Q FEVER VACCINATION PROGRAM IN NEW ENGLAND REGION

Q fever is a well recognised health hazard for abattoir workers, dairy workers, shearers, wool sorters, tanners and veterinarians. It is contracted by the inhalation of aerosols or dust contaminated by the infected products of conception of cattle, sheep and goats. The infectious agent is a rickettsia, *Coxiella burnettii*.

The New England Region was one of four Health Regions in NSW with high notifications of Q fever (18 per 100,000 population in 1990). The perceived costs in employee claims under the Occupational Health & Safety Act were identified as high by the abattoir administration.

The five abattoirs in the Region were approached in July 1991 with a proposal to screen and vaccinate their workforce against Q fever. Discussions were held with abattoir managers, personnel managers, occupational health nurses and union representatives. Background information was gained from the Central West Region, where a testing program had been implemented, and from Professor Barry Marmion of Adelaide.

Screening involves taking a short medical and occupational history, a skin-test and venipuncture for Q fever serology. The skin-test is read five to seven days later, when pathology results are also received. Vaccination is offered only to those who have negative serology and skin tests.

The New England program

The Public Health Nurse (PHN) was trained as a Q fever vaccinator by Professor Marmion. After accreditation the PHN trained the occupational health nurse at Gunnedah Abattoir, and initially assisted her with the screening of employees. This program began in September 1991 and continued until the expiry date of the only vaccine source in February 1992. With minimal disruption to the abattoir

LEPROSY

The first cases of leprosy in two years have been notified, from South West Region (1) and Central Sydney Area Health Service (2). Details of the three cases are as follows:

AGE (YEARS)	SEX	COUNTRY OF BIRTH
34	Male	Vietnam
51	Female	New Guinea
77	Male	India

Leprosy is primarily a disease of the tropics and subtropics. It is a disease of low infectivity, usually being transmitted after prolonged personal contact. Antibiotic treatment is effective. Infectiousness is lost within three days of treatment with rifampicin.

The diagnosis should be considered when a patient from a country where leprosy is endemic presents with unexplained neuropathy or skin lesions. As leprosy is adequately treated in the outpatient setting and laboratory diagnosis is not always reliable, had been retained on the list of conditions to be notified by all medical practitioners.

HAEMOPHILUS INFLUENZAE INFECTIONS

Ten notifications were received for *Haemophilus influenzae* infections during May. This compares with 22 notifications received for the same period in 1991.

A total of 59 notifications has been received for 1992. Twenty-three (39 per cent) were for children aged between 18 months and five years, and therefore potentially preventable by the currently available vaccine. operation, screening was offered for several hours a day, including for night-shift workers, up to four days a week.

Tamworth Abattoir, with 90 employees, has no occupational health nurse but was included in December 1991. The Public Health Nurse coordinated the program at this small abattoir one morning a week over four weeks.

Concurrently in Tamworth a group of 41 of the New England Dairymen's Association was screened and vaccinated. The cost of their vaccination was met by individuals or their employers.

The combined abattoir program tested 655 employees (110 females, 545 males). Serology and skin testing demonstrated that 340 (52 per cent) had previously been infected. Of these:

- 315 (48 per cent) had negative serology and skin test;
 - 111 (17 per cent) had both positive serology and skin test;
 - 183 (28 per cent) had positive serology only; and 46 (7 per cent) had positive skin test only.

Vaccination was offered to the 315 serology and skin-test negative reactors.

In comparison, of the 41 dairymen screened eight (20 per cent) had been previously infected. Four (10 per cent) had positive serology only and four (10 per cent) had a positive skin test and negative serology.

Vaccine availability has limited the program to the present participants and prevented its extension to the remaining abattoirs.

Contributed by Greg Bell, Senior Environmental Health Officer, Cathy Johnson, Public Health Nurse and John Rooney, Director, Public Health Unit.

Q FEVER

As the vaccine against Q fever is unavailable, the serological screening and immunisation program has been stopped. The success of the program has been reflected in the 52 per cent decrease in Q fever notifications in 1992 compared with the same period in 1991.

FOODBORNE ILLNESSES

Notifications for foodborne diseases have decreased for several reasons. Among these is:

- The new notification criteria for foodborne diseases (campylobacter, yersinia and shigella are no longer notified as single cases, unless they occur in an "institution"); and
 - Delays in data entry of foodborne notifications as the Food Branch processes notifications and embarks on surveillance and public health action before passing notifications to PHUs.

This second factor will be streamlined with the integration of Food Branch officers into the PHUs.

INFLUENZA

Six PHUs (Western Sydney, Central/Southern Sydney, Illawarra, Central Coast, Central West Region and South Eastern Region) provide General Practitioner Sentinel Surveillance data on influenza. The rate of influenza, expressed as the number of cases per 100 consultations, increased from 1.63 at the beginning of May to 7.37 by the first week of June.

The national reporting scheme ASPREN recorded an increase in "influenza-like illness" in late April and early May.