# 10. CONCLUSION

#### Conclusion

The New South Wales Population Health Survey commenced as an ongoing survey in 2002, following adult health surveys in 1997 and 1998. This report on the health of adults aged 16 years and over is the third annual report from this ongoing survey.

Data were collected on a range of demographic information, health behaviours, health status, and use of and satisfaction with health services. Where possible indicators have been aligned with those collected in previous health surveys so that time series trends can be examined. Some of the trends and changes over the last 7 years are highlighted below.

### **Health behaviours**

Health behaviours are known to influence health and wellbeing. Between 1997 and 2004 there have been significant changes in some health behaviours. The proportion of smoke-free households (69.7 per cent to 84.3 per cent), and the proportion of homes with a smoke alarm or detector (58.2 per cent to 71.6 per cent) has increased significantly. There has been a significant decrease in the proportion of people who participate in any alcohol risk drinking behaviour between 1997 and 2004 (42.3 per cent to 35.4 per cent) but with no significant difference between 2002 and 2004. There was also a significant decrease in the proportion of people who were current smokers between 1997 and 2004 (24.0 per cent and 20.9 per cent) but with no significant difference between 2002 and 2004.

Between 1997 and 2004, the proportion of people aged 65 years and over immunised against influenza in the previous 12 months increased significantly, (57.1 per cent to 75.8 per cent). Similarly, between 2002 and 2004 the proportion of people aged 65 years and over who were immunised against pneumococcal disease in the last 5 years also increased significantly (39.4 per cent to 47.2 per cent).

Overall, there was a significant increase in the proportion of people who undertook adequate physical activity in 2004 compared to 1997 (47.9 per cent and 52.3 per cent). Virtually all of this increase occurred between 2003 (44.7 per cent) and 2004 (52.3 per cent).

Several health behaviours have remained unchanged. The proportion of people eating the recommended daily serves of fruit (47.1 per cent) or vegetables (8.2 per cent) is unchanged, as was the proportion of people who consumed reduced or low fat milk (46.1 per cent) and the proportion of people engaging in high risk 'binge' drinking in the last 4 weeks (9.6 per cent). The proportion of women aged between 50 and 69 years being screened for breast cancer in the last 2 years has also remained unchanged (74.4 per cent). However, the proportion of women having a Pap test within the last 2 years as a screen for cervical cancer has decreased from 77.3 per cent in 1998 to 72.8 per cent in 2004.

In 2004, 2 new indicators on screening—for bowel cancer and engaging in unsafe sex—have been reported for the first time and trends in these additional indicators will continue to be monitored. In addition, an index of sun protection behaviour has been developed and will also continue to be monitored.

#### **Health status**

Monitoring the health status of a population helps to detect emerging patterns of illness and disease and provides information to inform policy and planning of health services. There have been some obvious changes in the health status of the population between 1997 and 2004.

Overall in 2004, when compared with 1997, there has been a significant increase in the proportion of people who had been diagnosed with diabetes (4.7 per cent to 6.5 per cent), ever diagnosed with asthma (16.8 per cent to 20.4 per cent), and who were overweight or obese (41.8 per cent to 48.4 per cent). Between 1997 and 2004 there was also a significant increase in the proportion of people who reported high and very high physiological stress as measured by the Kessler 10 score (11.1 per cent to 13.3 per cent).

The proportion of people who rated their health status as excellent, very good or good decreased between 1997 (85.0 per cent) and 2002 (81.0 per cent) but did not change significantly between 2002 and 2004 (79.4 per cent). The proportion of people who reported all their natural teeth missing declined significantly between 1998 and 2003 (8.2 per cent to 6.3 per cent).

The only health status indicator to remain unchanged between 1997 and 2004 (10.4 per cent) was current asthma.

For the first time, information on visual and hearing status has been collected and these indicators will continue to be monitored.

## **Health services**

As part of the continuing commitment to monitoring satisfaction with health services in NSW, questions were asked about the use of and satisfaction with a range of services. These included difficulties getting health care when needed, admission to hospital, attendance at an emergency department, use of community health centres, and use of public dental services.

Overall, there has been a significant increase in the proportion of people who reported having difficulties getting health care when needing it in 2004 compared to 1997 (9.9 per cent to 13.9 per cent). Although the increase has continued in 2004 the proportion was not significantly higher than in 2002 or 2003. As in previous years, waiting time for an appointment with a general practitioner was the most frequently cited difficulty.

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Between 1997 and 2004, there have been no significant changes in the proportion of people who gave positive ratings of hospital inpatient care (90.0 per cent) and emergency department care (80.1 per cent). Between 2002 and 2004, there have been no significant changes in the proportion of people who gave positive ratings of community health care (91.5 per cent) and public dental care (84.4 per cent).

Emergency department attendance in the previous 12 months (14.6 per cent) and hospital admission in the previous 12 months (13.7 per cent) both remained unchanged between 1997 and 2004, as did public dental service attendance (4.3 per cent) and community health centre attendance (7.0 per cent) in the previous 12 months.

#### The future

In 2005, there are a number of changes in the New South Wales Population Health Survey. In the health status section a module on cardiovascular disease precursors will be included and an expanded asthma module will be incorporated. Under health behaviours new injury modules on sports injuries and water safety will be included.

The continued monitoring of indicators via the New South Wales Population Health Survey will provide information that will assist health professionals, health planners and those involved in policy development to plan, implement and evaluate health programs and initiatives within the community and within population and target groups.

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TABLE 11

TRENDS IN INDICATORS OF HEALTH BEHAVIOURS, BY SEX, NSW, 1997–2004

Indicator	Year	Males	(95% CI)	Females	(95% CI)	Persons	(95% CI)
Alcohol risk drinking (Guideline 1)	1997	50.6	(49.1–52.0)	34.3	(33.1–35.6)	42.3	(41.3–43.3)
	1998	50.4	(48.8–52.0)	36.3	(35.0–37.6)	43.2	(42.2-44.2)
	2002	39.3	(37.3–41.2)	30.2	(28.6–31.8)	34.7	(33.4–35.9)
	2003	41.5	(39.5–43.4)	30.2	(28.8–31.7)	35.6	(34.4–36.8)
	2004	40.5	(38.1–42.8)	30.3	(28.5–32.1)	35.3	(33.8–36.8)
High risk drinking in the past 4 weeks	2002	13.5		8.0	(7.0–9.0)	10.7	
right risk diffiking in the past 4 weeks			(12.1–14.9)		` '		(9.9–11.6)
	2003	14.4	(13.0–15.8)	7.3	(6.5–8.2)	10.7	(9.9–11.5)
	2004	12.4	(10.8–14.0)	6.9	(5.9–7.9)	9.6	(8.7–10.6)
Pap test within the last 2 years	1998			77.3	(75.9–78.7)	77.3	(75.9–78.7)
	2002			74.7	(72.9-76.4)	74.7	(72.9-76.4)
	2004			72.8	(70.6–75.0)	72.8	(70.6-75.0)
Screening mammogram within the last 2 years	1997			73.3	(70.9–75.7)	73.3	(70.9–75.7)
	1998			76.4	(74.1 - 78.7)	76.4	(74.1 - 78.7)
	2002			75.2	(72.6-77.8)	75.2	(72.6-77.8)
	2004			74.4	(71.4–77.4)	74.4	(71.4–77.4)
Vaccinated against influenza in the last 12 months	1997	55.7	(52.3–59.2)	58.1	(55.3–61.0)	57.1	(54.9–59.3)
	1998	61.9	(58.4–65.3)	64.5	(61.9–67.2)	63.3	(61.2-65.5)
	2002	74.6	(71.6–77.6)	75.8	(73.3–78.2)	75.2	(73.3–77.1)
	2003	76.3	(73.2–79.3)	75.9	(73.5–78.3)	76.0	(74.1–77.9)
	2004	76.1	(72.6–79.5)	75.5	(72.7–78.4)	75.8	(73.6–78.0)
/accinated against pneumococcal disease in	2004	70.1	(12.0-13.3)	75.5	(12.1-10.4)	73.0	(70.0-70.0)
Vaccinated against pneumococcal disease in the last 5 years	2002	26.0	(22.6. 20.4)	40.0	(29.0.42.7)	20.6	(26.4.40.0)
	0000	36.0	(32.6–39.4)	40.9	(38.0–43.7)	38.6	(36.4–40.8)
	2003	45.5	(42.0–49.1)	48.6	(45.8–51.5)	47.1	(44.9–49.4)
	2004	43.4	(39.2–47.5)	50.3	(46.9–53.6)	47.2	(44.6–49.8)
Homes with a smoke alarm or detector	1997					58.2	(57.3–59.2)
	1998					64.0	(63.0–65.0)
	2002					73.0	(71.9-74.1)
	2003					72.8	(71.7-73.9)
	2004					71.5	(70.1–72.9)
Recommended daily fruit intake	1997	39.7	(38.3-41.1)	52.4	(51.1–53.7)	46.1	(45.2–47.1)
toothinonada dany mait marko	1998	39.5	(38.0–41.1)	50.9	(49.5–52.2)	45.3	(44.3–46.3)
					` '		,
	2002	41.4	(39.4–43.3)	51.2	(49.5–52.9)	46.3	(45.0–47.6)
	2003	40.1	(38.2–42.0)	54.5	(53.0–56.1)	47.4	(46.2–48.6)
	2004	40.6	(38.3–43.0)	53.4	(51.5–55.4)	47.1	(45.6–48.6)
Recommended vegetable intake	1997	8.0	(7.3–8.8)	9.7	(8.9–10.5)	8.9	(8.3–9.4)
	1998	7.1	(6.4–7.9)	8.6	(7.8-9.3)	7.9	(7.3-8.4)
	2002	5.8	(4.9-6.6)	9.1	(8.3-10.0)	7.5	(6.9 - 8.1)
	2003	8.1	(7.1 - 9.1)	11.4	(10.4-12.4)	9.8	(9.1-10.5)
	2004	6.0	(5.0-7.0)	10.3	(9.1–11.4)	8.2	(7.4–8.9)
Usual use of low fat, reduced fat or skim milk	1997	37.2	(35.8–38.6)	53.6	(52.3–55.0)	45.5	(44.6–46.5)
ocaai acc of fow fat, roadcoa fat of citim filmt	1998	38.6	(37.0–40.1)	52.3	(50.9–53.6)	45.5	(44.5–46.5)
						43.2	,
	2002	35.6	(33.7–37.4)	50.6	(48.9–52.3)		(41.9–44.4)
	2003	37.2	(35.4–39.1)	50.9	(49.3–52.4)	44.2	(42.9–45.4)
	2004	38.8	(36.4–41.1)	53.2	(51.3–55.1)	46.1	(44.6–47.6)
Food insecurity last 12 months	2002	5.3	(4.4–6.1)	6.1	(5.3–6.9)	5.7	(5.1-6.3)
	2003	5.3	(4.4-6.1)	6.8	(6.0-7.5)	6.1	(5.5-6.6)
	2004	5.2	(4.2-6.2)	6.3	(5.3-7.2)	5.8	(5.1-6.5)
Adequate physical activity	1998	52.5	(51.0-54.0)	43.4	(42.1–44.7)	47.9	(46.9–48.9)
· · · · · · · · · · · · · · · · · · ·	2002	51.0	(49.1–53.0)	43.4	(41.8–45.1)	47.2	(45.9–48.5)
	2003	49.5	(47.6–51.5)	40.4	(38.9–42.0)	44.7	(43.5–46.0)
	2004	57.0	(54.7–59.3)	47.9	(46.0–49.8)	52.4	(50.9–53.9)
Current daily or occasional smoking	1997	27.1	(25.8–28.4)	21.1	(20.0–22.1)	24.0	(23.2–24.9)
ourient daily of occasional smoking							,
	1998	26.2	(24.8–27.5)	21.3	(20.2–22.4)	23.7	(22.8–24.6)
	2002	23.9	(22.2–25.6)	19.2	(17.9–20.5)	21.5	(20.5–22.6)
	2003	24.7	(23.0–26.4)	19.7	(18.5–21.0)	22.3	(21.2–23.3)
	2004	22.5	(20.5-24.5)	19.3	(17.8–20.8)	20.9	(19.6–22.1)
Smoke-free households	1997					69.7	(68.8–70.6)
	1998					73.1	(72.3-74.0)
	2002					80.8	(79.8–81.8)
	2003					82.6	(81.7–83.5)
	2004					84.2	(83.2–85.3)
Screening test for colorectal cancer in the	2004	27.7	(25.0–30.4)	24.4	(22.3–26.5)	26.0	(24.3–27.7)
last 5 years Percentage of population engaging in unsafe	2004	4.3	(3.4–5.3)	2.4	(1.8–3.0)	3.4	(2.8–3.9)
sex High sun protection behavior index (SPBI)	2004	61.8	(59.6–64.1)	71.9	(70.1–73.7)	67.0	(65.5–68.4)
	C 11114	01.0	(55.0-04.1)	71.9	(10.1-13.1)	07.0	(00.0-00.4)

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TABLE 12
TRENDS IN INDICATORS OF HEALTH STATUS, BY SEX, NSW, 1997–2004

Indicator	Year	Males	(95% CI)	Females	(95% CI)	Persons	(95% CI)
Excellent, very good, or good self-rated							
health status	1997	85.0	(84.0–85.9)	85.1	(84.2–86.0)	85.0	(84.4–85.7
	1998	85.0	(84.0–86.0)	83.1	(82.2–84.0)	84.0	(83.3–84.7
	2002	82.0	(80.5–83.5)	79.9	(78.6–81.2)	81.0	(80.0–81.9
	2003	81.8	(80.4–83.2)	79.7	(78.5–80.9)	80.7	(79.8–81.6
	2004	79.4	(77.6–81.3)	79.5	(78.0–81.0)	79.5	(78.3–80.7
Ever diagnosed with asthma	1997	15.2	(14.1–16.2)	18.4	(17.3–19.4)	16.8	(16.1–17.5
	1998	15.5	(14.3–16.6)	18.1	(17.1–19.1)	16.8	(16.1–17.6
	2002	18.6	(17.1–20.1)	21.1	(19.7–22.4)	19.8	(18.8–20.9
	2003	19.3	(17.7–20.8)	22.6	(21.3–23.9)	21.0	(19.9–22.0
	2004	18.1	(16.2–20.0)	22.5	(20.9–24.2)	20.4	(19.1–21.6
Current asthma	1997	8.8	(7.9-9.6)	12.1	(11.2–13.0)	10.5	(9.8–11.1
	1998	8.9	(8.0-9.8)	11.0	(10.2–11.7)	9.9	(9.4–10.5
	2002	9.2	(8.1–10.4)	12.1	(11.1–13.2)	10.7	(9.9–11.5
	2003	9.1	(8.0–10.3)	12.6	(11.6–13.7)	10.9	(10.1–11.7
	2004	8.9	(7.4-10.4)	11.9	(10.7–13.1)	10.4	(9.5–11.4
Diabetes or high blood sugar	1997	5.2	(4.6-5.7)	4.2	(3.7-4.8)	4.7	(4.3–5.1)
	1998	4.9	(4.2-5.5)	4.0	(3.5-4.5)	4.4	(4.0-4.8)
	2002	6.5	(5.7-7.3)	5.5	(4.9-6.2)	6.0	(5.5-6.5)
	2003	7.0	(6.1-7.8)	5.6	(4.9-6.2)	6.3	(5.8-6.8)
	2004	8.0	(6.9 - 9.1)	5.3	(4.6-6.0)	6.6	(6.0-7.3)
High and very high psychological distress	1997	9.2	(8.4-10.0)	13.0	(12.1 - 13.9)	11.1	(10.5-11.8
	1998	9.0	(8.1 - 9.9)	12.1	(11.2-12.9)	10.6	(10.0-11.2
	2002	10.5	(9.3-11.6)	14.2	(13.0-15.4)	12.4	(11.5-13.2
	2003	9.3	(8.2-10.4)	12.8	(11.8-13.9)	11.1	(10.3-11.8
	2004	11.7	(10.2-13.3)	14.7	(13.3-16.1)	13.2	(12.2-14.3
Overweight and obesity	1997	49.3	(47.8–50.7)	34.2	(32.9-35.4)	41.8	(40.8-42.7
	1998	49.8	(48.3–51.4)	34.1	(32.9–35.4)	42.0	(41.0–43.1
	2002	53.4	(51.4–55.4)	38.2	(36.6–39.8)	45.9	(44.6–47.2
	2003	55.7	(53.7–57.7)	41.0	(39.4–42.6)	48.4	(47.1–49.6
	2004	56.2	(53.8–58.6)	40.5	(38.6–42.4)	48.4	(46.9–50.0
All natural teeth missing	1998	5.7	(5.1–6.4)	10.6	(9.9–11.3)	8.2	(7.7–8.7)
	2002	4.9	(4.3–5.6)	7.8	(7.1–8.6)	6.4	(5.9–6.9)
	2003	4.3	(3.7–4.9)	7.7	(7.1–8.3)	6.1	(5.7–6.6)
	2004	4.7	(4.0–5.5)	7.7	(6.9–8.6)	6.3	(5.7–6.8)
Eyesight check in last 2 years	2004	70.6	(68.2–73.0)	74.1	(72.1–76.0)	72.4	(70.8–73.9
Normal vision in both eyes	2004	56.2	(53.9–58.5)	48.4	(46.5–50.4)	52.2	(50.7–53.7
Ever had hearing tested	2004	60.8	(58.5–63.1)	39.9	(38.1–41.8)	50.2	(48.7–51.7
Normal hearing in both ears	2004	76.2	(74.4–78.1)	85.1	(83.9–86.3)	80.7	(79.7–81.8

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TABLE 13
TRENDS IN INDICATORS OF HEALTH SERVICES, BY SEX, NSW, 1997–2004

Indicator	Year	Males	(95% CI)	Females	(95% CI)	Persons	(95% CI)
Difficulties getting health care when	1997	8.8	(8.0-9.6)	11.0	(10.3-11.8)	9.9	(9.4-10.5)
needing it	1998	8.5	(7.8 - 9.3)	11.8	(11.0-12.5)	10.2	(9.6-10.7)
	2002	10.8	(9.6-11.9)	14.3	(13.2-15.4)	12.6	(11.8-13.4)
	2003	11.4	(10.3-12.6)	15.1	(14.0-16.2)	13.3	(12.5-14.0)
	2004	12.7	(11.2-14.1)	15.0	(13.7-16.3)	13.9	(12.9-14.8)
Emergency department attendance in the	1997	15.8	(14.8-16.8)	12.0	(11.2-12.9)	13.9	(13.2-14.6)
previous 12 months	1998	13.9	(12.9-14.9)	12.0	(11.2-12.8)	13.0	(12.3-13.6)
	2002	14.7	(13.4-16.0)	13.8	(12.7-14.9)	14.3	(13.4-15.1)
	2003	14.0	(12.7-15.3)	13.1	(12.1-14.1)	13.6	(12.7-14.4)
	2004	15.5	(13.9-17.0)	13.7	(12.4-15.0)	14.6	(13.6-15.6)
Emergency department care rated as	1997	80.4	(77.5-83.3)	79.6	(76.6-82.7)	80.1	(78.0-82.2)
excellent, very good or good	1998	82.5	(79.5–85.5)	78.6	(75.7–81.5)	80.7	(78.6–82.8)
	2002	79.8	(75.8–83.7)	72.6	(68.7–76.6)	76.3	(73.5–79.1)
	2003	80.3	(76.1–84.4)	77.9	(74.3–81.6)	79.1	(76.3–81.8)
	2004	77.3	(72.3–82.2)	81.7	(77.9–85.6)	79.4	(76.2–82.6)
Hospital admission in the previous 12	1997	11.3	(10.4–12.1)	14.6	(13.7–15.5)	13.0	(12.3–13.6)
months	1998	11.4	(10.5–12.4)	15.3	(14.4–16.2)	13.4	(12.7–14.0)
	2002	11.0	(9.9–12.2)	16.0	(14.8–17.3)	13.6	(12.7–14.4)
	2003	12.3	(11.1–13.5)	14.9	(13.8–16.0)	13.6	(12.8–14.4)
	2004	12.3	(10.9–13.7)	15.1	(13.7–16.6)	13.7	(12.7–14.8)
Hospital care rated as excellent, very good	1997	90.2	(87.8–92.7)	89.9	(87.9–91.9)	90.0	(88.5–91.6)
or good	1998	92.6	(90.4-94.7)	89.9	(88.0-91.8)	91.0	(89.6-92.5)
	2002	93.4	(90.6–96.2)	88.9	(85.9–91.9)	90.7	(88.6–92.9)
	2003	93.0	(90.3–95.8)	89.9	(87.5–92.2)	91.3	(89.5–93.0)
	2004	91.6	(88.3–94.9)	90.5	(87.4–93.7)	91.0	(88.7–93.3)
Community health centre attendance in the	2002	4.8	(4.0-5.6)	8.9	(8.0–9.9)	6.9	(6.3–7.5)
previous 12 months	2003	3.6	(3.0-4.3)	6.5	(5.8–7.2)	5.1	(4.6–5.6)
	2004	6.0	(4.9–7.1)	8.0	(7.0–9.0)	7.0	(6.3–7.8)
Community health centre care rated as	2002	91.7	(87.1–96.4)	93.6	(90.8–96.3)	92.9	(90.5–95.3)
excellent, very good or good	2003	94.2	(90.0–98.3)	93.3	(90.4–96.1)	93.6	(91.3–95.9)
	2004	86.7	(80.5–92.9)	94.9	(91.8–98.0)	91.5	(88.3–94.7)
Public dental service attendance in the	2002	3.9	(3.1–4.7)	5.3	(4.5–6.1)	4.6	(4.1–5.2)
previous 12 months	2003	3.8	(3.2–4.5)	4.7	(4.1–5.4)	4.3	(3.8–4.7)
	2004	5.2	(4.3–6.1)	5.6	(4.8–6.5)	5.4	(4.8–6.1)
Public dental service care rated as	2002	82.2	(75.0–89.5)	81.1	(75.5–86.6)	81.6	(77.1–86.0)
excellent, very good or good	2003	85.8	(80.4–91.2)	84.8	(79.8–89.9)	85.4	(81.8–89.0)
	2004	80.8	(71.9–89.6)	87.7	(82.7–92.8)	84.4	(79.4–89.5)

 $Source: \ \ New \ South \ Wales \ Population \ Health \ Survey \ 2004 \ (HOIST). \ Centre \ for \ Epidemiology \ and \ Research, \ NSW \ Department \ of \ Health.$ 

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