

## Acute Gastroenteritis Outbreak in Asajaya District, Samarahan Division, Sarawak, Malaysia in August-December 2010

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<b>Introduction</b>	<p>In August 2010, an acute gastroenteritis outbreak occurred in Asajaya District, Samarahan Division of Sarawak. The outbreak was notified to Samarahan Divisional Health Office on 26 August 2010. The outbreak was reported by the medical officer in Sadong Jaya Health Clinic, who noted the increasing trend of diarrhoea cases together with a number of dysentery cases, since epidemiologic Week 34 (starting 23 August, 2010). Even though control measures were taken to control the outbreak, the number of cases only starts to decline in epidemiologic Week 42 (starting 18 October 2010). The outbreak was declared over on the 25th of December 2010 (Week 51) after the number of diarrhoea cases dropped to, and remained at less than 10 per week, during the preceding 4 weeks.</p> <p>The objective of this paper is to share our experiences, and lessons learnt, in managing a long (14 weeks in duration) outbreak of water-borne acute gastroenteritis in Asajaya District in Samarahan Division, Sarawak, Malaysia.</p>
<b>Results</b>	<p>As of 18 December 2010, a total 573 cases who met the case definition were notified from 37 villages, 25 were admitted, and 3 deaths reported.</p> <p>Investigation Results and Possible Source of Infection: Laboratory results from examination of clinical samples showed mixed findings of <i>E. coli</i> 0157 (4), <i>Salmonella enteritidis</i> (1), <i>Shigella flexneri</i> (1), <i>E. histolytica</i> (2), <i>Klebsiella</i> spp (1) and Sapovirus (1). The source of infection was likely contaminated drinking water as environmental inspection showed leakage in piping system and water samples showed evidence of contamination with faecal bacteria.</p>
<b>Discussion</b>	<p>Management Of Outbreak And Control Measures Taken The water purveyor was asked to flush the water supply system by the water purveyor. A number of flushings were done, but regular flushing was not able to be carried out due to inadequate water pressure in the system. Health promotion activities and collaboration with other department were conducted to increase awareness, knowledge and practice of personal hygiene to the communities affected.</p>
<b>Conclusions</b>	<p>There were a number of shortfalls in managing this outbreak. These included late notification and inability to detect early outbreak, poor data management, poor coordination, late case detection and poor laboratory response.</p>