Increasing physical activity

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counselling, based on behaviour change principles[5]. Health professionals, including general practitioners, need to provide brief advice about physical activity for all consultations. Research and demonstration projects in NSW are assessing the effectiveness of these approaches.

A specific challenge is that programs encouraging physical activity will inevitably involve working beyond the health sector. Physical activity is central to the work of Departments of Sport and Recreation, and has an important place in the work of schools, urban planning, local government and many non-governmental agencies and the private sector. Working across departments and agencies is more likely to result in the environmental changes required to support physical activity in the community. Incidental physical activity, such as walking children to school, is encouraged by the existence of a safe walking route with minimal traffic.

The NSW strategic planning process to achieve a 'whole of Government' framework is embodied in the work of the NSW Premier's Task Force on Physical Activity. The next few years will see media campaigns recommending brisk walking every day, but these need to be reinforced by environmental projects to construct safe, well-lit walkways and pavements and to link green spaces within urban communities. The health sector will be required to extend its thinking about the limits to public health programs to achieve these goals.

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INFECTIOUS DISEASES

TRENDS

With summer ending, reports of **arbovirus** infections have risen sharply (Figure 5), particularly **Ross River virus** infections in the Greater Murray Area (in the south west of NSW) (Table 1). **Hepatitis A** cases doubled in January 1997 throughout the State, due largely to an outbreak traced to the consumption of contaminated oysters from Wallis Lake (see *NSW Public Health Bulletin* issue for January-February 1997). Reports of **pertussis** are still pouring in, continuing an upward trend that began in mid 1996. Despite an effective vaccine, cases of **Q fever** continue to occur with little sign of abatement from (what should be) historical levels (Figure 5).

OUTBREAK OF HEPATITIS A WITHIN A FAMILY

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A routine investigation by South Eastern Sydney (SES) Public Health Unit (PHU) of a reported hepatitis A case in February 1996 uncovered a cluster of cases in an extended family. All cases had attended a family function and had close contact with an infectious case, yet none received normal human immunoglobulin (NIGH). The investigation was hampered by incomplete and delayed notifications.

Hepatitis A is an infectious disease with symptoms including fever, malaise, anorexia, nausea and abdominal pain, followed by jaundice. Infection can be mild or asymptomatic, especially in children, and illness is almost always followed by full recovery. The incubation period averages 28-30 days[1]. Hepatitis A is transmitted by the faecal-oral route, and is most infectious during the two weeks before, to one week after, onset of jaundice. Prevention involves early counselling of the patient and advice on good hand washing, food hygiene, and mode of transmission. NIGH given to close contacts within two weeks of exposure may prevent or lessen severity of the symptoms[1]. The NSW Public Health Act requires laboratories to notify cases on serological confirmation and medical practitioners to notify cases on provisional diagnosis of acute viral hepatitis.

Case reports

On February 7, 1996 a laboratory notified SES PHU of a 36-year-old man with hepatitis A (Case A). The blood sample had been collected on January 25. Case A reported that he had become ill on January 20 with nausea, fever and vomiting, and developed jaundice on January 30. His doctor arranged for his close contacts to receive NIGH.

One week later, a neighbouring PHU reported having been contacted by a second case (Case B) who had been diagnosed with hepatitis A by her doctor. Case B stated that other members of her family had also developed hepatitis A, including her brother, who was Case A.

On February 13, 1996 we were notified by a neighbouring PHU of a case of hepatitis A in a female (Case C) with the same family name as Case A. The date of the specimen collection was January 29. The names of the patient and the referring doctor were the only information available.

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Case investigations

Case A reported that his younger sister (Case D) had serologically confirmed hepatitis A two days after Christmas, with symptoms including fever, rigors and vomiting. Case D, her husband, and children were staying with her mother (who was Case C) while she was ill. Two of Case D's three children (aged 2, 4 and 6 years) had been unwell in November 1995 with general malaise, and one "looked yellow", but no diagnosis had been made.

Cases A, B, C and D and a family friend had attended a family gathering on Christmas Eve at the home of Cases C and D. Cases A, B and C developed hepatitis A about one month after the family gathering. It is unclear whether Case D had prepared any of the food eaten that night. The only adult household members not to get sick were the husband of Case D and the family friend, both of whom reported having had a previous history of hepatitis.

Case D's doctor decided not to recommend NIGH for any of her contacts because he was concerned about possible risks from this blood-derived product.

Discussion

Although Case D was diagnosed with hepatitis A a few days after the family gathering, none of the contacts received NIGH. Had they received NIGH within two weeks of exposure, the outbreak may have been prevented[2].

Investigation of this cluster was hampered by incomplete and delayed notifications. Laboratory notification was never received on Case D, and none of the cases was notified by the doctors. Case C's details were omitted on the laboratory request, leading to delays in the investigation. If PHU staff had been aware of the first case (Case D), she could have been counselled about preventive measures for her contacts.

NIGH is prepared from human plasma which has tested negative for HIV, hepatitis B and hepatitis C. It is prepared by Cohn's cold ethanol process of fractionation and has never been implicated in the transmission of viral infectious diseases[3,4,5,6].

Recommendations

Similar outbreaks of hepatitis A could be prevented if:

- suspected cases of hepatitis A are notified by **telephone** to the Public Health Unit by both laboratories and doctors;
- doctors provide all patient details on laboratory request forms;
- PHU staff counsel the patient about the value of NIGH to allow them to make an informed choice;
- the laboratory notification process is streamlined, either by encouraging PHUs to pass on hepatitis A notifications to the relevant PHU by telephone, or by laboratories notifying the relevant PHUs directly of cases of hepatitis A; and
- doctors are made aware of the safety of NIGH.

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ACTIVE AIDS SURVEILLANCE REPORT 1996

Under the Medicare Agreement, the Commonwealth Government provides about $33,000 to State Health Departments for HIV services for each reported person living with AIDS in NSW as at November 1 each year.

Active case finding throughout NSW late in 1996 tracked down 239 unreported AIDS cases. After adjustment for those known to have died, a total of 1,202 people were recorded as living with AIDS in NSW on November 1, 1996. Active case finding recorded an additional 80 cases in 1993, 256 cases in 1994 and 210 cases in 1995.

Infectious diseases surveillance has been an Area responsibility since 1991. During 1994-96 each Area Health Service strengthened active surveillance activities, with assistance and support from the NSW Health Department's AIDS/Infectious Diseases Branch.

FIGURE 5

REPORTS OF SELECTED INFECTIOUS DISEASES, NSW, 12 MONTHS TO JANUARY 1997 BY MONTH OF ONSET (WITH HISTORICAL COMPARISON)

Due to data collation problems, historical rubella data are unavailable, and figures printed in previous *Bulletins* may have been inaccurate.

Feb 96-Jan 97 **Mean Feb 93-Jan 96**

TABLE 1

INFECTIOUS DISEASE NOTIFICATIONS FOR NSW RECEIVED IN FEBRUARY 1997, BY AREA HEALTH SERVICES

Condition	Area Health Service																	Period	
	CSA	NSA	WSA	WEN	SWS	CCA	HUN	ILL	SES	NRA	MNC	NEA	MAC	MWA	FWA	GMA	SA	Total for Feb**	Total to date**
Blood-borne and sexually transmitted																			
AIDS	14	–	1	–	2	–	1	–	3	1	3	–	–	–	–	–	–	26	105
HIV infection*	HIV figures reported every second month																		
Hepatitis B – acute viral*	1	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	2	4
Hepatitis B – other*	56	37	25	2	75	7	8	8	48	4	2	3	3	7	2	6	1	294	587
Hepatitis C – acute viral*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hepatitis C – other*	91	52	36	11	82	41	35	23	104	38	21	24	5	35	1	20	29	648	1,329
Hepatitis D – unspecified*	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	2
Hepatitis, acute viral (NOS)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Gonorrhoea*	3	1	2	–	–	–	–	–	18	2	–	2	2	1	–	1	–	32	83
Syphilis	10	3	–	–	6	–	–	1	9	1	1	8	3	–	–	–	–	42	82
Vector-borne																			
Arboviral infection*	2	7	1	6	1	1	5	2	1	6	27	4	11	10	18	110	4	216	339
Malaria*	3	4	–	–	2	–	–	–	2	1	2	1	–	–	–	1	–	16	28
Zoonoses																			
Brucellosis*	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	2
Leptospirosis*	–	–	–	–	–	–	2	–	–	1	–	1	–	–	–	–	–	4	5
Q fever*	–	–	–	–	–	–	–	–	–	3	7	11	3	–	2	–	–	26	49
Respiratory/other																			
Legionnaires' disease	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	1	10
Meningococcal (invasive) infection	–	–	1	–	–	–	1	–	2	–	–	–	–	–	–	–	–	4	15
Leprosy	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Mycobacterial tuberculosis	3	3	2	–	2	–	2	–	2	–	–	–	–	1	–	–	–	15	30
Mycobacteria other than TB	11	1	2	1	9	–	4	–	2	1	–	–	–	–	–	2	–	33	64
Vaccine-preventable																			
Adverse event after immunisation	–	–	–	–	–	–	–	–	–	1	–	–	–	2	–	–	–	3	7
H.influenzae (invasive) infection	–	–	–	–	1	–	1	1	–	–	–	–	–	–	–	–	–	3	7
Measles	2	1	2	2	–	–	2	1	–	–	–	–	–	2	–	–	–	12	20
Mumps*	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	6
Pertussis	13	34	44	24	18	4	29	7	10	6	5	13	6	3	7	6	2	232	413
Rubella*	3	3	2	–	–	–	1	2	5	2	–	3	–	–	–	–	–	21	44
Faecal-oral																			
Cholera*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Foodborne illness (NOS)	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1	24
Gastroenteritis (instit)	–	3	–	–	–	–	106	–	–	–	–	–	1	–	–	–	–	110	154
Hepatitis A	28	66	41	13	34	7	23	10	64	13	21	13	3	23	6	4	2	371	450
Listeriosis*	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	2	5
Salmonellosis (NOS)*	12	22	1	4	10	3	13	7	21	16	9	6	2	4	1	3	2	136	274
Typhoid and paratyphoid*	–	–	–	–	1	–	–	–	2	–	–	–	–	–	–	–	–	3	4

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

Abbreviations used in this Bulletin:
CSA Central Sydney Health Area, SES South Eastern Sydney Health Area, SWS South Western Sydney Health Area, WSA Western Sydney Health Area, WEN Wentworth Health Area, NSA Northern Sydney Health Area, CCA Central Coast Health Area, ILL Illawarra Health Area, HUN Hunter Health Area, NRA Northern Rivers Health Area, MNC Mid North Coast Health Area, NEA New England Health Area, MAC Macquarie Health Area, MWA Mid West Health Area, FWA Far West Health Area, GMA Greater Murray Health Area, SA Southern Health Area, OTH Interstate/Overseas, U/K Unknown, NOS Not Otherwise Stated.

Please note that the data contained in this Bulletin are provisional and subject to change because of late reports or changes in case classification. Data are tabulated where possible by area of residence and by the disease onset date and not simply the date of notification or receipt of such notification.