

Measuring Up: A Health Surveillance Update on Canadian Children and Youth

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Measuring Up: A Health Surveillance Update on Canadian Children and Youth (1) is a timely, well presented and colourful publication produced by staff at the Laboratory Centre for Disease Control (LCDC), an arm of the Health Protection Branch of Health Canada. Within only 59 pages with little fine print, the contents focus to a considerable extent on health surveillance information from the various bureaus within the LCDC. The following six topic areas are highlighted: infant health, cancer, vaccine-preventable diseases, respiratory health, child injury, and sexual health with reference to the human immunodeficiency virus (HIV) and AIDS. At the end of the section about sexual health, reference is made to a future street youth project.

The material provided puts in perspective future challenges faced by children and youth under 20 years of age within the overall Canadian health picture. The update records great improvements in some areas – infant mortality rates and cancer treatment results are two examples. Progress is also seen in recently recorded reductions in automobile deaths and injuries, and other areas.

The publication's contents appear to be most useful for physicians in reporting the incidence of certain health problems in Canada, while highlighting areas for potential improvement. As with many such publications, the personal element is missing because individual cases are not presented or discussed. It becomes a challenge for the reader to picture the effect of a particular disease on a child or family when the publication's focus is primarily on reporting statistics and disease prevalence.

Some of the areas that are discussed and highlighted in this update, while nevertheless important, seem to be less significant today. For example, the section on infant walker injuries properly notes the Canadian success in reducing walker-related emergency room visits. In 1997,

132 walker-related injuries were documented by paediatric emergency departments from across the country and the few general hospitals associated with the LCDC's injury surveillance program, Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP). Clearly, the voluntary withdrawal of infant walkers from sale in Canada has had a major effect on reducing injuries. However, compare this accomplishment with the 543 children whose injuries led to death due to motor vehicle crashes in a single year in 1996; the relative significance of the two areas is quite different, but the space devoted to the two subjects in the report is similar.

The update highlights problem areas that require action; these include medical conditions for which physicians have been advocating strongly for change in disease reduction over a number of years. For example, while the number of neural tube defects in newborn infants in Canada is decreasing, several other countries still perform much better than Canada in terms of prevention. Factors such as abortion incidence and patient acceptance, as well as the degree of folic acid and vitamin supplementation before and during pregnancy clearly play significant roles in the incidence of this problem in Canada. Nevertheless, the reported rate in this country of 0.77 cases of neural tube defects/1000 live births in 1996 pales in comparison with the corresponding rate of 0.13 cases/1000 in England and Wales. The update, while noting that 219 infants were affected in Canada (excluding Quebec) in a single year in 1996, correctly concludes that neural tube defects remain an important health problem in our society.

The introductory section notes several problem areas that are omitted in the report. Poverty, one example of an omission, is clearly an important determinant of health in children and youth. An adverse environment is also a ma-

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ajor contributing factor to disease incidence, particularly in relation to the prevalence of asthma in our society. Two pages in the report outline asthma hospitalizations across the country. The rate of hospitalizations, the report notes, had generally increased over the past two decades, but the increase halted recently with a very slight decline in past years. Most physicians in practice could probably explain that decline, based not on disease prevalence or a drop in emergency department visits, but rather due to a lack of available hospital beds, as well as better established outpatient maintenance and acute treatment programs.

The suicide rates in youth aged 10 to 19 years are also highlighted in the report, along with intentionally self-inflicted nonfatal injuries. There has been no significant improvement noted in these areas between 1980 and 1996. In terms of frequency, there were 271 suicides in this age group in Canada in 1996. The suicide rate among Aboriginal youth in Canada is also significantly three to four times higher than that of the corresponding age group in the general population. Suicide prevention is, thus, an important area for future medical attention, and probably ties in with the issue of poverty to a significant extent.

Learning disabilities, attention deficit hyperactivity disorder and related emotional problems are further items that are not addressed in the report but that are worthy of future attention. From a clinical standpoint, the amount of time spent by paediatricians across the country in addressing behavioural and social problems of such children appears to be steadily increasing, and it has become a significant part of clinical practice today.

While *Measuring Up* notes that chlamydia is the most common sexually transmitted disease today, nevertheless, more attention is focused on HIV infections and AIDS. One disturbing comment in the report indicates that approximately 15,000 Canadians from all age groups were infected with HIV by the end of 1998 and were unaware of their infection. Youth are a major concern in this regard due to their inherent risk taking behaviour. More incidence information in this area is required.

After reviewing this 1999 update, a reader is left to wonder about the thoughts of a physician who looks back on this material 50 or 100 years from now. It will be noted

that injuries are the major medical problem area from after the first year of life to age 20 years in youth, and automobile crashes remain the single major cause of death in this age group. While cancer, various infectious diseases and congenital anomalies, particularly in the first year, all require future medical efforts, the relative influence of the automobile on the health of our children seems enormous by comparison. Not only do motor vehicles produce atmospheric pollutants and contribute to the greenhouse gas effect with associated asthma and other respiratory manifestations, but children still continue to be killed in motor vehicle accidents at an alarming rate across Canada. While seatbelts, car seats and airbags have all contributed to improved safety for a child occupant within a vehicle, an observer cannot help but wonder how much longer our society will allow vehicles that pollute so much to be used. Vehicles are driven at high speeds and separated from each other by only a few feet; safety is dependant on the size and condition of the vehicles, and on the training, co-ordination, health, and emotional and mental status of the drivers.

While we can eventually eliminate infant walkers altogether, by contrast, the removal of the automobile and its internal combustion engine from our society seems an overwhelming undertaking. Nevertheless, logically, at some point in the not too distant future, this will happen. Less polluting and safer forms of transportation must eventually be adopted for the health of our children, and for the well-being of the environment and the human race.

Ce rapport est également disponible en français sous le titre : À la hauteur : une mise à jour de la surveillance de la santé des jeunes au Canada. S'informer auprès de la Gestion de la santé génésique et santé des enfants, Laboratoire de lutte contre la maladie, Santé Canada, 1^{er} étage, Immeuble LLMC, Pré Tunney, AL 0601E2, Ottawa (Ontario) K1A 0L2. Également disponible par Internet à l'adresse suivante : http://www.hc-sc.gc.ca/hpb/lcdc;brch/measuring/index_f.html.

REFERENCES

- Rusen ID, McCourt Catherine, eds. *Measuring Up: A Health Surveillance Update on Canadian Children and Youth*. Laboratory Centre for Disease Control, Bureau of Reproductive and Child Health. Ottawa: Health Canada, 1999.