

# Anti-Cancer Council of Victoria



ltr-1

12 December, 1989

Memo to: Members, State Mammographic Advisory Committee

From: Professor R R H Lovell

Subject: Meeting Papers for 19 December 1989

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## 8. Other Matters

### 8.1 Inspection of Mammography Equipment under Health (Radiation Safety) Regulations 1984

Arising from a comment made by the Australian Institute of Radiography to the Chief Health Officer in June 1989, a copy of which was sent to ACCV, I wrote to Dr GJ Rouch, Chief Health Officer on 9 August 1989 to raise the question of the availability of dedicated quality assurance testing equipment to test mammography x-ray units of which there were now 70 in Victoria. A copy of Dr Rouch's reply enclosing a copy of his letter of 7 August 1989 to the Australian Institute of Radiography is attached for information.

Attachment 1.

### 8.2 Request from Australian Institute of Radiography (Victorian Branch) for representation on SMAC

Copy of letter from Honorary Secretary, AIR to Executive Secretary, SMAC, dated 2.8.89

Attachment 2.





# Health Department Victoria

## Statewide Services

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23 August 1989

Prof. R.R.H. Lovell,  
Executive Secretary,  
ACCV Mammographic Screening Advisory Committee,  
Anti-Cancer Council of Victoria,  
1 Rathdowne Street,  
CARLTON, VICTORIA, 3053.

Dear Prof. Lovell,

I refer to your letter of 9th August, 1989 concerning mammographic X-ray units in Victoria, and more particularly the quality assurance testing of these units.

I have enclosed a copy of the reply letter sent to the Victorian Branch of the Australian Institute of Radiography in response to their letter on this subject. I hope that this adequately addresses your concerns.

Should you have any further comments or queries, I would be pleased to hear from your Committee.

Yours sincerely,

Dr. G.J. Rouch,  
Chief Health Officer,  
STATEWIDE SERVICES.

Enc.



# Health Department Victoria

## Statewide Services

### ENVIRONMENTAL HEALTH STANDARDS

Address all mail to  
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7 August, 1989.

Honorary Secretary,  
Victorian Branch,  
Australian Institute of Radiography,  
National Science Centre,  
191 Royal Parade,  
PARKVILLE. VIC. 3052.

Dear Miss McCormack,

Re:- Inspection of mammography x-ray units.

I refer to your letter of the 20th of June, 1989 concerning the inspection of mammography x-ray facilities in the State of Victoria, and am pleased to be able to provide the following information.

#### Current situation.

The inspection and testing of mammographic x-ray units requires equipment which is calibrated for the low energy beams used in mammography. The Radiation Safety Section of this Department has a suitable ionization chamber for dose measurement, but is currently without a mammography kV (kilovoltage) meter. Product data has been obtained on a number of suitable instruments, and arrangements are in progress to test these units prior to a decision to purchase an appropriate kV meter.

Following the recent upsurge in the number of mammographic x-ray units in Victoria, and the consideration of a screening program for asymptomatic women, the Radiation Safety Section has commenced the preparation of an inspection / quality assurance protocol. Due to the radiation sensitive nature of breast tissue and the fact that asymptomatic women will be x-rayed, this protocol and the selection of suitable test equipment require careful consideration.

A further problem has been the establishment of a dose measurement technique, and the selection of a breast tissue equivalent phantom. The Australian Radiation Laboratory (ARL) is currently conducting an Australia wide survey on mammography doses using thermoluminescent dosimeters (TLD). The ARL encountered difficulties in obtaining a suitable TLD material which was capable of being calibrated at the low beam energies used in mammography. Also as most modern mammographic x-ray units incorporate an automatic exposure control system, the use of an ionization chamber to measure dose presents difficulties which may lead to spurious results. Suitable TLD techniques would seem to be the preferred method. Hence it was not considered appropriate to attempt to duplicate efforts being conducted by ARL in developing the National Survey, but was considered prudent to wait until some of the problem areas were clarified.

Proposed action.

The Radiation Safety Section have made arrangements to evaluate several suitable kV meters, and once this is completed the appropriate instrument will be purchased. A suitable dose measurement technique for automatic exposure control type units is also being developed. The Section will then be in a position to carry out full inspections of all mammographic x-ray units in Victoria. It is anticipated that appropriate equipment and techniques will be in place prior to end 1989.

I trust that this information is adequate, and should you have any further queries, please contact Mr. Steve Crosling, Senior Radiographer of the Radiation Safety Section, on 616 7080.

Yours Faithfully,



Dr. G. Rouch, <sup>for</sup>  
Chief Health Officer,  
Statewide Operations.





Reed 3/8  
AUSTRALIAN INSTITUTE OF RADIOGRAPHY  
VICTORIAN BRANCH

Incorporated in N.S.W.

NATIONAL SCIENCE CENTRE, 191 ROYAL PARADE, PARKVILLE, VIC., 3052

Address all correspondence to the Honorary Secretary

1. cc'd  
2. -> SMAC

2nd August 1989.

Mr. R.R.H. Lovell,  
Executive Secretary,  
A.C.C.V. Mammographic Screening Advisory Committee,  
Keogh House,  
1 Rathdowne St.,  
Carlton South, 3053.

Dear Mr. Lovell,

Thank you for your letter of 17th July.

In response to your questions about Mammography X-ray Units, I wish to advise that the Radiation Safety Section of the Health Department Victoria have issued licenses for approximately 60 Mammography Units. Your assumption that there are 60 X-ray Units performing only Mammography procedures is quite correct, and yes these machines have been designed specifically for Mammography. The design features of these dedicated units are such that patients receive an extremely low dose of radiation, whilst a high quality image is produced.

Thank you for providing us with the terms of reference of the State Mammographic Screening Advisory Committee for Victoria. We would be interested to know who this committee is composed of, and we also seek representation on this committee because Medical Imaging Technologists are the major practitioners of mammography and we believe our expertise would be invaluable.

Yours faithfully,

Annette McCormack,  
Honorary Secretary.