

# THE NSW PROGRAM FOR MAMMOGRAPHIC SCREENING

In NSW mammographic screening for the early detection of breast cancer is being phased in as a population-based program over a five-year period. The goal of the program is to reduce breast cancer deaths by 30 per cent in the target population which is all asymptomatic women aged 50-69 years. Swedish and other overseas trials have demonstrated an unequivocal benefit in reduced mortality in women in this age group. Women aged 40-49 years and 70-79 years who present for screening will be accepted in accordance with national policy, but active recruitment will be restricted to the 50-69 age group.

A previous article<sup>1</sup> stressed the importance of proceeding carefully through a pilot project stage because of the known pitfalls in mammographic screening: principally the need to recruit at least 70 per cent of the target population to regular screening; the need for adequately trained radiologists, radiographers and other service providers and the application of uniform standards and quality assurance measures.

In June 1991 the NSW Health Department agreed to participate in the National Program for the Early Detection of Breast Cancer. In June 1992, following approval of the five-year strategic plan for the NSW program, the Commonwealth and State signed a three-year performance and funding agreement for the first phase of the program. Commonwealth funds of \$13.5 million are being matched by the State for the financial years 1991-92, 1992-93 and 1993-94 to screen a cumulative total of 179,703 women.

The NSW Health Department has assigned responsibility for the implementation of the program to the NSW Cancer Council, and the State Planning and Co-ordination Unit has been set up under the auspices of the council for this purpose.

The Statewide program is being expanded in accordance with the strategic plan which was produced by the State Planning and Co-ordination Unit with the assistance of the Advisory Committee of the NSW Program for Mammographic Screening. The unit is working closely with the Chief Executive Officers of the Area Health Services and Directors of Health Regions for the Statewide development of the program.

The service delivery model for mammographic screening comprises a multidisciplinary assessment centre with a number of linked screening units. This entity, known as a screening and assessment service, has a defined geographic catchment area not confined to Health Area or Region boundaries. The available resources will be used to maximise the effectiveness of the program across the State.

The NSW plan provides for seven screening and assessment services in the first phase of the program. In addition to the two services based in the Central Sydney and Hunter Areas, three new services will be set up this financial year — expanding the program to the north, west and south west of the Sydney metropolitan area and the North Coast Region. In the 1993-94 financial year two more services will be set up, one in a rural area and the other in the metropolitan area.

The assessment centres being established this year will be at Royal North Shore Hospital in the Northern Sydney Area, Parramatta Hospital in the Western Sydney Area and Lismore in the North Coast Region. Dr Marjorie Kossof has been appointed Director in Northern Sydney, Mrs Beth Trevan in the North Coast and Dr John Boyages for the Western Sydney Service.

The major issues in the implementation of the five-year plan are:

- quality assurance including accreditation of screening and assessment services;
- monitoring effectiveness of the program;
- training of staff involved in screening and assessment;
- recruitment of women in the target age group; and
- providing services to meet the needs of women.

To qualify for funding, the assessment centres and their affiliated screening units must be accredited in accordance with the standards required by the national program. Responsibility for the accreditation process rests with the State Planning and Co-ordination Unit which is being assisted in the process by the Accreditation Sub-Committee of the Program Advisory Committee. The sub-committee includes representatives of the Colleges of Pathologists, Radiologists and Surgeons and is chaired by Professor Ken Donald, past president of the Australian Cancer Society.

Before gaining accreditation, screening and assessment services must pass a site inspection by a multi-disciplinary team, which includes at least one interstate assessor. An assessors' register has been set up by the national program to assist the States in forming the site inspection teams. The two existing services in the Central Sydney and Hunter Area Health Services have applied for accreditation and their site inspections were conducted in October 1992. The recommendations of the Accreditation Sub-Committee and the State Planning and Co-ordination Unit about these services were ratified by the National Accreditation Committee at its meeting in December. New services are required to undergo site inspections within two months of commencement of operation.

A State Mammographic Screening Register is being set up within the State Planning and Co-ordination Unit. The register will monitor crucial indicators of an effective program such as the participation rate of the target population, the results of screening mammography, the recall rate and the outcomes of the work-up procedures on recalled women. The screening and assessment services will be required to transmit data on each woman screened to the register in accordance with the National Minimum Data Set. Summary data will be transferred to the National Screening Register.

The State Planning and Co-ordination Unit has been developing a strategy to address the task of training for all clinical and non-clinical staff involved in the screening and assessment services.

To achieve the agreed screening targets, individual and general recruitment strategies will be used to encourage women aged 50-69 years to come forward for screening. Individual strategies include personalised letters of invitation using the electoral roll. General strategies are those which operate at population or community level and include the use of media and community action.

A recruitment package will be made available to the screening and assessment services to assist recruitment plans for their respective catchment areas. The package comprises three major documents: a summary of recruitment research in the Australian and overseas settings, a set of consumer-oriented standards and a case study of the implementation of recruitment strategies.

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## Blue green algae

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The most promising avenue for future epidemiological research would be school-based studies. Children living along the Darling swim frequently in the river. School nurses are in a unique position to monitor even minor illness among these children. The most appropriate option for future surveillance of this potential public health problem would be to monitor continuously trends in blue green algae-related illnesses reported to school nurses in areas regularly affected by riverine blooms of blue green algae. Increases in the incidence of blue green algae-associated illnesses during or following algal blooms would indicate the need for further epidemiological study.

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### ACKNOWLEDGMENTS

*We greatly appreciated the help provided by Dr John Affleck and the staff of the Royal Australian Flying Doctor Service, Matron Joan Edgecombe and the staff of Wilcannia Hospital and Community Health, the principals and staff of the Wilcannia Central School and St Teresa Community School and the community at Wilcannia.*

1. Blue Green Algae Final Report. Blue Green Algae Task Force, NSW Department of Water Resources, 1992.
2. Hunter PR. Human Illness Associated with Freshwater Cyanobacteria (blue green algae). *Public Health Laboratory Service Microbiology Digest* 1991; 8:3; 96-100.
3. Falconer IR, Beresford AM, Runnegar MTC. Evidence of liver damage by toxin from a bloom of blue green algae. *Med J Aust* 1983; 1:511-514.
4. Collins M. Algal Toxins. *Microbiological Reviews* 1978; 42(4):725-746.

## Mammographic screening

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The satisfaction of women with the service provided at the time of the first screen will be an important influence on their decision to have future screens. A survey of women attending the screening and assessment services in the Central and Hunter Area Health Services was begun in June 1992. The results of the survey will be taken into account in the planning of the new services to ensure that service provision meets the perceived needs of women.

Printed materials about mammographic screening have been written in consultation with consumer representatives, health providers and educators and will be distributed by the services.

Community education is a major issue in developing public knowledge and acceptance of the mammographic screening program and fostering recruitment of the target population. Strategies to involve health promotion personnel in the broadest sense will be developed through a series of seminars about breast cancer and mammographic screening. The seminars will be developed on a consultative basis by the State Planning and Co-ordination Unit.

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- 1 Henry E. Bid to reduce breast cancer deaths. *NSW Public Health Bulletin*, May 1991. Volume 2, Number 5.

The following abstracts were prepared for the NSW Public Health Network Conference in Sydney in November. The presenting author's name is underlined.

### BEHAVIOURAL/RISK FACTOR SURVEY IN A RURAL AREA

Three communities in the South West Region were surveyed using a telephone-based methodology. The aims of the survey were to pilot the use of telephone surveys in a rural area and to gather local behavioural/risk factor data. The survey employed random digit dialling and the random selection of household participants, over the age of 18 years, using Kish Grids. Questions were taken (or modified) from the National Health Survey and National Heart Foundation Risk Factor Survey or were developed locally following input from a community meeting. The survey included specific questions on injuries related to farm work as well as questions on the perceived major health problems in the communities surveyed.

Students from La Trobe University Albury/Wodonga campus were trained as interviewers. Interviews were conducted between 6.30pm and 8.30pm Monday to Friday for a period of three weeks with 480 interviews being completed. Despite intense and supportive local media coverage the response rate was 62 per cent. The cost per completed interview (not including data entry and analysis and questionnaire development) was approximately \$12. Analysis of the data is being undertaken. A major issue when conducting these surveys in rural areas is the lack of experienced interviewers.

*Tony Kolbe, Kim Gilchrist, Elaine Clark and Neil Stubbs*

### THE SYDNEY AIR POLLUTION AND MORTALITY STUDY

There has been increasing community concern over visible air pollution in Sydney and its possible effect on health. This paper reports the results of an analysis of daily death counts and environmental variables in the Sydney area of NSW for the period 1986 to 1989. The study determines the association between daily air pollution (nitrogen dioxide, ozone and nephelometry, an indirect measure of particulates) and mortality.

All available air pollution data were obtained from the then State Pollution Control Commission from 1986 to 1989 for all sites in the Sydney area. Meteorological and mortality data were collected for the same time period and area. Multiple linear regression models were fitted to the dataset, with non-traumatic deaths as the outcome variable. Various techniques were used to account for autocorrelation. Separate models were fitted for seasons and additional analyses were performed using the alternative outcome variables of cardiovascular deaths and cancer deaths.

The base model found significant effects of temperature, nitrogen dioxide, day of week and seasons in predicting the number of non-traumatic deaths. The reduced model accounted for 38 per cent of the variability in daily non-traumatic deaths. An increase of one log unit of nitrogen dioxide is associated with an increase in daily deaths of two. An increase in nitrogen dioxide levels from 0.0 to 2.7 ppm would be associated with an extra two deaths on that day. If nitrogen dioxide levels increased by a further log unit, from 2.7 to 7.4 ppm, there would be a further two deaths.

*Peter Lewis, John Wiodarczyk, Stephen Corbett and Tim Churches*

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