

239848 Rural health department costs associated with response to outbreaks of Measles and Pertussis: Grant County Health District, Washington, 2008 and 2010

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Background: Measles and Pertussis are highly infectious and resurging communicable diseases. Grant County Health District (GCHD), a rural public health jurisdiction in Washington State, responded to two unrelated outbreaks: one of Measles in 2008 and one of Pertussis in 2010. Since the economic impact of outbreak investigations can be particularly significant for rural health agencies, this report analyzed such impact on the GCHD's budget. Methods: Expenditures data for investigated cases of Measles (n=19) and Pertussis (n=28) were collected using identical methods of record keeping. The period for data collection was defined as the time from the first case notification until the final outbreak debriefing. Cost was separated by involved GCHD divisions and by activity. Labor cost was calculated by period and division. Cost of the outbreaks was expressed as total, by activity, by division and by population served (in dollars and in percent). Results: GCHD incurred direct cost of \$5,238.53 per case of Measles (in 2008 dollars) and \$1,621.83 per case of Pertussis (in 2010 dollars), or \$0.06 per capita (Grant County, WA) per Measles case and \$0.02 per capita per Pertussis case. Conversely, in 2008, 4.9% (\$99,532 of direct cost) of the agency's total annual expenditures were attributed to Measles outbreak; in 2010, 2.4% (\$45,411) to Pertussis outbreak. Additionally, \$100,951 was spent by collaborating agencies during the Measles outbreak. Conclusions: The observations underscore the large economic impact of communicable disease outbreaks on rural public health budgets. As rural health jurisdictions depend on increasingly vulnerable flexible funds for disease investigations and response, an overhaul of funding sources for such capacity is warranted.

Learning Areas:

Conduct evaluation related to programs, research, and other areas of practice
Epidemiology
Protection of the public in relation to communicable diseases including prevention or control
Public health administration or related administration

Learning Objectives:

1. Identify the cost of two communicable disease outbreaks in the context of a rural public health jurisdiction. 2. Compare the severity of budgetary impact in two unrelated outbreaks.

Keywords: Cost Issues, Outbreaks

Presenting author's disclosure statement:

Qualified on the content I am responsible for because: as a county public health officer I oversee all activities related to jurisdictional public health assessment, intervention development and public health assurance, including communicable diseases response.

Any relevant financial relationships? No

I agree to comply with the American Public Health Association Conflict of Interest and Commercial Support Guidelines, and to disclose to the participants any off-label or experimental uses of a commercial product or service discussed in my presentation.