

b An outbreak of a vesicular rash at the National School Sport Championships, December 2015

The NICD was alerted to an outbreak of peri-oral vesicular lesions affecting learners attending the National School Sport Championships in Tshwane during December 2015. The index case was a 13-year-old male learner from a school in Mpumalanga Province who arrived at the training camp on 7th December with peri-oral lesions. This was followed by a second case on the 8th December. An additional six learners developed symptoms by the 11th December, at which point, medical personnel were notified.

On examination, apart from the peri-oral lesions, no vesicular lesions or ulcers were noted in the oral mucosa or on the hands and feet. Cases had no systemic signs or symptoms, no fever or joint pains and none of the cases were acutely ill. Two cases gave a history of mild diarrhoea. A differential diagnosis of enteroviral infection, herpes simplex and impetigo was made. Three learners were taken to Steve Biko Academic Hospital where specimens were taken for laboratory investigation, and simultaneously, immediate infection control measures were implemented by medical personnel. Infection control measures included advising learners to avoid activities likely to expose them to other persons' saliva, such as sharing eating utensils, water bottles, and toothbrushes, drinking with their mouth directly from water-taps, and kissing. Standard hygiene precautions and adherence to handwashing was reinforced. The medical officer in charge requested to be notified of any further cases. Following implementation of the infection control measures, only five additional cases were reported by the 13th December amongst players from different sports teams, including

netball, football, and rugby. Thereafter no further cases were reported. The tournament ended on the 15th December, with all participants returning by bus.

Unfortunately, none of the three cases taken to Steve Biko Academic Hospital had sufficient vesicular fluid, so swabs of the lesions were taken, and transported in viral transport media. Stool specimens were also taken from each of the three patients and submitted for enterovirus PCR testing. The swabs were tested by PCR for enterovirus, herpes simplex virus 1 & 2, Group A streptococcus, *Streptococcus pneumoniae*, *Haemophilus influenzae*, *Moraxella catarrhalis* and *Staphylococcus aureus*. All of these molecular tests were negative except for a *Staphylococcus aureus* PCR which was positive in one patient. Two stool specimens were positive for enterovirus. Further molecular typing of the VP1 region suggested infection with a coxsackie A6 virus in one patient. However the other specimen had insufficient titre for molecular characterisation. Although no definite causative agent was identified, timely implementation of appropriate infection control measures successfully contained the outbreak.

Source: Centre for Vaccines and Immunology; Division of Public Health, Surveillance and Response, NICD-NHLS; Medical personnel of the Mpumalanga National School Sport Championship team (outbreak@nicd.ac.za)



Figure 3. Two learners who attended the National School Sport Championships in Tshwane during December 2015 and who developed vesicular lesions, showing the vesicular lesions with blisters (left) and crusting (right) (Photographs courtesy Mpumalanga team doctor)