

## EDITORIAL: IMPROVING THE HEALTH OF CHILDREN IN NSW

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**A**t the close of the 20th century, health services for children in NSW have accomplished significant achievements. However, many challenges lie ahead.

Overall, most children have never had a greater opportunity to be healthier: they have access to abundant, high-quality food and clean water, schooling and housing, the highest levels of medical care, and safe and effective vaccines against many of the common infectious diseases.

However, at the same time we are witnessing a marginalisation of the health needs of children as the demands of an expanding aged population compete for resources. We are also witness to the progressive impoverishment of an increasing proportion of children in Australia. Already more than 40 per cent of children are living in families receiving a pension or the Additional Family Payment.<sup>1</sup>

To date, the report, *Health Goals and Targets for Australian Children and Youth* remains the clearest statement of the health needs of children and young people.<sup>2</sup> It succinctly states the high-priority health outcomes that must be achieved by any health service or program. This report also recognises that disadvantaged children are more likely to become ill, to be injured, and to require greater levels of health care.

In the next four issues, the *NSW Public Health Bulletin* will explore the essential components of any program that seeks to improve the health of children. Beginning in May 1998, Dr Elisabeth Murphy and Ms Caroline Wraith from the Health Services Policy Branch, NSW Health Department, outline the critical issues of child health in NSW. This article includes examples of how services currently being provided in NSW address the health goals and targets for Australian children.

In the June issue readers will be able to examine the health status of children in NSW and the information that permits monitoring of their progress. In the July issue, there will be a closer examination of the process of identifying effective strategies that are available to address the identified health needs and to achieve the desired outcomes. The August issue will present a detailed exploration of the priority programs in NSW capable of achieving improved health for children and youth.

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Children and young people are shaped by and shape the environments in which they live. An ecological perspective requires child health professionals to develop a range of strategic responses at individual, family, neighbourhood, regional and national levels.<sup>3</sup> The models for this approach to improving the health of children and youth have been outlined in the strategic plan 'Health Gain for Children and Youth of Central Sydney' (developed by the Central Sydney Area Health Service over the past two years).<sup>4</sup> Some of these programs have been implemented in some health areas such as South Western Sydney Area Health Service.

If the outlined challenges to the continued improvement of child health in NSW are to be met, and if the health goals and targets for Australian children are to be achieved, health care services in NSW will need to refocus their attention to the needs of children, to identify and implement more evidence-based strategies, and to emphasise population-based illness-prevention and health-

promotion programs. If the outcomes are to be attained, an effective population-based approach to child health needs to become as essential a part of health services as clinical paediatrics.

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## CHILD HEALTH NOW! THE STATE OF CHILDREN'S HEALTH: HISTORICAL CONTEXTS AND CURRENT DEVELOPMENTS

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The NSW Health Department is currently developing a comprehensive child health policy, which is nearing completion. It will provide a framework for the health system to address the health care needs of children and provide child-focused and developmentally appropriate health services. This article provides an overview of the international and national contexts supporting this development and highlights both a number of current state initiatives and future directions in child health.

### INTERNATIONAL CONTEXT

The origins of an international agenda for children emerged just after the second world war. In 1948 the Universal Declaration of Human Rights was proclaimed, and in 1959 the special needs of children were addressed by the United Nations Declaration on the Rights of the Child. One outcome of the International Year of the Child in 1979 was the push for the United Nations Convention on the Rights of the Child which was achieved 10 years later.<sup>1</sup> The Convention was adopted by the United Nations (UN) on 20 November 1989 and was ratified faster than any other convention in the history of the United Nations.

It consolidated into international law the existing provisions of over 100 declarations and treaties.

The Convention led to the World Summit for Children (1990), at which the United Nations World Declaration on the Survival, Protection and Development of Children<sup>2</sup> was developed and an international commitment given to a plan of action.<sup>3</sup> The World Summit for Children was the first ever truly global gathering of world leaders. If the goals of the Declaration are met then it is estimated that the lives will be saved of 50 million of the 150 million children who are otherwise projected to die of preventable causes over this decade.<sup>4</sup> New problems such as child abuse, sexual exploitation, drug-related problems and inter-country adoptions are also addressed in the Declaration. For the first time, the role of the child as a consumer is acknowledged and the right of that child to be involved and participate in decision making on matters that affect his or her own interests is emphasised.

### NATIONAL CONTEXT

Australia signed the United Nations Convention on the Rights of the Child in August 1990 and ratified it in December 1990. Some of the concerning health issues for Australian children include immunisation and poor infant mortality rates in the Aboriginal population to more complex social problems such as child abuse and youth suicide.

The publication of *Health Goals and Targets for Australian Children and Youth* in 1992 represented the first attempt to determine common aims and objectives for the development and provision of child health services across Australia.<sup>5</sup> As such, it was an important starting point for planning to improve the health outcomes for Australian children. This document recommended five goals:

1. Reduce the frequency of preventable mortality:  
in particular, mortality from injury, suicide and sudden infant death syndrome, and Aboriginal infant mortality.
2. Reduce the impact of disability, including reductions in the occurrence of new disability and the impact of established disabilities:  
focusing on congenital abnormalities, low birthweight, prematurity, chronic illness, intellectual disability, physical disability and learning disorders.
3. Reduce the incidence of vaccine-preventable diseases.
4. Reduce the impact of conditions occurring in adulthood which have their early manifestations in childhood or the teen years:  
in particular, conditions associated with suboptimal nutrition and/or fitness (for example, cardiovascular disease, diabetes mellitus and osteoporosis), alcohol and tobacco use, unprotected sexual activity (for example, unplanned pregnancy, sexually transmitted diseases including *Chlamydia trachomatis* infection, hepatitis B and HIV-AIDS) and excessive exposure to sunlight.
5. Enhance family and social functioning:  
including parenting and the well-being of children and young people, child abuse and neglect, importance of adequate housing and family income, importance of education for development, youth employment, enhancing physical and social environments.

The final goal links with all the other goals listed.

*Health Goals and Targets for Australian Children and Youth* included a strong recommendation that there should be a national plan of action to address the health needs of young people. This was addressed by the subsequent development of *The Health of Young Australians: a National Health Policy for Children and Young People* in 1995.<sup>6</sup> This policy was endorsed by all the Australian Health Ministers and represented the first formal commitment by Australian governments to work cooperatively to promote, maintain and improve the health status of all Australian children. It also recommended that a parallel process of policy development be undertaken at the State level.

A national framework for key areas of action and strategic directions has now been put in place. The seven key areas of this policy are:

1. **Promotion of healthy supportive environments for children and young people** through appropriate

policies, programs and services by all levels of government and the community.

2. Provision of **health services that have both a focus on the needs of consumers and a commitment to participation of young people and families** in decisions about health and health care.
3. Development of a **balanced approach** at all levels of government between those strategies that actively promote good health through environmental and behavioural change and those that provide care and treatment for ill health.
4. **Reduction of inequities** in the availability of, and access to, the range of health services appropriate to the needs of young Australians.
5. **Greater coordination and collaboration** within the health sector and between health and other sectors through the development of cooperative strategies to improve the health of children and young people.
6. **Regular monitoring of the health of children and young people** complemented by **research** targeting priority issues for the health of children and young people.
7. **Development of a workforce with the skills and knowledge to work effectively in the maintenance and enhancement of the health** of young Australians together with increased emphasis on the training needs of people whose work relates to the health of children and young people.

In 1997 an implementation plan, *The National Health Plan for Young Australians: An Action Plan to Protect and Promote the Health of Children and Young People*, was released.<sup>7</sup>

## NSW INITIATIVES

In response to these international and national policy developments, the NSW Health Department released to wide consultation *Caring for Health, Caring for Children: a Discussion Paper Towards the Development of a Child Health Policy for NSW* in 1996.<sup>7</sup> This policy is currently being finalised and will promote the development of prevention, early-intervention and health-promotion strategies to address preventable health problems. It will also seek to improve the accessibility, appropriateness and quality of the health services provided to children.

To inform the development of this child health policy, and using the structure of the *Health Goals and Targets for Australia Children and Youth*, high-priority health issues were identified for the children of NSW. Current activities in the health system addressing these issues were then identified. The following are examples of these activities. Many show how collaboration, both within the health system and across sectors, is an important strategy for improving the health of children.

**Health goal: Reduce preventable premature mortality**

- The most successful **injury prevention** activities are those that concentrate on creating a safe environment for children. The 'Hot Water Burns Like Fire' campaign was a partnership between the NSW Health Department, plumbing and housing industry groups and key child health advocates such as Kidsafe NSW. It focused mainly on encouraging householders to reduce the temperature of their hot water delivery to bathrooms. The campaign used a full range of media and industry education mechanisms. The first phases of the campaign have been significantly successful, with a 30 per cent decline in serious hot tap water scalds admissions (10+ days) and an 11 per cent decline in less serious cases.
- **Sudden infant death syndrome (SIDS)** is the most common cause of death in the first year of life. Since the introduction of the 'Reducing the Risks' campaign in 1991 the incidence of SIDS has declined significantly in NSW, with deaths decreasing from 174 in 1987 to 71 in 1996. The success of this campaign has been attributed to effective partnerships among the public, the Sudden Infant Death Association, researchers and health professionals. These partnerships have enabled sound evidence to support decisions, wide participation in decision making and the provision of consistent information to the public.

**Health goal: Reduce the impact of disability**

- Low birthweight, principally due to preterm birth, and birth defects are major causes of premature death and childhood disability. All births in NSW are registered in the **Midwives Data Collection** from which annual reports are prepared. These reports include information on rates of low birthweight and preterm birth by maternal age, Aboriginality, maternal residence and type of hospital. These data and issues of concern are considered by the Minister's Maternal and Perinatal Committee and, where appropriate, recommendations are made regarding clinical care. The Committee also has the Perinatal Outcomes Working Party, which can examine issues requiring further study.
- **Asthma** is the most common chronic illness in childhood and a principal cause of hospitalisation. Evidence suggests that prevalence rates of childhood asthma have increased in Australia over the last decade. The NSW Asthma Health Improvement Project, commenced in 1995, involves the collaboration of health professionals, consumers and government. An evidence-based review has been conducted of strategies to prevent the development of asthma and for preventing exacerbations. *Asthma and the Environment: Perspectives on the Prevention of Asthma* has been produced by the NSW Health Department to inform health professionals and consumers.<sup>9</sup>

- The **NSW Early Intervention Coordination Project (EICP)** is jointly funded by the Department of Health, the Department of Ageing and Disability, the Department of Education and Training, and the Department of Community Services. It is a statewide project to improve the coordination of early intervention services provided for families with young children who have developmental delays or disabilities. The project has resulted in these departments and the non-government sector working collaboratively to ensure that the range of services required by families of young children with developmental delays or disabilities are coordinated, accessible and accountable. A recent external evaluation of the Project found that 80 per cent of EICP service users received early intervention services within two months or less of having their needs identified, and of these, 50 per cent received services in less than one month.

**Health goal: Reduce the incidence of vaccine-preventable diseases**

- **Universal immunisation** is a major preventive health strategy for children. It is a simple, safe and effective way of protecting children (and adults) from harmful infection. Since 1994, parents in NSW have been requested, under the NSW Public Health Act, to provide evidence of age-appropriate immunisation to child care facilities and present an immunisation certificate at the time of school enrolment. In the event of outbreaks of infectious diseases, children who are not immunised may be excluded from child care facilities and schools.

**Health goal: Reduce the impact of conditions occurring in adulthood which have their early manifestations in childhood**

- Epidemiological evidence suggests that **sun exposure in childhood** is particularly important in causing skin cancer, particularly melanoma. The NSW Health Department worked in partnership with the NSW Cancer Council to develop and launch a mass media campaign for the summer of 1997-98. This campaign specifically targeted parents and carers of children aged 0-11 years. The campaign also targeted organisations and individuals outside the home environment who make decisions affecting the sun protection of children: for example, staff of child care centres, preschools and schools.

**Health goal: Enhance family and social functioning**

- The **Interagency Schools As Community Centres Project** was established in June 1995 and aims to prevent disadvantage for children entering school by providing integrated services for families with children under five years of age in disadvantaged communities. The project is a joint initiative of the Departments of Education and Training, Health, Community Services

and Housing. The Project works with families to encourage and support them in their parenting role, actively promotes community involvement in the provision of services for children, and encourages and assists parents to obtain access to existing mainstream services in the community. The Project has been successful in promoting access to services for disadvantaged groups, including Aboriginal families, and provides an appropriate facility for the development of many intersectoral programs targeting children under five years and their families.

- Each Area Health Service has a child protection coordinator and has recently been funded to develop new services and appoint additional staff to provide counselling and support to **children who have been physically or emotionally abused or neglected** and their families. Services are guided by the NSW Health Department's *Child Protection Policy and Procedure Manual*.<sup>10</sup>

### CHILD HEALTH: FUTURE DIRECTIONS

In NSW child health services have a long and proud history of being both community-health and hospital based. However, these differing origins have meant that, to date, as child health services have expanded and new services developed, they have become increasingly disparate. Early childhood health services, school health services, health promotion, public health, general practice, paediatric wards, outpatient and specialised paediatric hospitals all provide preventive, early intervention and/or treatment services for children.

The development of the child health policy for NSW will provide a coordinated framework for the health system to provide child-focused and developmentally appropriate health services that address the health care needs of children. It will also support the role of the health sector of advocate for the needs of children and in promoting initiatives that will contribute to more-comprehensive and better-coordinated prevention and early intervention programs. Many of the health problems experienced by today's children reflect the complex interactions between children and their families and their social, economic and cultural environments.

Improving the health of children is integral to improving the health of adults in NSW. Many adult diseases have

their origins in childhood and many health behaviours are established at this time. A focus on prevention and early health interventions that address the needs of children, if effectively provided, will deliver long-lasting health outcomes for all people in NSW.

Increased coordination of activity across the health system is needed if we are to maximise the opportunities to improve the health of children. Greater collaboration among hospital paediatric services, community child health services, general practice, public health and health promotion activities focused on children will be encouraged. Partnerships with other government departments, non-government organisations and the community will be promoted as a vehicle for the development of more effective programs across health, education and welfare services to address the needs of children and support their families and the communities in which they live.

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## MEASLES CONTROL CAMPAIGN

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The *NSW Public Health Bulletin* is a publication of the NSW Department of Health. The editor is Dr Lynne Madden, Manager, Public Health Training and Development, NSW Health Department. Rhana Pike is production manager.

The *Bulletin* aims to provide its readers with population health data and information to motivate effective public health action.

#### Submission of articles

Articles, news and comments should be 1000 words or less in length and include a summary of the key points to be made in the first paragraph. References should be set out in the Vancouver style, described in the *New England Journal of Medicine*, 1997; 336: 309–315. Send submitted articles on paper and in electronic form, either on disc (Wordperfect or Word for Windows are preferred), or by email. The article must be accompanied by a letter signed by all authors. Full instructions for authors are available on request from the editor.

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Recently the Federal Minister for Health, Dr Michael Wooldridge, announced funding for the National Enhanced Measles Control Program, which will be conducted from August to November 1998. The NSW Minister for Health, Dr Andrew Refshauge, has endorsed and pledged his support for this campaign.

The Measles Control Campaign will aim to:

- Ensure that all primary school children are provided with a second dose of the measles (measles–mumps–rubella (MMR)) vaccine, through a school-based delivery program. The NSW Health Department will be targeting 2100 primary schools during this campaign.
- Follow up all two- to five-year-olds, in cooperation with general practitioners and other immunisation providers, to ensure that they have received their first dose of MMR vaccine.
- Ensure that all secondary students are advised to make sure that they have received their MMR booster (second) dose.

The Commonwealth Government will provide \$30 million nationally to fund this important campaign, from which NSW will receive \$2 130 680. This will cover the purchase of vaccines, the employment of a state measles coordinator, nursing and clerical assistance and a multilayered integrated communication campaign. The aim is to achieve the National Health and Medical Research Council objective of 95 per cent coverage of school-age children for measles.

The NSW Health Department has employed Ms Jan Broome as the State Measles Immunisation Coordinator to facilitate the Enhanced Measles Control Program. Ms Broome will coordinate the implementation of the campaign in metropolitan Areas. Teams of nurses will be employed to vaccinate primary school children in these Areas. Rural immunisation coordinators will be responsible for implementation of the campaign in the respective rural Areas.

The Commonwealth is planning an extensive education campaign aimed at parents of primary school-aged children, parents of preschool-aged children, parents of high school children, general practitioners and teachers. The public education campaign commenced on 12 July 1998. ¶¶

## INFECTIOUS DISEASES, NSW: MAY 1998

### TRENDS

Notifications of infectious diseases have continued to follow expected seasonal trends through to April 1998, with the exception of **arboviral** infections with fewer notifications than usual (Figure 1).

With the **influenza** season close at hand, in this edition we present the first data from the NSW influenza surveillance program, and review our current approach to immunisation in the workplace. In addition, with some overseas reports indicating recent declines in AIDS cases in some western countries, we review **HIV** and **AIDS** notifications in NSW.

### INFLUENZA VACCINATION CAMPAIGN

A campaign to remind those at risk from the complications of influenza to have themselves vaccinated was launched by the Health Minister on 18 May. The campaign was mounted by the Pharmacy Guild of Australia, with the support of the NSW Health Department, as part of National Pharmacy Week, and took the form of a series of radio advertisements combined with a public relations campaign. The main message of the campaign, which was aimed particularly at the elderly, was that it is still not too late to be immunised. Although influenza immunisation rates have increased in New South Wales in recent years, about half of those for whom vaccination is recommended remain unimmunised.

### NSW INFLUENZA SURVEILLANCE

Although a widespread epidemic did not develop following the outbreak of influenza in Hong Kong at the end of 1997, the emergence of the H5N1 subtype and its potential to re-emerge and cause pandemic disease have concentrated attention worldwide on influenza surveillance. The 'Sydney' strain of the H3N2 subtype of influenza A, which was responsible for considerable 'flu activity in parts of Australia in 1997, has since been responsible for a widespread epidemic in the United States in the northern hemisphere winter and has also been active in Europe and Asia. In the light of these outbreaks and the imminent influenza season in Australia, it was timely to review surveillance measures in New South Wales. Proposals developed to strengthen surveillance are now being implemented. One essential element of improved surveillance was recognised to be timely feedback of information about influenza activity to those involved in influenza surveillance and others who wished to know. A weekly report has been developed (*NSW Influenza Surveillance Activity Update*) and the contents of the first three reports are summarised below. The weekly reports are prepared by the AIDS/Infectious Diseases Branch of the NSW Health Department, in collaboration with the South East Area Laboratory Service, the Institute of

Readers will notice a change in our regular infectious diseases graphs. Instead of showing disease reports for the previous 12 months with historical comparisons, we'll now show you disease reports over the entire previous four years or so.

Clinical Pathology and Medical Research, the New Children's Hospital, the South West Area Pathology Service, Royal Prince Alfred Hospital, Pacific Laboratory Medical Services, participating general practitioners and the Hunter, New England, Northern Sydney and Southern Public Health Units.

#### Activity update (Weekly reports nos. 1-3, 26 April to 16 May 1998)

**Summary:** Both clinical and virological indices of activity were low over this period.

**Clinical activity:** Reports of consultations for influenza-like-illness from the NSW Sentinel General Practitioner Surveillance Scheme were received from three Public Health Units (PHUs). Weekly rates ranged from 5 to 11 per 1000 consultations (Figure 2), similar to the rates seen in previous years.

**Virological activity:** Reports of diagnoses on influenza infection were received from four laboratories in New South Wales. Only one report of an isolate of influenza virus was received: an influenza A subtype H3N2 virus from a person who had recently returned from the Middle East (strain typing results on this virus are awaited). Two diagnoses of influenza A infection were confirmed by direct immunofluorescent detection of antigen and one other by a fourfold rise in antibodies. No influenza B infections were confirmed.

A total of 106 respiratory syncytial virus infections were reported over the same period: respiratory syncytial virus activity usually rises at this time of year, with the majority of infections being confirmed in the under-one-year age group. Very few other respiratory virus infections were confirmed during this period.

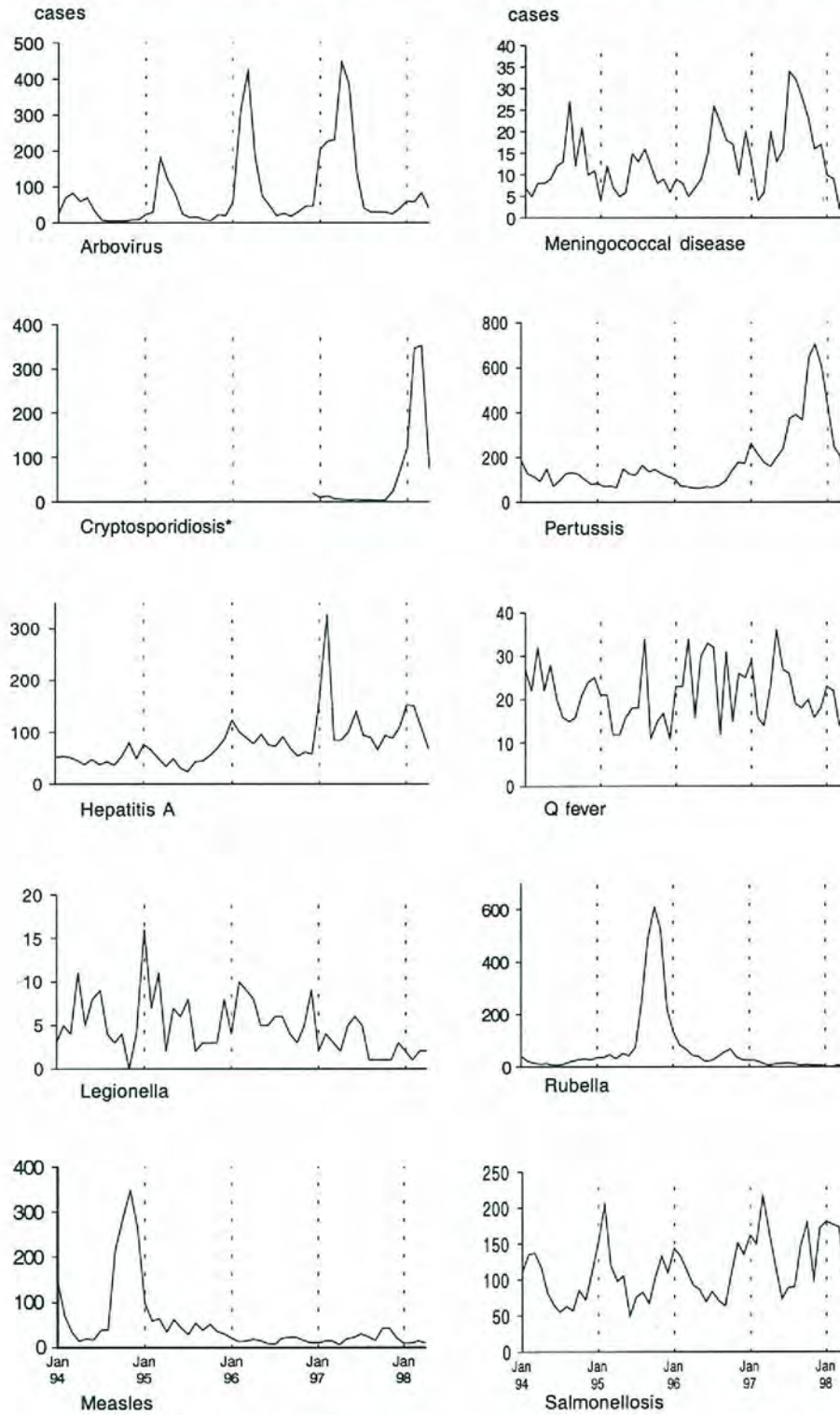
#### Directed virological surveillance

The NSW Health Department has proposed a surveillance initiative which will involve 10 to 20 sentinel general practitioners submitting up to five specimens per week each for virological analysis. The potential advantages of such schemes are that influenza isolates are generally obtained earlier in the season than by routine laboratory surveillance, the results are more representative of the

**FIGURE 1**

**REPORTS OF SELECTED INFECTIOUS DISEASES, NSW, JANUARY 1994 TO APRIL 1998, BY MONTH OF ONSET**

These are preliminary data: case counts in recent months may increase because of reporting delays



\* not reportable before December 1996



viruses circulating in the community (than the viruses causing illness in hospitalised patients), specimens are obtained from a more representative age spectrum than can be achieved from hospital-based surveillance, the results are obtained by the consistent use of standardised sampling methods and the results are available rapidly. The recruitment of general practitioners continues and reporting will begin later in the season.

## IMMUNISATION AGAINST INFLUENZA IN THE WORKPLACE

**John Watson**

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There is considerable uncertainty about the appropriateness of influenza immunisation of fit adults of working age in the occupational setting. The National Health and Medical Research Council (NHMRC) states that 'mass vaccination of individuals in particular industries or worksites cannot usually be justified on public health grounds',<sup>1</sup> but does leave the way open for supporting the immunisation of occupational groups in certain circumstances.

The problem is not one of protective efficacy (influenza vaccine provides a good level of protection in most years, especially in working-age adults and children) but with cost-effectiveness and uptake. From a population perspective, it makes a lot of sense to recommend

immunisation of those people who are at increased risk of the complications of influenza, not only to prevent serious morbidity and mortality but also to reduce health care (especially hospital) expenditure on treatment.

For younger people, the benefits, both health and financial, are less clear cut: for most of this group influenza is a self-limiting illness, albeit a miserable one, and they soon return to work. In addition, influenza is very variable in its extent and severity from year to year, and major epidemics occur only every few years. Nevertheless, in the United States, physicians are recommended to immunise any person who wishes to reduce the likelihood of becoming ill with influenza.<sup>2</sup>

From an employer's point of view, the calculations may be different. An employer may be prepared to pay a premium to reduce absenteeism during influenza epidemics. This may be especially important for businesses or organisations involved in work where loss of more than a small proportion of the workforce at one time is more critical than the overall annual level of absenteeism, for example, companies involved in continuous industrial processes. Health services, too, have a special interest in not losing employees on sick leave during influenza epidemics, because this is the very time that workloads are increased. Both the NHMRC and the United States Centers for Disease Control (CDC) recommend immunisation of groups that can transmit influenza to

**FIGURE 2**

**REPORTS OF INFLUENZA-LIKE ILLNESS FROM NSW SENTINEL GENERAL PRACTICES, APRIL–MAY 1998, BY WEEK OF CONSULTATION, WITH HISTORICAL COMPARISONS**



persons at high risk, and the CDC guidance goes on to recommend vaccination of 'persons who provide essential community services ... to minimize disruption of essential activities during influenza outbreaks'.<sup>1,2</sup>

One of the main problems in the occupational setting has been obtaining adequate levels of vaccination uptake. Among health care workers in particular, uptake has been generally poor. Employers may have to invest a lot of resources to obtain a high enough uptake level to produce any appreciable reduction in sickness absence. In addition, they may have to invest these resources for three or four years before they prevent the substantial absence associated with a major epidemic. Assessing cost-effectiveness in this area is very difficult. Studies need to be large, blinded and controlled. Few have been good. An exception is the study by Nichol et al. published in 1995, which showed cost savings in a working-age population as a result of the use of influenza immunisation.<sup>3</sup>

Advice to employers should probably include an appreciation of these issues, as the ultimate decision will be that of the employer, who will pay for a workplace-based immunisation campaign. While mounting scientifically robust investigations of the cost-effectiveness of this intervention in different Australian settings will be difficult because of the large studies required, much could be learnt from the description of workplace campaigns that are carried out, including costs, methods employed, levels of uptake and difficulties encountered.

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## TOO EARLY TO CELEBRATE?

Recent evidence from the United States shows declines of close to 75 per cent in both AIDS-related mortality and morbidity over the two to three years to 1997. These remarkable gains have been attributed largely to more intensive use of combined antiviral therapies.<sup>1</sup> In addition, the period of AIDS-free survival in persons living with HIV appears to be increasing.<sup>2</sup>

In New South Wales, surveillance of AIDS has been used to track the epidemic since the mid-1980s. Concern that AIDS surveillance was insufficient for tracking trends in HIV infections (because of the delay between initial

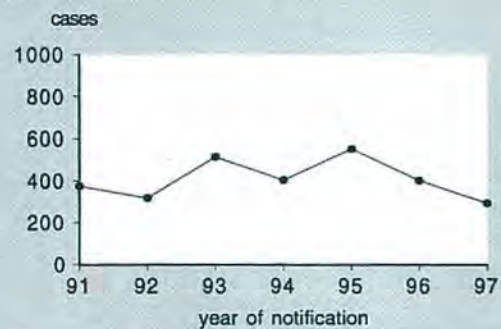
infection and onset of AIDS-defining illnesses) led to an upgrading of laboratory-based HIV surveillance in 1991.

Recent trends in NSW AIDS surveillance data from 1991 to 1997 show some cause for optimism, with reports of AIDS diagnoses declining from a peak of 552 in 1995, to 293 in 1997 (Figure 3). This represents a 47 per cent decline in cases over two years. These data suggest that the increased use of combined antiviral therapy to treat HIV infections may have had a similar success in NSW as it has in the United States, although further analyses are required to support this hypothesis.

Of concern, however, is the only modest decline in new HIV diagnoses since 1994, with 437 diagnoses in 1995 and 399 in 1997 (Figure 4). A potential negative outcome of the good news about the declining incidence of AIDS is that complacency could emerge among persons at risk of infection, who may also be tiring of public health advice about safe sex.

**FIGURE 3**

### REPORTS OF PERSONS NEWLY DIAGNOSED WITH AIDS, NSW, 1991 TO 1997, BY YEAR OF NOTIFICATION



**FIGURE 4**

### REPORTS OF PERSONS NEWLY DIAGNOSED WITH HIV, NSW, 1991 TO 1997, BY YEAR OF NOTIFICATION

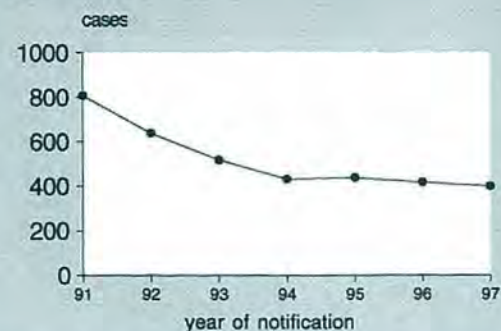


TABLE 1

## REPORTS OF PERSONS WITH NEW HIV OR AIDS DIAGNOSES, NSW, 1994 AND 1997, BY REPORTED RISK EXPOSURE

Risk exposure type	New HIV diagnoses					New AIDS diagnoses				
	1995	% <sup>a</sup>	1997	% <sup>a</sup>	%change	1995	% <sup>a</sup>	1997	% <sup>a</sup>	%change
MSM <sup>b</sup>	297	74	215	72	-28	464	87	214	81	-54
MSM and IDU <sup>c</sup>	12	3	8	3	-33	15	3	8	3	-47
IDU	17	4	9	3	-47	12	2	15	6	+25
Heterosexual	61	15	61	20	0	30	6	21	8	-30
Other	17	4	7	2	-60	15	3	5	2	-67
Not stated	33	—	102	—	+209	16	—	30	—	+88
Total	437		399		-9	563		293		-47

(a) MSM = men who have sex with men

(b) IDU = injecting drug users

(c) % of known exposures to risk

Complacency has no place in the fight against AIDS. Evidence of just how long new HIV therapies and prophylactic regimes can stave off the onset of opportunistic infection is not yet available. The small decline in new HIV diagnoses, coupled with reports of an increase in both unprotected sex (Crawford J, Kippax S. Periodic survey: results for fourth survey, unpublished), and (perhaps as a consequence) gonorrhoea incidence, among young inner-city men<sup>4</sup> highlights the need to remain vigilant in monitoring HIV infections and adapting prevention strategies as required.

Between 1995 and 1997, there was a large increase in the number of persons newly diagnosed with HIV infection for whom risk factors were not reported and, in contrast to other exposure groups, no decline in persons reporting heterosexual exposure to the virus. In addition, the decline in new AIDS diagnoses was least among persons reporting heterosexual contact and there was an increase in persons reporting injecting drug use (Table 1). These differences involve only relatively small numbers, but suggest that persons who acquire HIV infection through injecting drug use or heterosexual contact may be somewhat more difficult to reach with interventions.

The recent changes in AIDS-free survival time has highlighted the importance of HIV surveillance in tracking the evolution of the epidemic.<sup>3</sup> However, the large and growing proportion of HIV notifications that are provided without risk information severely limits our ability to do this. To inform the most effective prevention strategies, **doctors are urged to be vigilant in notifying new infections** through the existing laboratory-based notification system, by completing and returning the laboratory-generated risk forms on persons newly diagnosed with HIV.

The NSW Health Department has been active in implementing harm-minimisation strategies, such as education and needle and syringe exchange programs, that have resulted in very low levels of HIV infection among injecting drug users. Partnerships between affected communities and government have kept HIV infections among men who have sex with men under control. However, reported increases in risk behaviours among men who have sex with men, a possible increase in HIV infections among heterosexuals, and overseas experience of increases in HIV infections among injecting drug users are reminders of the need for vigilance. Should these changes be accompanied by a failure to sustain treatment effectiveness, we could see an increase in HIV infection with a far more potent and difficult-to-manage virus. The NSW Health Department is currently developing new treatment and prevention strategies that take into account both the changing epidemiology of HIV disease and new treatments, and is liaising with laboratories to improve the completeness of HIV infection notifications.

## REFERENCES

1. Palella FJ, Delaney KM, Moorman AC, et al. Declining morbidity and mortality among patients with advanced human immunodeficiency virus infection. *N Engl J Med* 1998; 338: 853-860.
2. Hogg RS, Heath KV, Yip B, et al. Improved survival among HIV-infected individuals following initiation of antiviral therapy. *JAMA* 1998; 279: 450-454.
3. CDC Diagnosis and reporting of HIV and AIDS in states with integrated HIV and AIDS surveillance—United States, January 1994–June 1997. *MMWR* 1998; 47: 309-314.
4. Infectious diseases: Gonorrhoea increases. *NSW Public Health Bulletin*, March 1998. Sydney: NSW Health Department, 1998: 41. ☒

TABLE 2

## INFECTIOUS DISEASE NOTIFICATIONS RECEIVED IN APRIL 1998 BY AREA HEALTH SERVICES

Condition	Area Health Service (1998)																	Total	
	CSA	NSA	WSA	WEN	SWS	CCA	HUN	ILL	SES	NRA	MNC	NEA	MAC	MWA	FWA	GMA	SA	for Apr**	To date**
<b>Blood-borne and sexually transmitted</b>																			
AIDS	-	-	2	1	-	1	-	1	1	-	-	-	-	-	-	-	-	6	34
HIV infection*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	114
Hepatitis B: acute viral*	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	19
Hepatitis B: other*	29	18	11	5	-	1	1	8	20	-	1	2	-	4	-	-	1	101	1041
Hepatitis C: acute viral*	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	14
Hepatitis C: other*	42	23	58	39	2	35	37	15	53	20	24	10	3	18	-	8	23	410	2773
Hepatitis D: unspecified*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Hepatitis: acute viral (not otherwise specified)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Gonorrhoea*	7	5	-	-	-	1	2	1	30	-	3	1	-	-	-	1	-	51	294
Syphilis	7	5	-	-	-	1	-	-	5	4	-	-	1	5	-	-	-	28	158
<b>Vector-borne</b>																			
Arboviral infection*	1	-	-	-	-	-	4	-	-	12	14	4	1	2	2	1	-	41	248
Malaria*	-	-	-	1	-	-	2	1	3	-	-	-	1	1	-	-	-	9	56
<b>Zoonoses</b>																			
Brucellosis*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leptospirosis*	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	9
Q fever*	-	-	-	-	-	-	2	-	-	1	1	3	9	1	1	-	-	18	81
<b>Respiratory and other</b>																			
Blood lead level	4	2	1	2	-	3	19	-	2	3	1	-	-	2	-	-	-	39	270
Legionnaires' disease	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	7
Leprosy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal (invasive) infection	-	3	2	2	-	1	-	-	1	1	-	1	-	-	-	-	-	11	32
Mycobacterial tuberculosis	-	2	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	4	79
Mycobacteria other than TB	2	2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	5	67
<b>Vaccine-preventable</b>																			
Adverse event after immunisation	-	-	1	-	-	-	-	-	2	1	2	-	-	-	-	1	-	7	72
<i>H. influenzae</i> b (invasive) infection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Measles	-	1	-	1	-	3	2	1	1	-	4	-	-	-	-	-	-	13	48
Mumps*	1	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	3	18
Pertussis	3	6	6	2	4	3	3	14	10	3	21	2	1	2	-	2	3	85	1022
Rubella*	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	14
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
<b>Faecal-oral</b>																			
Botulism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cholera*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Cryptosporidiosis	4	2	6	9	10	12	6	2	9	11	5	3	1	-	1	1	6	88	963
Food-borne illness (not otherwise specified)	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9
Gastroenteritis (in institution)	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	112
Haemolytic uraemic syndrome	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Hepatitis A	4	6	6	4	1	2	-	6	15	18	2	1	-	5	-	-	-	70	499
Hepatitis E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Listeriosis*	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	16
Salmonellosis (not otherwise specified)*	11	22	-	-	-	14	15	3	-	14	4	4	3	4	1	2	2	120	908
Typhoid and paratyphoid*	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	15
Verotoxin-producing <i>E. coli</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

\* lab-confirmed cases only \*\* includes cases with unknown postcode

CSA = Central Sydney Area  
NSA = Northern Sydney Area  
WSA = Western Sydney AreaWEN = Wentworth Area  
SWS = South Western Sydney Area  
CCA = Central Coast AreaHUN = Hunter Area  
ILL = Illawarra Area  
SES = South Eastern Sydney AreaNRA = Northern Rivers Area  
MNC = North Coast Area  
NEA = New England AreaMAC = Macquarie Area  
MWA = Mid Western Area  
FWA = Far West AreaGMA = Greater Murray Area  
SA = Southern Area