

## FOR THE RECORD

## United States health care system to focus on prevention

The United States government hopes to improve its citizens' quality of life and reduce health care costs by focusing more effort and resources on preventing disease and injury, as well as creating healthier homes and workplaces.

The "National Prevention Strategy: America's plan for better health and wellness" also aims to expand preventive services in clinical and community settings, empower people to make healthy choices and eliminate health disparities ([www.healthcare.gov/center/councils/np-hpphc/strategy/report.pdf](http://www.healthcare.gov/center/councils/np-hpphc/strategy/report.pdf)).

"This National Prevention Strategy, called for under the Affordable Care Act, will help us transform our health care system away from a focus on sickness and disease to a focus on prevention and wellness," Department of Health and Human Services Secretary Kathleen Sebelius stated in a press release ([www.hhs.gov/news/press/2011pres/06/20110616a.html](http://www.hhs.gov/news/press/2011pres/06/20110616a.html)). "We know that prevention helps people live long and productive lives and can help combat rising healthcare costs."

The average US citizen can expect to live 78 years but will spend only 69 of those in good health, according to the report from the National Prevention Council, which is composed of 17 federal departments and agencies.

The economic savings of improved prevention in health care would be substantial, the plan contends. A 5% reduction in the prevalence of hypertension, for example, could save US\$25 billion over five years. Overall, a dollar invested in preventive services equals six dollars in health care savings, Senator Tom Harkin (Democrat, Iowa) noted during a Webcast speech following the report's release on June 16. Currently, however, the US spends only four cents of each health care dollar on such services.

The report argues that substantial health benefits will accrue from efforts to building healthier and safer environments, in which the water and air are clean, and people can walk through communities without experiencing violence. "Healthy and safe community environments are able to detect and respond to both acute (emergency) and chronic (ongoing) threats to health," the report states.

Providing preventive health services within the community, including homes, schools and workplaces, is also necessary, the report adds. For example, "some estimates suggest that if screenings were implemented at recommended levels, more than 18,000 lives could be saved each year." It also argues that community health workers must do more to help patients overcome barriers to care, such as lack of transportation and child care.

The report also calls on communities to help eliminate health disparities within subgroups of the population, particularly those who are socially or economically disadvantaged. "Low-income and minority neighborhoods are less likely to have access to recreational facilities and full-service grocery stores and more likely to have higher concentrations of retail outlets for tobacco, alcohol, and fast foods," it states.

The government will also increase its focus in seven key areas to reduce the leading causes of preventable death and major illness: tobacco use; drug and alcohol abuse; healthy eating; active living; injury- and violence-free living; reproductive and sexual health; and mental and emotional well-being. — Erin Walkinshaw, Ottawa, Ont.

## Canadian stroke care in need of overhaul

Canada could shave \$15.4 billion (in inflation-adjusted dollars) from its health care bill and avoid \$20.7 billion in indirect costs between

2011 and 2031, while preventing roughly 1000 premature deaths annually, by improving stroke care, according to a Canadian Stroke Network cost-analysis.

Optimal stroke care, including diagnosing and treating patients with transient ischemic attacks more rapidly, faster treatment of stroke with thrombolytic therapy, more treatment of patients with stroke by comprehensive stroke units within hospitals and improved "early home-supported discharge" would yield 6.2 million fewer acute care days and 18.2 million fewer residential care days, according to the study, "The Quality of Stroke Care in Canada" ([www.canadianstrokenetwork.ca/wp-content/uploads/2011/06/QoS-EN1.pdf](http://www.canadianstrokenetwork.ca/wp-content/uploads/2011/06/QoS-EN1.pdf)).

In arguing for vast improvements in Canadian stroke care, the report states that stroke remains the "most impactful" of chronic diseases in the country and one of the heaviest drains on health care resources. "Each year there are an estimated 32,081 hospitalizations for stroke care, 28,345 for incident stroke, 493 for readmissions, and 3,243 for recurrence. This cohort of stroke patients is associated with the use of over 639,000 acute care days and almost 4.5 million residential care days. In addition to this use of direct health care resources, the cohort is associated with 7,111 deaths in hospital and approximately 286,000 quality-adjusted life years (QALYs) lost."

Other key findings of the report included:

- "The risk factors for stroke need to be better controlled: 64% of patients with stroke have hypertension, and more than one-third have experienced a previous stroke or transient ischemic attack (TIA).
- "Time is brain" yet many don't consider stroke a medical emergency: Two thirds of the people who have an ischemic stroke do not arrive in time at an appropriately prepared hospital to receive optimal care.
- When patients arrive at hospital,

they are not treated quickly enough: Only 40% of patients who arrived within 3.5 hours of symptom onset received a CT or MRI scan within an hour of arrival. The median door-to-needle (arrival to administration) time for tPA [tissue plasminogen activator] was 72 minutes.

- Telestroke could save lives, but it is not being widely used: Telestroke presents an opportunity for those who live in rural settings or who are admitted to smaller hospitals, yet less than 1% of stroke patients are benefiting from this service.
- Patients need greater access to stroke units: Only 23% of stroke patients in Canada are treated in a specialized stroke unit while in hospital. This number is substantially lower than in other countries.
- Other areas of stroke care could be improved: Of concern is the low level (50%) of documented dysphagia screening to assess swallowing difficulties and the fact that only 22% of the audited hospitals were affiliated with a secondary prevention clinic.
- Access to appropriate rehabilitation is vital, yet not well monitored: Patients with moderate to severe stroke (30-40% of all cases) benefit most from rehabilitation in a specialized facility. However, only 37% of all moderate to severe stroke cases are discharged to a rehabilitation facility. In general, there is a lack of reliable information on the quality of inpatient and outpatient rehabilitation.”

The report also says programs to improve patient awareness about stroke symptoms need to be bolstered. Among recommendations for health care providers:

- “Assess your patients’ blood pressure regularly at all appropriate visits. Encourage and support patients to adopt healthier lifestyles and follow-up with them regularly. Use risk assessment tools to educate your patients on their risk of stroke.
- Ensure emergency protocols for stroke are in place within your health region and organize the emergency room to achieve door-to-needle times of less than one hour for all those eligible for tPA.

- Take advantage of existing Telestroke initiatives within your province or health region. If the technology exists, use it.
- Ensure that all hospitals that provide tPA have a stroke unit. If a stroke unit exists, ensure it has the necessary capacity to handle the volume of strokes within the hospital or region.
- Work with patients to develop personalized rehabilitation plans. Document rehabilitation practices including timeliness and type of rehabilitation therapy offered. Be aware of the community services available for patients upon discharge.
- Have your hospital assessed by Accreditation Canada for Stroke Distinction, based on best practices and defined standards of care practices.” — Wayne Kondro, *CMAJ*

### Climate change poses “significant concern” to water safety, WHO warns

**A**nticipating and planning for greater extremes of weather due to climate change will be “key” to ensuring the future supply and safety of drinking water worldwide, suggest new water quality guidelines by the World Health Organization (WHO).

The revised WHO “Guidelines for Drinking-water Quality,” which often form the basis for national laws and regulations, warn that greater extremes of climate “should be expected” and will require a “paradigm shift” in water management, including changes in storage and treatment, to ensure the future safety of the world’s drinking water ([http://whqlibdoc.who.int/publications/2011/9789241548151\\_eng.pdf](http://whqlibdoc.who.int/publications/2011/9789241548151_eng.pdf)).

“Countries have an opportunity to make substantial public health progress by setting and applying effective and appropriate standards for ensuring safe water,” WHO director for public health and the environment Dr. Maria said in a press release ([www.who.int/water\\_sanitation\\_health/events/press\\_backgrounder/en/index.html](http://www.who.int/water_sanitation_health/events/press_backgrounder/en/index.html)). “Shifting to a primary prevention approach is more effective, costs less,

and gives us the flexibility to deal with new pressures threatening water safety such as climate change, population growth, and urbanization.”

Each year, some two million people die from waterborne diseases, and billions more suffer illnesses from drinking poor-quality water, the WHO estimates.

Greater frequencies of drought, heavy precipitation and violent storms, as well as changes in sea levels caused by climate change, are set to jeopardize both the supply and quality of drinking water around the world, according to the guidelines. Increases or decreases in runoff may also affect the “sediment loading, chemical composition, total organic carbon content and microbial quality” of drinking water supplies.

Such climate extremes will pose a particular threat to water safety and availability in areas with growing populations, the guidelines warn, as well as those where existing water supplies are already stressed, such as parts of the Mediterranean, the Middle East, Australia and southwestern United States.

To meet the “growing challenge” posed by these changes, the WHO recommends that water treatment systems be upgraded and obtain greater storage capacities to cope with increased microbial and chemical contents in water supplies. New sources of water may also need to be developed, such as recycled wastewater or desalinated seawater. — Lauren Vogel, *CMAJ*

### Access to justice for women still a “hollow promise,” UN Women reports

**M**ore countries have gender equality laws on their books than ever before, but most only amount to paper promises as millions of women still lack access to justice and adequate reproductive health services, according to the first major report by UN Women, a new United Nations women’s agency.

Although equality between women and men is guaranteed in the constitutions of 139 countries and territories, the report, “Progress of the World’s Women: In pursuit of justice,” argues such statutes have little impact on the

lives of women, many of whom continue to be “denied control over their bodies, denied a voice in decision-making and denied protection from violence” (<http://progress.unwomen.org/pdfs/EN-Report-Progress.pdf>).

“In rich and poor countries alike, the infrastructure of justice — the police, the courts and the judiciary — is failing women, which manifests itself in poor services and hostile attitudes from the very people whose duty it is to meet women’s rights,” the report states. “In every region, there are laws that discriminate against women in relation to property, the family, employment and citizenship.”

Despite progress in some countries, the failure of many to make reproductive health care available and accessible continues to pose a “severe restriction” to women’s rights and in some cases results in injury or death, the report finds. Moreover, some 20 million unsafe abortions are carried out annually as a result of the criminalization or restriction of abortion in many countries, killing an estimated 68 000 women each year.

Legal reform is only the start, the report argues — laws must be implemented to translate into true equality.

Across the board, existing laws are inadequately enforced, the report finds. Many women shirk away from reporting crimes because of social stigma, and the costs and practical difficulties of seeking justice can be prohibitive.

To break down these barriers to justice, the report recommends governments invest in “one-stop shops,” which bring together justice, legal and health care services in one place to cut down the steps a woman has to take to access justice. The report also calls on UN member states to employ more women at the frontlines of justice, particularly in police forces, provide legal aid for women and create specialized courts that bring justice to women liv-

ing in remote areas where levels of sexual violence are high.

“The foundations for justice for women have been laid: in 1911, just two countries in the world allowed women to vote — now that right is virtually universal. But full equality demands that women become men’s true equals in the eyes of the law — in their home and working lives, and in the public sphere,” Michelle Bachelet, under-secretary-general and executive director of UN Women, said in a press release ([www.unwomen.org/2011/07/justice-still-out-of-reach-for-millions-of-women-un-women-says/](http://www.unwomen.org/2011/07/justice-still-out-of-reach-for-millions-of-women-un-women-says/)). — Lauren Vogel, *CMAJ*

## Snapshots of children’s health in the United States

**M**ore adolescents in the United States are developing asthma and using illicit drugs, though fewer are getting pregnant or dying from injuries, according to a report by the Federal Interagency Forum on Child and Family Statistics, a working group of federal agencies and private research partners. The report, “America’s Children: Key national indicators of well-being, 2011,” presents the most recent statistics for children in seven key areas: family and social environment, economic circumstances, health care, physical environment and safety, behavior, education and health ([https://extranet.nichd.nih.gov/childstats/americas\\_children\\_2011\\_508.pdf](https://extranet.nichd.nih.gov/childstats/americas_children_2011_508.pdf)).

The report states that the number of US children with asthma has grown steadily over the past decade, reaching 10% in 2009. This despite the number of children living in areas with at least one pollutant exceeding air quality standards decreasing from 69% in 2008 to 59% in 2009.

Illicit drug use among eighth graders

has also increased slightly, from 8% in 2009 to almost 10% in 2010. This is still much lower, however, than the peak rate of 15% in 1996.

The report also indicates that the rate of girls aged 15–17 years having babies, after a brief increase from 2005–2007, has decreased for two consecutive years. The most recent statistic, from 2009, was 20.1 per 1000 adolescents, lower than the 2008 and 2007 rates of 21.7 and 22.1 per 1000, respectively. Adolescent birth rates began declining in 1991–1992.

Also declining is the injury-related death rate for youth aged 15–17 years. In 2008, the rate was 44 per 100 000, falling to 39 in 2009. The report notes that almost 75% of adolescent deaths result from injuries, the most common being deliberate or accidental contact with a person or object (assaults, sports injuries, etc.), followed by falls and traffic accidents.

This year’s report also includes a special feature on adoption. The most recent statistics suggest that how a child is adopted could affect their behaviour. For example, 83% of children adopted from foster care exhibited positive social behaviour, compared to 91% adopted privately. Children adopted through foster care were also found to have more moderate to severe health problems, the most common being a learning disability.

“This report documents some significant changes in several key areas,” Edward Sondik, director of the Centers for Disease Control and Prevention’s National Center for Health Statistics, stated in a press release ([www.nih.gov/news/health/jul2011/nichd-07.htm](http://www.nih.gov/news/health/jul2011/nichd-07.htm)). “Preliminary data show significant declines in infant mortality and in fatal injuries to teens. These are very interesting snapshots of children’s health that we have in this report.” — Erin Walkinshaw, Ottawa, Ont.

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