By SUSAN C. THOMSON, M.A., M.B.A.

A mysterious scourge sickened residents of fifth century B.C. Athens. Bubonic plague swept London in 1665. New York City suffered deadly contagions of yellow fever in the 1800s. Polio once aroused dread, summer after summer, across 20th-century urban America. With densely packed populations, where communicable diseases can fester, cities have for centuries been hazardous to human health. Although modern medicine has banished many of the infectious scourges of old, new ones like HIV/AIDS have come to town in tandem with epidemics of non-communicable diseases like diabetes and hypertension. Urbanites are also at above-average risk of violence, accidents, polluted air and water and shortages of green space and nutritious food — all with potentially unhealthy consequences, especially for the poor.

Considering such realities, the World Health Organization (WHO) has termed the world’s rapid urbanization “a major health challenge of the 21st century.”

The challenge has been taken up by the emerging interdisciplinary field of “urban health,” an offshoot of public health with elements of epidemiology, urban planning and sociology — all brought to bear on the study and promotion of health in impoverished urban communities.

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released its landmark Report of the Task Force on Black and Minority Health, documenting above-average rates of infant mortality and deaths from cancer, cardiovascular disease, stroke, chemical dependency, diabetes, homicides and accidents among minorities, blacks especially, when compared with whites.

But where were these people living? The report didn’t say. Numerous federal reports over the years since have followed suit, documenting persistent, worrisome health disparities but casting them chiefly in racial rather than in geographic terms. One could only assume these long-standing gaps were to some extent — perhaps a significant extent — an urban health issue.

Health, United States, 2010, the Centers for Disease Control and Prevention’s latest annual compendium of health statistics, published in February 2011, confirms that to be the case. Three of its 563 pages are devoted to data showing that in small, medium and large urban counties alike, death rates are substantially higher for blacks than for whites and the general population. In the central areas of large urban counties, for instance, for every 100,000 in population, 994.2 African-Americans died from 2005 to 2007, the latest years tracked, compared with 753.3 for the general population and 729.7 whites. For black men, the urban death-rate disparities are even greater.

The data stop short of indicating what diseases are taking these urban
black lives at these higher rates, but death rates alone are telling. Although some deaths are accidental, the great majority of people die because they are sick. That makes death rates “the most important measure of the health of any place,” said Patrick Remington, MD, professor in the University of Wisconsin’s Population Health Institute and director of the groundbreaking County Health Rankings project.

The rankings are based on a formula that combines death rates with people’s self-reported physical well-being to rate the overall health of population groups. The institute developed the measure and has used it annually since 2003 to rank residents’ health in Wisconsin’s 72 counties. With funding from the Robert Wood Johnson Foundation, the institute has gone on to twice apply the same model to states and their counties nationwide. Results of the second annual rankings were published online in March 2011. Search www.countyhealthrankings.org by state to see how its counties stack up against one another. Click on any county to see how it fares on some two dozen specific indicators of its residents’ health.

The rankings detail on a larger scale than ever before how Americans’ health varies from place to place. The ambitious, overarching goal has been to give communities bases for developing policies and programs to improve local health. “Our focus is not specifically on urban health,” said deputy rankings director Bridget Booske. But key perspectives on urban health can nonetheless be taken away from the findings.

AVERAGES DECEIVE
The big picture is brightly upbeat: When the researchers compared all of the counties with one another, Booske said, they discovered that, “contrary to common belief,” people living in the nation’s more urban counties were on average in better health than their rural counterparts.

But as Booske conceded, averages can be deceptive. That is especially true of cities, magnets for the upwardly and downwardly mobile alike, dynamic places with ever-shifting populations consisting of various racial and ethnic groups, stable long-term residents and transient new arrivals, the richest of the rich and poorest of the poor, the healthiest of the healthy and the sickest of the sick.

How sick is apparent from a closer inspection of the rankings, specifically in the dismal standings of those few cities or parts of cities that either are or closely approximate counties in themselves. In their respective states, Baltimore, Philadelphia and the Bronx show up dead last in health. New Orleans comes in 60th out of 64 Louisiana counties. Michigan’s Wayne County, dominated by Detroit, ranks 81st out of 82. All show above-average rates of smoking, adult obesity, excessive drinking and sexually transmitted diseases, although the rates vary.

Such city-level snapshots are also averages, masking internal variations. “In many respects, some of the greatest health disparities we are witnessing occur within an urban environment,” said Shan Mohammed, MD, who directs the three-year-old master’s program in urban health at Northeastern University in Boston, one of the few of its kind in the country.

It’s often said in the field that all urban health is local, meaning that it’s all about those disparities within. Urban health asks what conditions are and then what can be done to improve them at the most local levels possible — neighborhoods, blocks and streets.

ANALYZING THE DATA
Getting there is easier said than done. “One of the challenges we face [in urban health] is, how do you get data down at the community level?” said Jo Ivey Boufford, MD, president of the New York Academy of Medicine, which does research on urban health and promotes programs to improve it, especially in New York City. “It’s very hard to collect that kind of information,” Boufford said.

The know-how exists to do it, however. “We have the technology to really do sophisticated epidemiological work down at the street level,” said Mohammed. But, he added, with many public health departments hurting for money, there can be an “issue of funding.”

With funding from outside sources, including from hospitals, cutting-edge urban-health work has been taking place on some of the “sickest” streets of Milwaukee and Chicago. In both cities, researchers collect and analyze neighborhood health statistics, revealing pockets of disease and disparity. Improvement efforts have followed, tailored to specific place and problems.

In Milwaukee, the work has been taking place under the aegis of the Center for Urban Population Health — a partnership of the University of
Wisconsin School of Medicine and Public Health, the University of Wisconsin-Milwaukee’s College of Health Sciences and Aurora Health Care, a network of 15 nonprofit Wisconsin hospitals.

The Milwaukee-based center was created in 2001 to do community-based, urban-health research and education. In the years since, it has applied its expertise to one community in particular — its hometown. The resulting Milwaukee Health Report, produced annually since 2009 in conjunction with the city’s health department, is state-of-the-art, an example for other cities, said the center’s director, Ron A. Cisler. “I don’t know of any other city that has done anything like this in such detail,” he said.

Investigators have begun each year’s analysis by categorizing the city’s 29 ZIP codes as low, middle or high in socioeconomic status based on the education and income of its residents. Using health data collected from each ZIP code, they then compared the three socioeconomic groups with each other and with Wisconsin and national averages in several ways.

The lower group has consistently come out as least healthy, with, for example, the city’s highest rates of premature births and deaths, infant mortality, chlamydia, HIV infection, teen births, lead poisoning, smoking and obesity and the lowest rates of routine care, vaccinations, cancer screenings and health insurance. The higher group has been almost the mirror opposite.

By almost all of the reports’ gauges, the lower group also has shown up sicker and the higher group healthier when compared with state and national norms.

POVERTY, RACISM KEY

Cisler said the reports have confirmed “the strong association of poor health and poverty.” Steve Whitman, Ph.D., a biostatistician and the founding director of Chicago’s Sinai Urban Health Institute, puts the connection even more bluntly. “The causes [of urban pathology] are poverty and racism,” he said. “There are a million other things that are subsumed under those.”

In face-to-face interviews, institute researchers posed a list of more than 600 health-related questions to a statistically representative sample of 1,700 adults and children in the hospitals’ two immediate communities and, for comparison, four others.

The answers revealed clusters of diabetes, asthma, depression, obesity, HIV/AIDS, high blood pressure and arthritis as well as unhealthy behaviors like smoking, bad eating habits and physical inactivity, particularly in lower-income Mexican, Puerto Rican and African-American areas. Residents of those areas also were found especially likely to lack health insurance.

Amassing the data is only a start, “a way to understand what is going on in the communities we serve and how to improve health there,” Whitman said. Using a succession of government and private grants and partnering with community organizations, the institute has gone on to launch education programs on asthma, obesity, diabetes, breast cancer and smoking in the specific neighborhoods where those problems are concentrated.

The Center for Urban Population Health’s Milwaukee reports have spurred initiatives in that city to reduce homicides and teen pregnancy and raise rates of colorectal cancer screening.

With no less urgency than in Milwaukee and Chicago, urban health departments across the country are campaigning against particular health problems that they have succeeded in identifying, with or without benefit of in-depth analyses. Their targets are typical of the ills all too familiar to urban health experts.

For example:
- Diabetes, obesity and depression in Los Angeles County
- Childhood diabetes and asthma in Detroit
- Sexually transmitted diseases in Miami-Dade County
- STDs, HIV/AIDS and hepatitis C in the District of Columbia

In the District of Columbia, these diseases thrive in the shadow of some fine hospitals,
Food Deserts: Where Poor Nutrition Thrives

If we are what we eat, then too many Americans are French fries, sugary soda and cupcakes, as opposed to carrots, bananas and whole-grain bread. The national diet stands condemned of supersizing the population, causing an epidemic of obesity along with such life-threatening side effects as diabetes and hypertension.

Some people may eat high-fat, high-sugar, empty-calorie foods out of little more than habit or choice. Others are seen as having no choice because they live in what have become known as “food deserts”—neighborhoods where fresh, healthy foods are in short supply or not available at all.

There is, fortunately, some good news on the horizon, thanks to a First Lady’s strong interest and a variety of initiatives.

“We must deal with the predatory and pervasive environment of junk food and the factor that it’s fast, cheap, easy and tasty.”

MARI GALLAGHER

The concept of food deserts has been around for about 20 years and has been gaining currency in tandem with rising public consciousness of the effect — for good or ill — of eating habits on health. Besides First Lady Michelle Obama and her campaign against childhood obesity, no one has done more to raise awareness than Mari Gallagher, a Chicago-based researcher and consultant specializing in food and other grassroots community issues.

Gallagher’s 2006 map of Chicago food deserts is credited with spurring Congress two years later to ask the U.S. Department of Agri-
wastelands.aren't necessarily food
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to Latino, white and neighborhoods
with higher incomes. Unsurprisingly,
food scores for the city's predominantly
middle- to upper-class Upper East Side,
calculated for comparison's sake, were
higher yet. The findings were published
in 2011.
By then, New York had, for two
years, been offering zoning conces-
sions and financial incentives like tax
abatements to food stores opening in
underserved neighborhoods.
Other cities, meanwhile, have been
coming up with their own special ini-
tiatives to bring healthy food to areas
starved for it. Philadelphia, for example,
in 2000 had the second lowest number
of food stores per capita of 21 major
U.S. cities. The city has since enrolled
500 corner stores in a program to stock
more fruits and vegetables. In 2011,
New Orleans set aside $14 million for
low-interest loans to food retailers
putting new grocery stores in areas
without any.
The First Lady has called out food
deserts as part of her “Let’s Move!”
campaign for healthy eating and
against childhood obesity. In July 2011,
her effort bore its biggest fruit to date
when retail executives joined her at
a White House press conference to
announce separate but complementary
plans to, in effect, irrigate food deserts
over the next five years.
Wal-Mart Stores Inc., which has
opened 218 stores in food deserts in
the past four years, pledged to open or
expand 500 more. Walgreen Co. agreed
to make fresh produce available at
1,000 of its more than 7,000 pharma-
cies. SuperValu Inc. promised to open
250 of its Sav-A-Lot stores in shortage
areas. A number of regional grocers
announced similar moves.
Grocers that make promises like
these are “serious about locating in
food deserts,” Gallagher said. “But we
have to keep in mind that these sites
ultimately need to work for the gro-
too, so there likely will be a few
attempts that won’t 100 percent pan
out.”
When they do pan out, there
may follow a horse-to-water kind of
dilemma: You can bring spinach to peo-
ple, but you can’t make them eat it. Bad
food habits can be hard to break. Adver-
tising for junk food can undermine
the best intentions. New food “oases”
may yet remain “food swamps.”
The food swamp term has been
coined to make the point that food des-
erts aren’t necessarily food wastelands
— instead, what ails them is as much
abundance of the bad as it is scarcity of
the good.
“It’s not that there’s no food there,” said Jonathan Fielding, MD, director of
the Los Angeles County Department
of Public Health and a subscriber to
the swamps notion. “There are a lot
of places selling food in one form or
another . . . food that is high in salt, fat
and sugar and drinks that are super-
sized.” Pursuers may include vending
machines, gas stations, drug stores,
convenience stores and — especially —
fast-food restaurants.
Some critics have gone so far as to
advocate that cities limit the number
of fast-food and convenience stores
in food-poor areas. Along those lines,
the Los Angeles City Council in 2008
imposed a year-long moratorium on
new fast-food restaurants in low-
income south Los Angeles. Fielding sug-
gested a variation on that move. “You
could, as a condition of allowing an
organization to set up a new fast-food
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about what kinds of foods the outlet
is going to serve and how it’s going to
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“The bottom line is, we cannot
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gov/data/fooddesert/fooddesert.html),
the department put online in May 2011.
Gallagher has reservations about
that description. Food deserts aren’t
exclusively low-income, big stores
aren’t the only sources of healthy food,
and census tracts don’t provide a close
eough picture, she contends. Her
organization has developed its own
food-desert metric with a perspective
from more of a block level.

A group of researchers from New
York City health offices also crafted
their own “food desert index” for a
block-to-block study of food outlets and
types of food and beverages available
to residents in low-income Brooklyn
and Harlem neighborhoods with high
levels of disease and early death. They
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black neighborhoods and higher ones
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including affiliates of Georgetown, George Washington and Howard universities. It’s the same story in many other major cities as well: the sickest, poorest people live within easy reach of some of the nation’s top health care facilities. Problem is, the twain may meet only in emergency rooms, providers of first and last resort for many of the urban poor.

**URBAN HOSPITALS AT RISK**

Their options are becoming fewer, however. According to “Factors Associated With Closures of Emergency Departments in the United States,” by Renee Y. Hsia et al., published in the May 18, 2011, *JAMA*, the number of hospital-based emergency departments at “non-rural” U.S. hospitals declined to 1,779 in 2009 from 2,446 in 1990 — a drop of 27 percent overall — while emergency room visits were on the rise at a rate of about 3 percent a year.

The study found emergency departments at for-profit, small and financially weak hospitals and those with high shares of minority, poor and uninsured people to be the most vulnerable. Ten percent of the shuttered departments were at “safety-net” hospitals, those open to all patients, typically dependent on inadequate Medicaid and Medicare reimbursements and often not reimbursed at all.

Ellen Kugler, executive director of the National Association of Urban Hospitals, an organization of non-profit safety nets, said many such hospitals are at financial risk. If they can’t cover costs, it will be hard for them to stay open, she said.

New York’s St. Vincent’s Hospital, once an association member, stands out as a worst-case, urban-safety-net-hospital scenario. Renowned for charity care but finally crushed by more than $1 billion in debt, the 160-year-old institution filed for bankruptcy and shut its doors in 2010. It was the city’s last full-service Catholic hospital, and its demise left its displaced patients and nearby hospitals scrambling to regroup.

The *JAMA* article describes emergency room closings as setting off much the same kind of unsettling readjustments, with “profound repercussions for a community.” These include more crowding at surviving facilities, longer wait times and the likelihood of some patients leaving without being seen and others forgoing care altogether because they must travel farther for it. Such outcomes “adversely affect access to emergency care for everyone — insured and uninsured alike,” the authors write.

In the view of leading experts in population health, urban or otherwise, health care access is a matter of more than just patients’ physical proximity to providers. The Population Health Institute’s county rankings (countyhealthrankings.org) describe the bars to adequate health care as also including poor understanding about preventive care, long waits for appointments, low health literacy and the high deductibles and co-pays of many insurance plans. Boufford adds language barriers to the list of impediments.

For all that, the experts also see access as far less important than the general public and even some health workers might at first imagine.

**DETERMINANTS OF HEALTH**

The county health rankings assign access an even lower value, combining it with quality of care into a single category seen as accounting for only 20 percent of health. Otherwise, the scale attributes 10 percent of health to environmental factors like air quality and the availability of recreation and healthy food and 30 percent to health habits such as smoking and exercise. The largest category, credited for 40 percent, includes employment, income and education — the so-called social and economic determinants of health.

The *Milwaukee Health Report* borrows those same four general categories from the county rankings without assigning percentages to them, but Cisler agreed with the larger study’s overall weightings. “It is commonly thought that clinical care accounts for only 20 percent, whereas other factors such as environment, behaviors and socio-economics — that is, public health — account for 80 percent of a person’s health,” he said.

Definitions of access differ. The county health rankings include in it the ratio of population to
ferred “universal health care so that everybody has all the access they need.”

Meanwhile, the world of urban health is growing as the world itself grows rapidly more urban. The WHO projects that 70 percent of the planet’s people will be living in cities by 2050, up from around 50 percent in 2000. The United States is tracking with the trend, the 2010 census having found 83.7 percent of the population living in the nation’s 366 metropolitan statistical areas, defined as those containing an urban core of 50,000 or more people.

“These gaps in health care quality and availability remain. They are detailed in the 286-page National Healthcare Disparities Report for 2010, published in March 2011, the latest in a series of such HHS reports issued every year since 2003. ‘Health care quality and access are suboptimal, especially for minority and low-income groups,’ the report says, and disparities among ‘residents of inner-city and rural areas’ merit ‘urgent attention.’

Unlike rural areas, though, cities have at their disposal some unique tools for healing their health divisions. Among them, Boufford counted their abilities to set health agendas, regulate, tax and do pilot projects. ‘The city is really an excellent unit for promoting healthy activity,’ she said.

SUSAN C. THOMSON is a freelance writer in St. Louis.

primary care physicians. The Milwaukee reports calculate it in part by residents’ rates for various vaccinations and cancer screenings. Both scales also factor in health insurance, the one access indicator that comes up in virtually all assessments of urban health.

The Sinai survey asked respondents whether they had health insurance. So do the telephone surveys the New York City Department of Health and Mental Hygiene conducts every year to develop health profiles of the city’s 42 different neighborhoods. Of the 125 questions about respondents’ health and health behaviors, four fall under the heading of access: Do you have a personal physician? Do you get needed medical care? Do you have insurance? Have you had it all year long?

To questions like those last two, urbanites are more likely than their suburban and country cousins to answer “no.” In 2009, the last time the U.S. Bureau of the Census counted, 19,270,000, or 38 percent, of the nation’s 50,674,000 uninsured people lived “inside principal cities.”

REFOCUS WITH REFORM

Health care reform promises to insure almost everyone. Kugler said that could prove “a huge advantage” for urban safety-net hospitals. She worries about scheduled cuts to Medicare and Medicaid reimbursements and to the special federal “disproportionate share” payments safety-net hospitals like her association’s members get as compensation for the charity care they do.

And how will reform otherwise play out for urban health? “We don’t know,” said Mohammed. “I think there still is an awful lot of uncertainty. My hope is that it will place the deserved focus on prevention.”

From Cisler’s perspective, reform already has fallen short by focusing too much on health systems and too little on health itself. “The discussion should have been about how we can promote the chance for everybody to be healthy,” he said. For a solution, Whitman said he would have pre-