the laboratory (10 faecal coliforms per 100ml). Similar results were found for faecal streptococci, with 75 per cent of samples below the detection limits of the laboratory (10 faecal streptococci per 100ml).

The wind direction at Sydney Airport during the 1990 survey was predominantly a mild to moderate northwesterly. North-westerly winds occurred on nine days (64 per cent), south-westerly on four days (29 per cent) and north-easterly on one day (7 per cent). Similar results were recorded during the 1993 survey.

Equipment failure meant limited data were available from Wollongong weather station during the 1990 survey. Where data were available, westerly winds predominated. A similar wind pattern was recorded in 1993.

There was no odour or visual evidence of grease, faecal matter or stormwater pollution on any of the 28 days samples were taken during 1990 and 1993.

DISCUSSION

Recreational water at Garie Beach was found to be free from faecal contamination both before and after the commissioning of Sydney's deepwater ocean outfalls. All water samples met the bacteriological standard for tidal waters set by the NSW Health Department. The standard states: "Water should be considered to be unsuitable for bathing where the faecal coliform count, calculated as the geometric mean of the number of organisms in three water samples taken at the same time from the area being examined, exceeds 300 organisms per 100ml, with an upper limit of 2,000 organisms per 100ml (in any one sample)."⁶

The lack of visual sewage pollution on the shore or in the water is consistent with the bacteriological findings.

A major limitation of the survey was the predominant westerly (offshore) winds recorded during the periods of sampling. Sewage floatables like "grease balls" could affect Garie Beach only with moderate to strong northeasterly, onshore winds and favourable current and eddy movements. North-easterly winds were recorded only once during the 1993 sampling program. Westerly winds predominated during the survey period, reducing the likelihood of faecal contamination from the ocean outfalls reaching the beach. Detailed current and eddy data could not be obtained for areas south of Port Hacking. Despite this, the very low levels of faecal indicator organisms and the lack of visual pollution detected during the survey suggest the Sydney deepwater ocean outfalls are unlikely to have had a detrimental impact on the bacteriological water quality at Garie Beach.

PUBLIC HEALTH ABSTRACTS

Professor James S. Lawson, Professor and Head of the School of Health Services Management at the University of NSW, has prepared the following public health items from the literature.

REDUCTION IN DEATHS FROM ISCHAEMIC HEART DISEASE

Deaths from ischaemic heart disease are falling substantially in many countries. A major public health question is the extent changes in important risk factors influence these trends. Finland has been one of the most active countries in developing and testing preventive measures for cardiovascular disease because in the early 1970s middle-aged Finnish men had the highest mortality from cardiovascular disease in the world. Between 1972 and 1992 mortality in parts of Finland fell by 55 per cent for men and 68 per cent for women. These declines have been almost wholly due to falls in the major risk factors, namely serum cholesterol concentration, elevated blood pressure and smoking.

Vartiainen E, Puska P, Pekkanen J et al. Changes in risk factors explain changes in mortality from ischaemic heart disease in Finland. Br Med J 1994; 309:23-7.

ASTHMA RISE IN AUSTRALIAN CHILDREN

A study between 1982 and 1992 in Wagga and Newcastle, NSW, has shown that the prevalence of recent wheeze in children aged 8-10 years rose 1.5 fold to about 25 per cent of all children. The reason for the increase is not known. However, there are higher levels of allergens – the numbers of house dust mites increased five fold during the study – or there may be new and unknown environmental factors.

Peat JK, Ven Den Berg RH, Green WF et al. Changing prevalence of asthma in Australian children. BrMedJ 1994; 308:1591-6.

ALCOHOL CONSUMPTION AND HIGH BLOOD PRESSURE It has long been known that there is a strong association between alcohol consumption and blood pressure. A large international study has confirmed this experience and shown that heavy alcohol consumption (three-four or more drinks a day) taken intermittently has a greater impact on blood pressure than constant heavy drinking. But constant heavy drinking also raises blood pressure. The study involved nearly 5,000 men and 5,000 women between 20 and 59 years in 50 centres on a worldwide basis.

Marmot MG, Elliott P, Shipley MJ et al. Alcohol and blood pressure: the INTERSALT study. Br Med J 1994; 308:1263-7.

PREVENTION OF SUICIDE: NO CLEAR STRATEGIES

A detailed review of the evidence indicates that no clear strategies are available for combating the increasing numbers of suicides among young people. Possible interventions include education of health care professionals on the recognition and treatment of depression, strengthening schemes to limit the size of individual prescriptions and reinforcement of media guidelines on the reporting and showing of fictional suicide. To understand the problems of rising suicide in youth, research must address the experience of young people and aspects of economic and social policy at a national level, according to the British authors of this paper.

Gunnell D, Frankel S. Prevention of suicide: aspirations and evidence. Br Med J 1994; 308:1227-33.

^{1.} Nichols P, Leeming R, Cresswell G. Survey of Sydney's Coastal Environment. *Water* 1992; 5:32-33.

Camp, Dresser and McKee International Inc. Draft Report on the Review of Sydney's Beach Protection Program. September 1989.
Fraser D. Community Committee of Review. Sydney Beach Protection Program - Concernmendations. June 1989.

Program – Concerns and Recommendations, June 1989. 4. Corbett SJ, Curry GK, Rubin GL, Kleinbaum DG. The Health Effects of Swimming at Sydney Beaches: The Sydney Beach Users Study. NSW Health Department, September 1991.

^{5.} Brooks NH. In: Myers EP and Harding ET. Ocean Disposal of Municipal Waste Water: Impacts on the Coastal Environment. Massachusetts: Inst of Tech, 1983.

^{6.} NSW Health Department. Tidal Bathing Standards 1982.