ASTHMA IN KANSAS CITY
the disease, the responses

A REPORT OF THE METROPOLITAN HEALTH COUNCIL

Released May 9, 2001

Participants in the Metropolitan Health Council are from the following organizations:
   Aetna US Healthcare
   Bank of America
   Black Health Care Coalition
   Blue Cross/Blue Shield of Kansas City
   Coventry Health Plan
   Family Health Partners
   FirstGuard Health Plan
   Greater Kansas City Community Foundation
   HealthNet
   Jackson County Health Department
   Kansas City, Missouri, Health Department
   Kaw Valley Medical society
   Local Investment Commission (LINC)
   Maternal and Child Health Coalition
   Medical Society of Johnson and Wyandotte Counties
   Metropolitan Lutheran Ministry
   Metropolitan Medical Society
   Midwest Bioethics Center
   Missouri Health Plan Association
   Prime Health Foundation
   UAW/Ford Health Care Initiative
   UnitedHealthcare
   University of Health Sciences
   Wyandotte County Health Department
   Wyandotte Health Foundation

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KANSAS CITY’S ATTACK ON ASTHMA

Asthma is a chronic inflammatory disease of the airways that restricts airflow to the lungs. In the U.S., Asthma is the only chronic disease, besides AIDS and tuberculosis, with an increasing death rate. Yet, with education, proper diagnosis, and a good management plan, asthma can be controlled.

This first-ever report examines the incidence of asthma in our metropolitan area. It identifies the scope of activities that are needed to effectively control asthma and how the community currently is responding to asthma which is the nation’s most common and costly illness. The report also recommends future activities to help control asthma.

The report was prepared for the Metropolitan Health Council. The Council’s members are organizations interested in health issues, funded by Prime Health Foundation. The Metropolitan Health Council has focused on asthma for over a year and has been the impetus for a variety of programs aimed at increasing asthma awareness and improving asthma care, including the “I Have Asthma, but Asthma Doesn’t Have Me” campaign.

The problem:

It is estimated that more than 80,000 people in the Kansas City area, including 23,500 children, have asthma. Area statistics reflect national trends that show asthma has sharply increased for all races, ages, sexes and regions of the U.S. The largest increase has occurred in children from birth to four years old. (See full report following for estimated number of persons with asthma for each county in greater Kansas City.)

In 1998 there were 21 deaths from asthma in the metropolitan Kansas City area. From 1979 to 1995, the national asthma death rate doubled for children 4 to 14 and young adults 15 to 24. Death from asthma is two to six times more likely to occur among African Americans and Hispanics than among whites.

In 1997 in Jackson, Clay and Platte counties, there were 6,341 visits to hospital emergency rooms for which asthma was the primary diagnosis. Nationally asthma is the leading cause of hospitalization of children, and among chronic diseases, asthma is the leading cause of school absenteeism. Also, inner city residents are four times more likely than residents of other areas to visit an emergency department because of asthma.

In Wyandotte County, bronchitis and asthma among children from birth to age 17 ranked 10th among the top 20 most frequent conditions treated at community hospitals. Across the state of Kansas the same diagnosis ranked 19th among the top 20 hospital diagnoses among children up to age seventeen.

The Costs:

Asthma-related costs in the metropolitan area are estimated to be in excess of $34 million annually. This figure is based on the number of persons with asthma, their direct medical expenditures and indirect costs such as lost time at work, etc. By city, the estimated annual costs of asthma are:

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Kansas City, Kansas    $  6,078,000
Overland Park, Kansas   $  5,063,000
Independence, Missouri  $  4,063,000
Kansas City, Missouri    $18,420,000.

The Needs:

- A community awareness campaign to help Kansas Citians understand the magnitude of the asthma problem in metro KC.
- Community-based asthma screening programs.
- Provider education for physicians and others about asthma diagnosis and management.
- Peer educators to work with families/communities in areas of high asthma incidence.
- Patient/family education to improve asthma management.
- Support from insurance companies to provide optimal asthma care.
- Environmental assessments and remediation in homes, schools and workplaces to promote indoor air quality.
- A community-wide tracking and surveillance system to promote follow up.
- An ongoing, community leadership group to coordinate Kansas City’s attack on asthma.

The Response:

A three-year asthma awareness campaign is being launched in May, which is Asthma and allergy Awareness Month. The campaign will target areas of the city with the highest incidence of asthma. An asthma hotline has been established.

The Greater Kansas City Asthma and Allergy Foundation (AAFA) is conducting asthma screenings at Hy-Vee stores throughout the area during the month of May. The American Lung Association of Western Missouri (ALA) will be offering asthma screenings at health fairs and other sites during the year.

The ALA and the AAFA are making available programs on managing asthma for school nurses, coaches, support staff, and day care workers.

“Open Airways for Schools” is a program of the ALA that trains teachers to work with students ages eight to eleven to manage their asthma condition.

AAFA offers “Meetings in a Box” for asthma patients and their families.

Several summer camps for children with asthma are offered locally.

The EPA has produced a video on environmental triggers and asthma.

A Pediatric Asthma Fair and Family Asthma Education Day are held each year in Kansas City.
Children’s Mercy Hospital has a program to perform environmental assessments in homes of asthma patients.

A health plan workgroup is finalizing asthma management guidelines to be distributed to physicians.

A health plan medical directors’ group is exploring a pilot project to reimburse physicians for in-office asthma education.

Children’s Mercy Hospital is developing a database to monitor system use by asthma patients of CMH and Truman Medical Center as well as patients in some managed care organizations. KU Medical Center tracks similar information on its asthma patients.

*The complete report follows.*
ASTHMA

Overview

Asthma is a chronic inflammatory disease of the airways which restricts airflow to the lungs. About 14 people die each day from asthma in the U.S. Asthma is the only chronic disease, besides AIDS and tuberculosis, with an increasing death rate. Yet, with education, proper diagnosis, and a good management plan, asthma can be controlled.

Asthma symptoms include coughing, wheezing, shortness of breath, chest tightness and mucus production. These symptoms may show up or increase with exertion or at night.

Factors that contribute to asthma severity include:
- Allergens
- Viral respiratory infections
- Tobacco smoke
- Indoor/outdoor pollutants and irritants
- Sulfite sensitivity
- Medication sensitivity and interactions
- Occupational exposures
- Co-morbid conditions including rhinitis, sinusitis, gastroesophageal reflux disease

National Trends

Asthma is a serious and growing health problem. In 1994, the total number of asthma patients in the U.S. was approximately 13.7 million. In 1998, the CDC reported that approximately 17.3 million Americans were diagnosed with asthma. The reasons for the increase are unclear.

According to the CDC, the reported incidence of asthma cases has sharply increased for all races, ages, sexes and regions of the U.S. The largest increase between 1980 and 1994, 160%, occurred in children from birth to 4 years old. The next largest increase in reported cases, a 75% increase, occurred in 5 to 14 year olds.

Asthma is the country’s most common and costly illness. Asthma accounts for approximately 11 million physician office visits and 1.6 million emergency room visits each year, and each year asthma is responsible for about 500,000 hospitalizations, 5,500 deaths, and 134 million days of restricted activity.¹

Asthma is the leading cause of hospitalization of children, and among chronic diseases, asthma is the leading cause of school absenteeism.

¹National statistics are from publications of the Asthma and Allergy Foundation of American and from Healthy People 2010, p. 24-3, quoting from National Heart Blood and Lung Institute fact sheet.
**Disparities**

While the number of adults with asthma is greater than the number of children with asthma, as indicated above, the asthma rate is rising more rapidly in preschool-aged children than in any other group. In 1995, the rate of self-reported asthma among children and adolescents under age 18 was 7.5 percent, compared to 5.7 percent among the general population. The rates were higher in boys under age 18 years than in girls in the same age group. The rates of self-reported asthma were higher for women (6.7 percent) than men (5.2 percent) and higher for African Americans (6.7 percent) than whites (5.6 percent). Among adults, women of all races have higher rates of illness and death from asthma than men.

Death from asthma is two to six times more likely to occur among African Americans and Hispanics than among whites. Although the number of deaths annually from asthma is low compared to other chronic diseases, the death rate for children aged 5 to 14 years and young adults aged 15 to 24 years doubled from 1979-80 to 1993-95 (from 1.5 to 3.7 deaths per million children aged 5 to 14 years and 2.8 to 6.3 deaths per million persons aged 15 to 34 years, respectively). In 1993-95, death rates were slightly higher overall in women than in men.

Rates of hospitalization for asthma demonstrate similar variations. Rates for African Americans are almost triple those for whites. Rates are higher among women than among men. Asthma hospitalization rates have increased dramatically among children under age 5 years. From 1980 to 1993, the rate increased from 36 to 65 children hospitalized per 10,000 children under age 1 year. Some of this increase may be related to changes in diagnostic practices and changes in coding and reimbursement, but a large portion represents a true increase in illness and disability.

In the inner city, patients frequently use hospital emergency departments for asthma care. In 1993 and 1994, such patients were four times more likely than residents of other areas to visit an emergency department because of asthma.

Socioeconomic status, particularly poverty, appears to be an important contributing factor to asthma illness, disability, and death. In the U.S., the rate of asthma cases for those with incomes below the poverty level is only slightly higher than for others, yet the death, hospitalization, and emergency department visit rates are more than twice as high. Although reasons for these differences are unclear, they likely result from multiple factors: high levels of exposure to environmental tobacco smoke, pollutants, and environmental allergens (for example, house dust mites, cockroach particles, cat and dog dander, and possibly rodent dander and mold); a lack of access to quality medical care; and a lack of financial resources and social support to manage the disease effectively on a long-term basis.²

² Healthy People 2010, page 24-6.
The Local Situation

Prevalence of Asthma in Metropolitan Kansas City

The American Lung Association (ALA) estimates that more than 80,000 people, including 23,500 children in the Kansas City area, have asthma.

With respect to asthma prevalence at the county level, using age-specific national estimates of self-reported lung disease, the ALA estimates the prevalence of lung disease for every county in the U.S. The ALA’s county-level estimates are made based on the age-specific population of each area. No adjustments are made for any other factors that may affect the actual local prevalence. Since actual information on prevalence at a state or county level is not now available, the ALA’s estimates serve as the best available proxy.

The ALA estimates the prevalence for adult asthma (persons 18+ years of age) and pediatric asthma (under 18 years of age). Here is their estimate for counties in the metropolitan Kansas City area, based on 1996 data:

<table>
<thead>
<tr>
<th>County</th>
<th>Adult</th>
<th>Pediatric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clay County, Missouri (Tot. pop. 170,440)</td>
<td>6,703</td>
<td>2,706</td>
</tr>
<tr>
<td>Jackson County, Missouri (Tot. pop. 650,451)</td>
<td>25,396</td>
<td>10,420</td>
</tr>
<tr>
<td>Platte County, Missouri (Tot. pop. 67,313)</td>
<td>2,644</td>
<td>1,087</td>
</tr>
<tr>
<td>Johnson County, Kansas (Tot. pop. 408,847)</td>
<td>15,996</td>
<td>6,659</td>
</tr>
<tr>
<td>Wyandotte County, Kansas (Tot. pop. 153,313)</td>
<td>5,785</td>
<td>2,685</td>
</tr>
</tbody>
</table>

City Prevalence and Costs

The Asthma and Allergy Foundation of America has estimated the prevalence of asthma for several cities in the metropolitan Kansas City area using census data and taking into account key demographic characteristics specifically age, gender and race. With these data in hand, the AAFA then derives asthma-related costs of illness for both direct and indirect medical expenditures by multiplying local prevalence rates by the national estimates of the cost of asthma for either adults or children. Here is the information they report, based on 1994 census data.

3Direct medical expenditures are composed of charges for inpatient and outpatient hospital services, emergency room services, physician services (both inpatient care and office visits), and medications. Indirect costs include the value of time lost from school and work as a result of asthma morbidity and mortality. More information on the AAFA’s methodology for estimating the cost of asthma may be found on its website at www.aafa.org/highcosts/methodology
<table>
<thead>
<tr>
<th></th>
<th>Estimated Prevalence (percent)</th>
<th>Persons with Asthma (thousands)</th>
<th>Direct Medical Expenditures (thousands of $)</th>
<th>Indirect Costs (thousands of $)</th>
<th>Total Costs (thousands of $)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kansas City, KS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>5.61</td>
<td>8.1</td>
<td>3,470</td>
<td>2,608</td>
<td>6,078</td>
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<tr>
<td>17 or under</td>
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<td>3.2</td>
<td>1,250</td>
<td>776</td>
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<tr>
<td>18 or over</td>
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<td>4.9</td>
<td>2,220</td>
<td>1,832</td>
<td>4,052</td>
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<tr>
<td><strong>Overland Park, KS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>5.35</td>
<td>6.7</td>
<td>2,873</td>
<td>2,195</td>
<td>5,063</td>
</tr>
<tr>
<td>17 or under</td>
<td>7.08</td>
<td>2.2</td>
<td>862</td>
<td>535</td>
<td>1,397</td>
</tr>
<tr>
<td>18 or over</td>
<td>4.77</td>
<td>4.5</td>
<td>2,011</td>
<td>1,660</td>
<td>3,670</td>
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<tr>
<td><strong>Independence, MO</strong></td>
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<tr>
<td>All</td>
<td>5.37</td>
<td>6.0</td>
<td>2,607</td>
<td>1,996</td>
<td>4,603</td>
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<td>17 or under</td>
<td>7.14</td>
<td>1.9</td>
<td>763</td>
<td>473</td>
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<td>18 or over</td>
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<td>4.1</td>
<td>1,844</td>
<td>1,522</td>
<td>3,367</td>
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<tr>
<td>All</td>
<td>5.50</td>
<td>24.3</td>
<td>10,461</td>
<td>7,959</td>
<td>18,420</td>
</tr>
<tr>
<td>17 or under</td>
<td>7.65</td>
<td>8.4</td>
<td>3,300</td>
<td>2,048</td>
<td>5,348</td>
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<tr>
<td>18 or over</td>
<td>4.79</td>
<td>15.9</td>
<td>7,161</td>
<td>5,911</td>
<td>13,071</td>
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</table>

**Asthma Deaths Among Residents of Metropolitan Kansas City**

Further information on asthma among the residents of greater Kansas City is available from the state health departments. The Missouri and the Kansas Departments of Health keep county-level statistics on deaths from asthma. For 1998, here is what they report:

- There were 21 deaths from asthma in 1998 in the metropolitan Kansas City area.
- 14 of the deaths occurred in Jackson County; Wyandotte County and Johnson County each had 3 deaths; Clay County had 1; Platte County had 0.
- 11 of the persons who died were 65+ years of age; 5 were 45-64; 4 were 25-44; 1 was 15-24 years of age; none of the persons who died was under 15 years of age.
- 14 of those who died were white; 7 were African-American.

**Asthma Hospitalizations Among Residents of Metropolitan Kansas City**

The Missouri Department of Health reports a) hospital discharges by diagnosis, b) emergency room visits by diagnosis, and c) preventable hospitalizations by diagnosis.

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4 The death statistics are based on information on death certificates.
5 The Missouri hospitalization statistics are from data submitted to the state by hospitals and are part of a data collection and reporting system called “MICA” -- or the Missouri Information for Community Assessment which is based on a system developed in New York that is becoming the standard for use by other states. Asthma (or any other diagnosis) is counted when it was the primary diagnosis requiring hospitalization. “Preventable hospitalizations” are determined based on certain ICD9 codes for hospitalized patients for which there is evidence that the hospitalization would not have been necessary if ambulatory care had been sought and outpatient protocols followed. Hospitalizations are based on place of residence of the patients, not the location of hospitals.
This information can be cut in various ways: by race, by age, by sex, payment source, etc. Here are highlights for Jackson, Platte and Clay counties for 1997.

**Jackson County** had 5,585 emergency room visits for which asthma was the primary diagnosis. 2,119 of these involved white individuals; 3,237 involved African-Americans; 183 were of other races. 2,414 of the emergency room visits were for persons under 15 years of age.

**Jackson County** had 1,165 hospital discharges for which asthma was the primary diagnosis. 510 of these involved white patients; 604 involved African-American patients; 34 were of other races. 437 of all discharges involved persons under 15 years of age.

**Jackson County** had 1,007 preventable hospitalizations for asthma. 412 of these involved white patients; 553 involved African-Americans; 29 were of other races. 426 of the preventable hospitalizations were among persons under 15 years of age.

**Platte County** had 189 emergency room visits for which asthma was the primary diagnosis. 160 of these involved white individuals; 20 involved African-Americans; 9 were of other races. 77 of the emergency room visits were for persons under 15 years of age.

**Platte County** had 71 hospital discharges for which asthma was the primary diagnosis. 60 of these involved white patients; 7 involved African-Americans; 2 were of other races. 19 of all discharges involved persons under 15 years of age.

**Platte County** had 56 preventable hospitalizations for asthma. 46 of these involved white patients; 7 involved African-Americans; 2 were of other races. 18 of the preventable hospitalizations were among persons under 15 years of age.

**Clay County** had 567 emergency room visits for which asthma was the primary diagnosis. 504 of these involved white individuals; 42 involved African-Americans; 21 were of other races. 206 of the emergency room visits were for persons under 15 years of age.

**Clay County** had 156 hospital discharges for which asthma was the primary diagnosis. 143 of these involved white patients; 8 involved African-Americans; 4 were of other races. 41 of all discharges involved persons under 15 years of age.

**Clay County** had 130 preventable hospitalizations for asthma. 119 of these involved white patients; 8 involved African-Americans; 3 were of other races. 41 of the preventable hospitalizations were among persons under 15 years of age.

In addition to this information, a recent journal article examined recent trends (1990-

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1997) in asthma morbidity and mortality rates across Missouri and analyzed population-based risk factors to find which factors account for the geographic variation in asthma hospitalizations and emergency room visits among counties. The article summarized its findings as follows:

This study had three principal findings about asthma in Missouri: (1) asthma mortality and treatment rates have not changed appreciably in recent years, but children and African-Americans continue to bear a disproportionate burden of the disease; (2) major disparities in asthma treatment rates exist among the counties of Missouri; and (3) these disparities can be explained, in part, by the sociodemographic characteristics of the constituent populations.

African-American race was the strongest predictor of high asthma treatment rates. Those counties with relatively high percentages of African-American residents had correspondingly high rates of asthma hospitalizations and ER visits, independent of other risk factors like poverty.\

The study further noted:

The percentage of African-American residents was the best predictor of high asthma treatment rates, explaining 77% of the variation in hospitalizations and 57% of the variation in ER visits [among Missouri counties]. All other sociodemographic predictors combined explained less than 10% of the statewide variation in rates.\

The Kansas Department of Health and Environment reports hospital information a bit differently from Missouri (though Kansas intends to adopt a similar system in the near future). Here are highlights from what is available regarding asthma hospitalizations on the Kansas side.

For the state as a whole during 1994-1998, hospitalizations for Bronchitis & Asthma among persons Age 0-17 numbered 2,578 or 99.8 per 100,000 population. This diagnosis was among the top 20 hospital diagnoses during these years (it was 19th out of 20). This same diagnosis, Bronchitis & Asthma Age 0-17, was among the top 10 hospital diagnoses with the lowest average age during those same years (it ranked 7th). Average age per case was 3.4.

At a county level this diagnosis did not appear among the top 20 “most frequent conditions treated in community hospitals” in Johnson County for the 1994–1998 period.

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7 Page 71. Interestingly, the study notes that, though its finding that African-American race was the strongest predictor of high asthma treatment rates is consistent with previous studies in other geographic areas, in those studies racial composition explained less of the geographic variation in asthma treatment and attributed more of the variation to poverty.

8 Page 67.

9 KDHE, Most Frequent Conditions Treated in Kansas Community Hospitals, Excluding Maternity. The State of Kansas and the Counties. September 2000.
In Wyandotte County, Bronchitis & Asthma Age 0-17, ranked 10th among the top 20 “most frequent conditions...” during that timeframe. There were 294 cases per year, with a mean age of 3.5. The rate per 100,000 for the county was 191.8 (compared with 99.8 for the state as a whole.

During the period 1995-1999 (that is, rolling the five-year data forward one year), Bronchitis & Asthma 0-17 does not appear among the top 10 diagnoses in Johnson County but does in Wyandotte County (it ranks 9th). For those five years there were 302 cases with a mean age of 4.0. The Wyandotte County rate for those years was 197.6 per 100,000 (rising from the previous report) at a time that the state rate was 96.4 (a decrease from the prior report).

**Programs/Services/Activities Aimed at Improving Asthma Prevention, Diagnosis and Management**

A variety of activities are needed to combat the growing asthma problem in metropolitan Kansas City. Many activities are already underway in our area. These are noted below. Following this, gaps in needed services and activities are noted, along with strategies for closing these gaps.

**What is needed and what exists to address the needs?**

1. A community awareness campaign is needed to improve public understanding of the magnitude of the asthma problem in metro KC and to guide the public to more information about asthma prevention and management. One goal of the campaign would be to reach those with asthma and impress upon them the importance of being under a physician’s care and following their treatment regimens.. The campaign should especially target those geographic areas (such as the housing projects in the inner city) where it is known there is a high incidence of asthma.

   **Types of Activities:** Asthma information would appear on billboards and bus boards; in public service or paid announcements on TV/radio; and in newspaper articles.

   **Status:** The Greater Kansas City Chapter of the Asthma and Allergy Foundation of America (AAFA) identified a similar campaign carried out in New York City and has received permission from the NYC Health Department to use its campaign materials. The Prime Health Foundation recently awarded a grant to AAFA to mount phase one of a public awareness campaign in Kansas City in 2001. (Later phases of the campaign would give more detailed information on asthma prevention and management.) The 2001 awareness campaign will be “rolled out” in May, 2001, National Asthma Awareness Month.
2. Community-based screening programs offered by qualified asthma providers are needed to identify children with undiagnosed asthma. It would be especially useful to offer these in school settings so that a maximum number of children could be reached. (It is recognized that there are limitations with screening in that follow-up for those with problems cannot be assured. Attention should be given by screening efforts to identify ways to improve follow-up including advocating for persons needing medical attention.)

Types of Activities: Screenings should take place at a variety of community health care sites including school-based clinics, health department clinics, managed care organization settings, private family physician and pediatric offices, possibly churches and public housing offices.

Status: The greater Kansas City chapters of the American Lung Association and the Asthma and Allergy Foundation of America periodically offer special screenings at health fairs, community clinics, grocery stores, and the like. (The next screening by AAFA will be in May at Hy-Vee stores throughout the area.) However, screening is not done routinely in Kansas City. One of the issues is that current programs use physicians on a volunteer basis, and this limits the amount of screening that can be done.

3. Provider education is needed to assure that physicians and others who interact with children are up-to-date on guidelines for asthma diagnosis and management.

Types of Activities: Programs are needed to educate primary care physicians, office nurses and respiratory therapists on best practices regarding asthma diagnosis and management. Additionally, school nurses and coaches, day care workers and others who work with children should be provided with up-to-date asthma information to increase their knowledge of optimal asthma management for children with whom they interact.

Status:
?? The Prime Health Foundation recently funded a proposal jointly sponsored by the asthma and allergy providers at Children’s Mercy Hospital and the UAW-Ford Community Health Initiative to offer provider education in physicians’ offices.
?? The American Lung Association of Western Missouri offers ongoing training of school nurses and other school personnel such as coaches and support staff.
?? The Greater Kansas City Chapter of the Asthma and Allergy Foundation of America periodically offers asthma updates for nurses (most recent program, co-sponsored by AAFA and the Metropolitan Health Council, was November 1, 2000, for school and office nurses; a similar session will be offered in the fall of 2001). AAFA has also developed a program appropriate for PE coaches and day care workers and will offer the program to day care workers in the Kansas City area this year.
?? The American Lung Association has developed a certification program for asthma educators to assure that educators have complete and up-to-date information on asthma prevention and management. The ALA program is just now being “rolled out” across the country. It would be beneficial if the certification program could be available in Kansas City.
4. Trained community-based peer educators are needed to work with families/communities in areas of high asthma incidence.

Types of Activities: Needed activities include assessing environmental asthma triggers/irritants, providing information about asthma and possibly supplying resources to help control environmental triggers (e.g., boric acid to eliminate roaches, mattress and pillow covers to address dust mite issues).

Status: Grant-funded peer educators have been used to address various health issues in the past, such as promoting immunizations and screening for high blood pressure. At this time there are none being used for asthma education. If/whenever a program using peer educators is mounted, peer educator training should assure that they are up to date on asthma prevention and management.

5. Patient/family education should be available to improve asthma management in the home. Support groups for asthma sufferers and their families should be available to enable participants to support one another in managing their asthma and to offer a venue for ongoing education on asthma management.

Types of Activities: These activities can take place on many fronts: at physician visits, through school nurses, through in-home visits covered by insurance, and through special programs and support groups. Whenever formal programs take place, it is important that they include evaluations to enable the sponsors to gauge their effectiveness, and, ultimately, to enable the larger community to assess outcomes to see if progress is being made in preventing and better managing asthma in the metropolitan Kansas City area.

Status:
?? Several of the health plans serving the Kansas City area have asthma disease management/case management programs wherein the plans identify members with asthma and work with them to optimize care for their condition.
?? The American Lung Association has programs available for use with children and families. One of these is its “Open Airways For Schools” program that is targeted for use with students aged eight to eleven. Through this program, children learn what steps they can take to manage their asthma condition. Recently, school nurses in Kansas City, Missouri, elementary schools were trained to offer the Open Airways program in their schools. Earlier the Jackson County Health Department nurses were trained to offer Open Airways in schools in its jurisdiction. The ALA also has available an educational kit on asthma for use with preschool-aged children. The program includes a video, available in English and Spanish, featuring Sesame Street characters plus a character named Danny who has asthma and talks about how he deals with it.
?? The Asthma and Allergy Foundation of America has a number of packaged products (games, “Meetings in a Box,” etc.) that are available for use with asthma patients and their families.
?? Both the Lung Association and the Asthma and Allergy Foundation offer summer camps for children with asthma. At the camps, children learn about asthma and how to manage it.
?? The Environmental Protection Agency has produced a video on environmental triggers and asthma, and it is available for use with patients/families.
St. Joseph Hospital hosts an annual Pediatric Asthma Fair (held February 25 this year) that offers activities for children and their families that promote an understanding of how to manage asthma. Various organizations have booths at the Fair with additional information. The ALA offers nurse education on asthma during the fair. Attendance runs 500-700.

The Asthma and Allergy Foundation annually offers a Family Asthma Education Day (held March 3 this year at First Baptist Church in Grandview). Classes and activities are offered for pre-school children, elementary students, adolescents, and adults on such things as using peak flow meters and how to control asthma. Child care is available during the day.

6. Support from insurers is needed to promote optimal asthma care and to cover services, equipment, and medications necessary for proper asthma care and appropriate self-management. Ideally, common data would also be collected by insurers and health plans to result in a common metro-wide data base that would promote an understanding of the magnitude of the asthma problem in Kansas City and efforts to address it.

Types of Activities: Common approaches by all health plans to asthma best practices among participating providers are needed.

Status:
A workgroup sponsored by the Metropolitan Health Council and consisting of representatives from health plans offering products in metro KC is finalizing a single synopsis of the NIH Asthma Management Guidelines for all plans to distribute to their providers. A follow-on group of health plan medical directors will explore development of a reimbursement pilot project to pay for patient asthma education in physician offices. Family Health Partners has recently implemented such a reimbursement program. In addition, a recent award to Family Health Partners from the Robert Wood Johnson Foundation will allow them to further develop their reimbursement project.

7. Environmental assessments and remediation in homes, schools, and workplaces are needed to promote indoor air quality and thereby help prevent asthma and asthma flare-ups.

Types of Activities: This should include on-site analysis by trained personnel followed by implementation of recommended remediation activities.

Status: Children’s Mercy Hospital has a program to perform environmental assessments in homes of asthma patients. Recent grants from the CDC and the Robert Wood Johnson Foundation will allow CMH to expand their in-home and community work aimed at removing environmental asthma triggers. The Environmental Protection Agency has developed a kit that may be used to assess indoor air quality at schools but such a program has not been undertaken in metro KC area schools.
8. A community-wide tracking and surveillance system is needed to assess community progress in addressing asthma incidence and costs and to promote optimal care and follow-up.

Types of Activities: An ideal system should track asthma-related ER visits, inpatient stays, deaths, and possibly school-days and work-days lost.
Status: An ideal tracking system does not exist anywhere in the U.S. at a state or local level. (If both Missouri and Kansas health departments and Professional Review Organizations could work with area providers, health departments, and insurers to identify a common data set and begin collecting such information, this would be the best approach.) At this time in Kansas City, Dr. Jay Portnoy at Children’s Mercy Hospital has taken initial steps to develop a database to monitor system use by asthma patients of CMH and Truman Medical Center. He also follows asthma patient use of services in all health systems by persons enrolled in Family Health Partners, the CMH/Truman Hospital-sponsored managed care organization. A Robert Wood Johnson Foundation grant to Family Health Partners will enable the FHP/CMH/Truman team to further develop their asthma registry. Other hospitals in the area, including KU Med Center, track similar information on their asthma patients.

9. An ongoing, identifiable community leadership group is needed to coordinate metropolitan Kansas City’s attack on asthma.

Types of Activities: The Kansas City area could use an approach similar to that found in many other communities across the U.S. where community asthma coalitions have been created and are working to foster a variety of approaches to address asthma in their areas.
Status: Although there is a Kansas Asthma Coalition in which area providers and other interested parties participate, there is no locally sponsored group that is working to address asthma issues specific to the metro Kansas City area on both sides of the state line. (Ideally, public health leadership should spearhead the creation of this group and involve a broad-base of community players as participants in it.)

How do we promote optimal asthma prevention, diagnosis and management in metropolitan Kansas City?

It is important that the current activities continue (assuming they can demonstrate positive outcomes) and be repeated and expanded as there is always a need to deliver messages more than once, provide updates with new information on asthma, and reach additional target groups whether these are other physicians with up-to-date information on asthma or more sites for population-based asthma screenings. To truly improve the asthma situation in metro Kansas City, we will need to be in this game for the long term.

To be able to expand and enlarge current efforts will require additional resources. Where this means money, area funders are urged to give serious consideration to requests for needed funding.

In addition to the continuation and expansion of current programs and activities, the creation of a Kansas City Asthma Coalition is of primary importance. Its role would be
not only to support existing worthwhile activities but to look systematically at what else needs to be done. For example, many of the “stand alone” programs and activities that currently exist could likely benefit from working with other “stand alone” efforts. A coalition could provide the impetus to bring these players together. Further, if beneficial programs are being offered in certain geographic areas but are needed in other areas, the coalition could encourage the development of such programs. A local coalition could also serve as the area’s contact point for the Kansas and Missouri state Asthma Coordinators that are funded by the CDC and work at the state-level to improve the asthma situation statewide. The local coalition could also advocate with the Asthma Coordinators for the development of statewide data systems that will provide information essential to understanding local asthma trends.

Members of the Metropolitan Health Council hope that this report will be useful to area residents and community leaders in furthering their understanding of asthma issues and activities in our community. The Council also hopes that the report will serve as a catalyst for further attempts to improve the asthma situation in our area.