Disease surveillance in dogs and cats: a practitioner-based system

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In 2010, a prospective national disease surveillance project was launched in Australia to capture data on diseases in dogs and cats. This system – called Disease Watchdog – is based on the reporting of disease cases by veterinary practitioners. Since its launch, approximately 40% of Australian practitioners have registered and participated in Disease Watchdog, attracted by the information generated from this system (including real-time disease mapping). Practitioners can report a range of diseases, including canine parvovirus, distemper and hepatitis; feline calicivirus, herpesvirus, infectious peritonitis and leukaemia virus; and tick paralysis. Ancillary data recorded include practitioner information, case occurrence date and location, species, breed, age, gender, neuter status, disease, case diagnosis method, case outcome, vaccination status, vaccine given and vaccination date. In addition, there is an optional field to record litters infected. During 2010 and 2011, 8,443 disease reports were submitted to Disease Watchdog. The conditions most commonly reported were tick paralysis (n=4,499, 53.3%) and canine parvovirus (n=3,372, 39.9%). Estimated case fatality rates were 58% (canine hepatitis), 23% (canine parvovirus), 7.4% (tick paralysis), 1.6% (feline calicivirus), 1.3% (feline herpevirus). To date, information generated by Disease Watchdog has been used to investigate risk factors for canine parvovirus mortality and disease clustering. The risk of death was significantly associated with season of diagnosis (summer) and pedigree type (hounds and non-sporting dogs). Clusters were found to occur in postcode areas with a greater level of relative socioeconomic disadvantage and a lower rank in education and occupation ($P<0.05$). Although the project is still in its infancy, already new information on the distribution and risk factors for diseases of dogs and cats has been produced. This system is continuing to evolve to include new diseases and additional information.