



Emerging and Reemerging Infectious Diseases, Region of the Americas

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Acute Gastroenteritis (AGE) Outbreak in Jamaica

According to the Ministry of Health (MOH) of Jamaica, surveillance reports have indicated an increase of gastroenteritis cases in St. Catherine, Kingston, St. Andrew and St. Thomas during June–July, 2003. AGE cases requiring inpatient care in Spanish Town Hospital increased from 17 in 2002 to 38 in 2003; and AGE cases handled in the emergency room of the same hospital increased from 494 in 2002 to 549 in 2003.

To better understand this situation, the MOH—together with CDC-Atlanta and PAHO—has been conducting epidemiological research on AGE since the end of July. Two different studies have been carried out: one retrospective (in which 60 children participated) that involved household visits by a health-care worker in addition to a review of the children's medical records; and one prospective study in which 100 children participated.

Main findings of the outbreak investigation are the following:

- Of the children, 97% were under five years of age, of which
 - 87% were vomiting,
 - 10% had a fever,
 - 58% were dehydrated, and
 - 50% had received medical attention prior to this episode.
- Rotavirus appeared in 38 out of the 87 stool samples (43.7%) for the patients under five.
- For the children over five, one out of every four stool samples (25%) tested positive for rotavirus.

At this point, the research is showing nothing to link this outbreak to the recent clinical study in Jamaica involving a rotavirus vaccine, for the following reasons:

- i. An increase of AGE has been observed in the southeast region of the country, while the vaccine trial is limited to other geographical areas.
- ii. Regarding the characteristics of the strain, seven samples revealed that common strains GI, GII, and P8 were generally found (in five of the seven, or in 71%).

- iii. One sample showed evidence of dual infection with a GI/G9 P8 rotavirus (G9 is considered an emerging agent).
- iv. Only one sample showed strain GII, non-typable for P, which may be related to the vaccine.

Measures taken included the distribution of education materials as well as media broadcasts. Case-management guidelines have been developed and are currently in use. Training programs for public-health teams will follow. A survey on knowledge, attitudes, and practices (KAP) is being carried out among health-care providers and caregivers. A total of 140 blood samples and 120 stool samples—along with tissue samples from five patients who died—have been sent to CDC for further analysis.

Source: Ministry of Health, Jamaica.