Foodborne disease in Australia—Why good local investigation is important for national understanding.

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Investigating foodborne disease can be challenging due to many potential sources of gastroenteritis and patient's poor recall about foods they have eaten. We conservatively estimate that there are approximately 5.4 million cases of foodborne gastroenteritis each year in Australia, with less than 1% reported to health authorities. However, surveillance data from doctors and laboratories are important to determine trends and identify risk factors for infection. Environmental health officers are key players in surveillance through the interviews they conduct with notified patients and their active contribution to foodborne disease outbreak investigation. To maximize the effectiveness of surveillance it is important to review the success of investigations. For example, over 16,000 cases of *Campylobacter* infection are notified each year, but health authorities detect only 1–2 outbreaks. Interviewing all persons infected with *Campylobacter* does not improve this ratio, although selective follow-up of people working in childcare, food services and healthcare settings is important for preventing secondary infection. Interviewing patentis infected with common serotypes or phage types of *Salmonella* is far more successful and results identification of food vehicles in approximately 40% of 60–80 *Salmonella* cluster investigations each year. To improve environmental health officers' effectiveness in following-up notifiable diseases, we initiated training in some states covering basic epidemiology of foodborne disease, collecting food samples, laboratory testing and legal issues. Collecting summary information on outbreaks helps identify high-risk practices that may result in foodborne outbreaks. Some examples include *Salmonella* contaminated piping bags used to dispense cream in bakeries and several outbreaks of *Clostridium perfringens* gastroenteritis after half cooked roasted meats were transported without refrigeration. These data are then used to develop policy for food safety programs. Environmental health officers' contributions to good local investigation in the community are vital to developing better national understanding of these common illnesses.