DEVELOPMENTS

Two new developments promise improved data on the health of NSW children in the near future.

First, the NSW component of the 1996 Australian School Students' Alcohol and other Drugs (ASSAD) survey included for the first time questions on a broad range of health issues, including self-rated health, physical activity, nutrition, injury, mental health, sun protection and the use of licit and illicit drugs. Data were collected from more than 10 000 NSW school students in Years 7 to 12. The survey was conducted jointly by the NSW Health Department and the NSW Cancer Council. Several survey reports will be released shortly. Planning for the next round of data collection, due in 1998, is under way.

Second, the Epidemiology and Surveillance Branch proposes to undertake a child health survey in 1999, as part of the NSW Health Survey Program. The survey will target children aged 0–12 years, and information will be collected by telephone from parents and carers. The survey will focus on collecting data that are not available from other sources, particularly on quality of life, disability, health-related behaviours and social and economic influences on health. Future editions of the Bulletin will include updates on the progress of the child health survey.

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Correction

Cooper C, Mira M, Cox M, Maandag A. Infection control in general practice, 1994 and 1995. *NSW Public Health Bulletin* 1998; 9(4): 51–52,55.

The tables were wrongly numbered during production of the April 1998 issue of the Bulletin, and should have read Table 6 (p. 51) and Table 7 (p. 52).

INDICATORS OF THE HEALTH STATUS OF CHILDREN AND YOUTH

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This article describes how the Epidemiology Unit, in conjunction with the Department of Community Paediatrics of the South Western Sydney Area Health Service (SWSAHS), used existing sources of data to produce a profile of the health of the children of that Area. The goal was to produce a readily accessible document that provided front-line health care workers and other professionals, planners and the community with up-to-date information to inform their work to improve health outcomes for local children and adolescents. The final report, the *Health of Children in South Western Sydney,* included a summary of the major health indicators that showed how the health of the children of SWSAHS compared with that of the children of NSW.[1]

With a growing focus on health outcomes in Australia there is a need to develop indicators that can be used to measure and monitor the health of populations of children and adolescents cheaply, conveniently and at regular intervals. Although infant mortality and child mortality are well-established measures that provide sensitive indicators of a broad range of factors affecting children's health, there has been a dearth of other data collected routinely and little monitoring of health indicators in children. The notable exceptions for children are the State and Territory collections of perinatal data and the Australian Childhood Immunisation Register. The lack of well-established health data is even more evident for adolescents. Adolescents, despite having a low level of use of health services, experience important health problems, such as unintentional injuries, substance abuse and suicide.

The challenge was to develop a reporting system that used routinely collected data from a variety of traditional and non-traditional sources (including hospitals, government departments and agencies and non-government groups) to describe the health of children and adolescents in the local community. These sources could then be supplemented by periodic surveys on specific health issues

or risk factors. However, to effectively inform health planning for these population groups, these data needed to encompass the key determinants of health from the *Health Goals and Targets for Australian Children and Youth*.[2]

METHODS

The *Health of Children in South Western Sydney* compiled indicators that addressed the Health Goals and Targets for Australian Children and Youth (1992).[2] Once the indicators had been determined, sources of routinely collected population-based data that could be used to monitor the health of children over time were identified. The aim was to use collections such as the perinatal collections and census data to update the report every two years. Depending upon the quality and type of data, statistical analyses included simple descriptive frequencies, population estimates, crude and adjusted rates and odds ratios and 95 per cent confidence limit calculations where applicable.

STRUCTURE OF THE REPORT

The report opens with an overview of the population demographics of South Western Sydney, as defined by age, sex, country of birth, indigenous status and health care allocation per resident. The order of the other sections of the report corresponds wherever possible with the process of child development, commencing with the antenatal period, continuing through childhood and ending with youth unemployment and families on low incomes (Table 1).

TABLE 1

CONTENTS OF THE SOUTH WESTERN SYDNEY AREA HEALTH SERVICE CHILD HEALTH REPORT

Population profile
Birth rates Smoking during pregnancy Unbooked confinements Low birth-weight at term Children born with birth defects Infant mortality Perinatal deaths Hearing loss Dental health Immunisation Health of Aboriginal children Hospital separations Paediatric (<18 years) emergency department visits Mortality for cancer, and injury and poisoning Adolescent health risk factors Suicide patterns in adolescents and young adults Child abuse Young people and the law School retention rates Youth unemployment Families on low incomes

Some of the diverse indicators used in the report, and their sources, are:

1. birth rates, rates of maternal smoking, rates of unbooked confinements and rates of low birth-weight at term, which were obtained from the NSW Midwives Data Collection
2. rates of birth defects, from the NSW Birth Defects Register
3. rates of infant death, perinatal death, cancer, injury and suicide death, from the Health Outcomes Information Statistical Toolkit (HOIST, Epidemiology Branch, NSW Health Department), or directly from the Australian Bureau of Statistics' perinatal mortality data or unit mortality data.
4. rates of hearing loss, from Australian Hearing Services
5. dental health data, from the 'Save Our Kids' Smiles' dental program
6. immunisation levels, from local surveys and now the Australian Childhood Immunisation Register
7. numbers of hospital separations, from the NSW Inpatient Statistics Collection
8. numbers of emergency department visits from the Emergency Department Information System (Table 2)
9. child abuse statistics, from the NSW Department of Community Services[3]
10. juvenile crime statistics, from the NSW Department of Juvenile Justice annual Children's Court statistics (Table 3)
11. school retention rates, from the NSW Department of School Education
12. youth unemployment, disability and family payment statistics from the Commonwealth Department of Social Security.

Tables 2 and 3 show how a broad range of indicators, including dimensions of social and physical health status, are presented and integrated into the report. Table 2 describes age-specific injury and poisoning rates per 100 emergency department visits for selected hospitals in South Western Sydney and shows that there are extremely high overall rates for those aged 10-14 years and 15-17 years at Campbelltown, Fairfield and Camden Hospitals. Table 3 shows the proportions of selected offences committed by juveniles for SWSAHS and NSW, indicating that SWSAHS was overrepresented in a number of categories compared with the NSW figures.

Data sources that report on disability, Aboriginal health and chronic disease in the child and youth populations are still fragmented and limited; nevertheless, local surveys

TABLE 2

AGE-SPECIFIC RATE OF POISONING INJURY PER 100 EMERGENCY DEPARTMENT VISITS FOR SELECTED HOSPITALS IN SOUTH WESTERN SYDNEY, JANUARY 1995–JUNE 1996

Hospital	Age group (years) <1	1–4	5–9	10–14	15–17	Total <18
Liverpool	24.6	26.3	26.9	26.2	24.8	25.8
Fairfield	7.0	22.5	32.3	45.2	41.4	28.5
Campbelltown	6.1	21.8	34.7	49.8	43.7	29.9
Bankstown	5.4	17.8	25.4	36.2	32.0	22.7
Camden[a]	16.3	32.1	41.5	47.3	41.5	38.3

(a) Data available for October 1995 to June 1996.

Source: South Western Sydney Area Health Service Emergency Data Information System (EDIS) 1995–1996.

TABLE 3

SELECTED OFFENCES COMMITTED BY JUVENILES FOR SOUTH WESTERN SYDNEY AND ALL OF NEW SOUTH WALES, 1994–95

Type of offence	South Western Sydney *n*	South Western Sydney % of NSW	NSW *n*
Motor theft	317	20.5	1547
Serious assault	177	18.0	967
Receiving or possessing	115	18.0	639
Robbery or extortion	62	17.8	348
Homicide	3	17.6	17
Drugs	99	14.9	663

Source: NSW Department of Juvenile Justice annual Children's Court statistics, Criminal Matters, Information Technology and Services Branch.

in conjunction with national surveys such as the National Health Survey can be used. Other important data sets are those maintained by the NSW Central Cancer Registry, the Spastic Centre and the Royal Blind Society, and COMCAS Community Health Client Administration System data. These data sets are not exhaustive but, when used in conjunction with ABS census data at a statistical local area level, can provide detailed descriptions of the population and its health status.

CONCLUSION

The usefulness of the first report has not been formally evaluated; this could be incorporated into the design of the second report in the series. However, there has been widespread distribution and reported use and referral to the document by SWSAHS personnel, local councils and other professional groups from a variety of disciplines, health and others. The report has also been disseminated at State and national levels as a potential prototype for a population-based report on child health and presented at international forums for comment. Another benefit of the report is that it establishes a baseline for describing child health with which measures from future monitoring can be compared. This should enable practitioners to advocate, with supportive data, changes to programs when outcomes are poor and their maintenance when outcomes are good.

In summary, data describing child and adolescent health is available at local, State and national levels. It is important to allocate sufficient time to obtain these data from disparate sources, and then to extract information for use at the local level. Some data (especially where events are rare or counts small) may not provide precise estimates at the local or regional level.

Information available through routine sources can be enhanced through periodic surveys of specific risk or health issues. These can be accomplished efficiently and economically with intersectoral collaboration and the use or modification of existing validated survey instruments. These strategies, if adopted at a local level, will allow the development of new indicators for measuring and monitoring the health of child and adolescent populations. It will also inform the decision making of front-line health and other professionals, planners and the community. The goal is to improve the health outcomes of children and adolescents.

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