately 10.8% or 32,900 adults residing in the State of Hawaii and adults with current asthma at some point in their lifetime (data not shown).

Finding: On average, Hawaii County has the highest percentage of children with current asthma (12%) compared with other counties and the state average. From 2001 - 2005, Maui and Hawaii counties have seen decreases in current asthma; however, most of these differences are not statistically significant.

Finding: On average, Hawaii County has the highest percentage of children with current asthma (7%) compared with other counties and the state average. From 2001 - 2005, Maui and Hawaii counties have seen decreases in current asthma; however, most of these differences are not statistically significant.

Based on the Hawaii BRFSS 2005, approximately 7.5% or 72,696 adults living in Hawaii currently have asthma (Figure 1). The survey also shows that about 23.2% or 43,867 children living in Hawaii reported having asthma at some point in their lifetime (data not shown).

Figure 1: Percent of adults residing in the State of Hawaii and the four counties that currently have asthma, Hawaii BRFSS.

Figure 2: Percent of adults residing in the State of Hawaii and the four counties that currently have asthma, Hawaii BRFSS.

Asthma in Children and Adults

• In the past 30 days, the majority of the adults with current asthma (69.7%) took asthma medication(s) prescribed by a doctor:
  • 20.8% had symptoms less than once a week;
  • 17.8% had symptoms once or twice a week;
  • 5.7% had daily symptoms.
• 13.2% of adults who have asthma visited an emergency room or urgent care facility for their asthma in the past 12 months; however, 14.4% were unable to perform usual activities for 1 to 3 days and 14.3% were unable for more than 4 days.
• Most of the adults with asthma had a doctor, nurse or other health professional for a routine checkup for their condition in the past 12 months; however, 14.4% were unable to perform usual activities for 1 to 3 days and 14.3% were unable for more than 4 days.
• Most of the adults with asthma had a doctor, nurse or other health professional for a routine checkup for their condition in the past 12 months; however, 14.4% were unable to perform usual activities for 1 to 3 days and 14.3% were unable for more than 4 days.
• The majority of adults (56.2%) who reported currently having asthma, also reported having had an asthma attack during the past 12 months.
• 13.2% of adults who have asthma visited an emergency room or urgent care facility for their asthma in the past 12 months; however, 14.4% were unable to perform usual activities for 1 to 3 days and 14.3% were unable for more than 4 days.

Based on the BRFSS 2003
• The majority of adults (56.2%) who reported currently having asthma, also reported having had an asthma attack during the past 12 months.
• 13.2% of adults who have asthma visited an emergency room or urgent care facility for their asthma in the past 12 months; however, 14.4% were unable to perform usual activities for 1 to 3 days and 14.3% were unable for more than 4 days.
• Most of the adults with asthma had a doctor, nurse or other health professional for a routine checkup for their condition in the past 12 months; however, 14.4% were unable to perform usual activities for 1 to 3 days and 14.3% were unable for more than 4 days.
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Figure 3: Percent of Hawaiian adults who currently have asthma by gender, Hawaii BRFSS.

Figure 4: Percent of Hawaiian adults who currently have asthma by ethnicity, Hawaii BRFSS.

Figure 5: Percent of Hawaiian adults who currently have asthma by education level, Hawaii BRFSS.

Asthma by Education Level

Finding: There appears to be an increase in the proportion of adults with less than a high school education reporting having current asthma, although this is not statistically significant.

Based on the BRFSS 2005, approximately 13% or 21,390 adults residing in the State of Hawaii had asthma at some point in their lifetime (data not shown).

Finding: Most of these differences are not statistically significant.

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Asthma by Gender and Ethnicity

Based on the Hawaii BRFSS 2005, approximately 12.9% of all adults (18 years or older) living in Hawaii currently have asthma. The survey also shows that about 9.6% of non-Hawaiian adults and 24.4% of Native Hawaiian adults have current asthma. On average, Hawaii County has the highest percentage of adults with current asthma (12%) compared with other counties and the state average. From 2001 - 2005, Maui and Hawaii counties have seen decreases in current asthma; however, most of these differences are not statistically significant.

Finding:

- There appears to be an increase in the proportion of adults with less than a high school education reporting having current asthma, although this is not statistically significant.

Asthma in Children and Adults

Based on the Hawaii BRFSS 2003, approximately 7.5% or 72,696 children living in Hawaii reported having asthma at some point in their lifetime (data not shown). On average, Hawaii County had the highest rate of current asthma among children (15.1%) or 45,987 children living in Hawaii. The survey also shows that about 13.3% of all adults (18 years or older) living in the State of Hawaii currently have asthma (Figure 1). The survey also shows that about 15.2% of all adults (18 years or older) living in the State of Hawaii currently have asthma (Figure 1).

Finding:

- In the past 30 days, the majority of the adults with current asthma (69.7%) took asthma medication(s) prescribed by a doctor.
- More than one-half of the adults with current asthma (54.3%) had difficulty staying asleep because of the symptoms of asthma.
- Most of the adults with current asthma reported having some symptoms in the past 30 days.
- Most of the adults with asthma saw a doctor, nurse or other health professional for a routine checkup for their condition in the past 12 months; however, 14.9% were unable to perform usual activities for 1 to 3 days and 14.3% were unable for more than 4 days.
- Most of the adults with asthma who report currently having asthma, almost one-half (45.4%), were diagnosed before the age of 10.
- Among half of the adults who report currently having asthma, almost one-half (45.4%), were diagnosed before the age of 10.
- 12.2% of adults who have asthma visited an emergency room or urgent care facility for their asthma in the past 12 months; however, 14.9% were unable to perform usual activities for 1 to 3 days and 14.3% were unable for more than 4 days.
- Most of the adults with asthma who report currently having asthma, almost one-half (45.4%), were diagnosed before the age of 10.
- Women who have asthma symptoms more frequently than males (33.6% vs. 30.3).
- More than two-thirds of adults with current asthma (70.9%) were able to work and carry out their usual activities in the past 12 months; however, 14.9% were unable to perform usual activities for 1 to 3 days and 14.3% were unable for more than 4 days.
Asthma by Gender and Ethnicity

A 95% confidence interval is range that contains the true population prevalence estimate with 95% certainty. For a more complete explanation of this confidence interval, please refer to the State of Asthma Hawai‘i 2004 burden report.

Based on the BRFSS 2003

• The majority of adults (56.2%) who reported currently having asthma, also reported having had an asthma attack during past 12 months.
• 13.2% of adults who have asthma visited an emergency room or urgent care facility for their asthma in the past 12 months; however, 14.9% were unable to perform usual activities for 1 to 3 days and 14.3% were unable for more than 4 days.
• Most of the adults with asthma had more symptoms frequently than males (39.9% vs. 35.6%).
• More than two-thirds of adults with current asthma (70.9%) were able to work and carry out their usual activities in the past 12 months; however; 14% were unable to perform usual activities for 1 to 3 days and 14.3% were unable for more than 4 days.
• Most of the adults with current asthma reported having some symptoms in the past 30 days:
  - 20.8% had symptoms less than once a week;
  - 17.8% had symptoms once a week or twice a week;
  - 15.2% had symptoms once or twice a week;
  - 14.6% had symptoms more than 2 times a week;
  - 5.3% visited an emergency department 2-3 times in the past year,
  - 7.2% visited an emergency department once in the past year,
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• Among half of the adults who report currently having asthma, almost one-half (45.4%) were diagnosed before the age of 10.
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**Asthma Emergency Department Visits**

Data depicted in Figure 6-7 are from Hawaii Health Information Corporation (HHIC) and US Census Estimates.

Finding: Very young children (0-4 years) had the highest asthma related ED utilization rate among all age groups. Individuals between the ages of 5-14 were closest to meeting the Healthy People 2010 goal. For the years 2000-2002, the asthma related ED utilization rate appeared to have slightly increased, especially among children aged 0-4 years.

Figure 6: Hawaii asthma related emergency department visits per 10,000 population by age group, HHIC, 2000-2002.

**Asthma Mortality**

Data depicted in Figure 8 are from the Hawaii State Department of Health, Office of Health Status Monitoring and US Census Estimates.

Finding: There is an overall non-significant downward trend in asthma mortality rates from 1995 to 2004 averaging around 0.6 deaths per year.

Figure 8: Hawaii statewide asthma mortality rates per 1,000,000 population from 1995 to 2004.

* Data in Hawaii Health Information Corporation, Emergency Department Database. Data are based on HHIC data extracted from Hawaii’s database of hospital-based Emergency Departments, with the exception of Kahuku ED. (Kahuku ED does not available until calendar year 2005).

**State of Asthma Hawai‘i 2006**

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Asthma Emergency Department Visits

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**Figure 7:** Hawai‘i asthma related emergency department visits per 10,000 population by sex and country, HHIC, 2000-2002.

**Finding:** Females had a slightly higher asthma related ED utilization rate compared to males. On average, Hawai‘i County had the highest asthma related ED utilization rate, whereas Honolulu County had the lowest. For the years 2000-2002, the asthma related ED utilization rate appeared to have slightly increased in Maui and Kauai Counties.

Asthma Mortality

Data depicted in Figure 8 are from the Hawai‘i State Department of Health, Office of Health Status Monitoring and US Census Estimates.

**Figure 8:** Hawai‘i statewide asthma mortality rate per 1,000,000 population from 1995 to 2004.

**Finding:** There is an overall non-significant downward trend in asthma mortality rates from 1995 to 2004 averaging around 0.6 deaths per year.

**Suggested Citation:** Krupitsky, D., Pobutsky, A., Hirokawa, R. (2006) State of Asthma Hawai‘i 2006 Supplement. Hawai‘i State Department of Health, Honolulu, HI