1. BACKGROUND TO THE EVALUATION

**Bug Breakfast**

Bug Breakfast is the name given to a series of hour-long breakfast seminars on communicable diseases presented by the Public Health Division of the NSW Department of Health about eight times a year. The Public Health Training and Development Branch, in the Centre for Epidemiology and Research, and the Communicable Diseases Branch, in the Centre for Health Protection, coordinate the content and delivery of the sessions.

First delivered in 1990, the purpose of Bug Breakfast is to keep participants abreast of issues in communicable diseases, with each session focusing on a disease of current relevance. It also forms part of the training for trainees on the NSW Public Health Officer Training Program. This group were the original audience for the sessions, along with staff from both the Public Health Division and metropolitan public health units in NSW.

Trainee Public Health Officers continue to be involved in the organisation and delivery of the sessions.

**Videoconferencing Bug Breakfast**

Videoconferencing facilities were first installed at the NSW Department of Health in July 1997 as part of a statewide Telehealth initiative to improve access to health services. The number of sites has continued to expand and there are now 200 facilities throughout NSW. While the priority of these facilities is the provision of direct clinical care, they are available for other purposes.

In 1999 it was suggested that videoconferencing could be used to link the staff of rural public health units in NSW with the Bug Breakfast sessions. This first occurred in June 1999 with a trial broadcast to the Mid North Coast Population Health Unit in Port Macquarie. Up to 10 sites are now regularly connected to the sessions. To date, the Centre for Health Protection has met the cost of these connections.

Videoconferencing enables the delivery of information in real time, across geographically distant sites. There are several advantages in utilising this form of technology for the delivery of Bug Breakfast to rural sites. First, rural health professionals can receive the training while remaining close to their work site. Previously a small number of rural participants were able to access Bug Breakfast when they were in Sydney for other training or for meetings. Videoconferencing offers these individuals consistent access and also expands the number of people who can participate. Second, it provides rural health professionals with the opportunity to participate in this program of continuing education with colleagues from across the state. Health professionals, regardless of their location, have the opportunity to network and share their experiences with experts in communicable diseases and with other public health professionals.

Since 1999 different ways of delivering the session have been trialled to optimise delivery for the remote audience. These have included using different transmission bandwidths, which influences the quality of the picture. Different methods of displaying the presentation have also been investigated. Currently, the camera at the live site is positioned to show both the presenter and the projection screen. All sites are provided with copies of the PowerPoint slides prior to the session so that participants do not need to rely on reading the screen for the content of the slides. Prior to this evaluation, there had been feedback of occasional technical difficulties. The evaluation, however, was not driven by dissatisfaction with the remote site delivery.
In recent years the audience at the live site in North Sydney has expanded from 20–30 people to 40–50 people. The venue that is regularly used, a medium-sized conference room, can no longer comfortably accommodate the audience. In addition, there has been an expanding demand both from rural sites and from sites within Sydney to participate by videoconference. To date, connections have been limited to one site per area health service and no sites in metropolitan Sydney are connected. This is largely due to the difficulties associated with organising and managing large numbers of connections on a dial-out basis.

**Evaluation**

While the content of Bug Breakfast is evaluated, there has been no evaluation of how videoconferencing has influenced the learning environment at either the live site in North Sydney or at the remote sites.

The general impression of the organisers of Bug Breakfast was that the continued expansion of videoconferencing was having a detrimental effect on the delivery at the live site. For example the question and answer session at the end of each session is shared between all the sites, resulting in restrictions in the number of questions per site. In addition, as the organisers of Bug Breakfast always participate at the live site, there was a need to explicitly document the experience of the remote sites.

A review of the literature identified several studies that had evaluated the effectiveness of videoconferencing through surveying participants.1–7 The author of a recently published Queensland based survey was contacted, and the types of questions used were reviewed.8 The benefits of including a qualitative component in telehealth evaluations has also been confirmed.9 Consequently an evaluation was undertaken to assess:

1. the impact of videoconferencing on the learning environments at both the live site at North Sydney and at the remote sites;
2. the perceived value of Bug Breakfast to the professional development of the participants.

The purpose of the evaluation was to document the quality of the delivery of Bug Breakfast and to identify ways to enhance the learning environment for all participants. It did not seek to evaluate the learning outcomes of the session.