

VARICELLA OUTBREAK EPIDEMIOLOGY IN AN ACTIVE SURVEILLANCE SITE, 1995-2005

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ABSTRACT

We report on varicella disease outbreaks identified in an active surveillance site from 1995 to 2005 and describe trends and characteristics of the outbreaks. Cases of varicella were reported to the active surveillance project and outbreaks were defined retrospectively as ≥ 5 varicella cases epidemiologically linked to a common setting occurring within one incubation period. Outbreaks were grouped by calendar year. From 1995-1998 to 2002-2005, varicella outbreaks significantly decreased in number, from 236 to 46 ($p < 0.001$); in size, median number of cases per outbreak from 15 to 9 ($p < 0.001$); and duration, from 44.5 days to 30 days ($p < 0.001$). The median age of outbreak cases increased from 6 to 9 years ($p < 0.001$). The one-dose varicella vaccination program has been successful with decreasing the number of outbreaks and cases; however, challenges remain with controlling outbreaks among vaccinated persons and targeting vaccination efforts to susceptible older age groups.

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