# Significant Event Review: Summary Findings

#### Overview/Issue

Save the Children is responding to the Ebola outbreak in four districts in Sierra Leone, with a strong focus on awareness-building and breaking transmission at the source. Its health, child protection, education, and child rights work has so far reached more than 100,000 people since the start of its response in March 2014. A significant part of the response involves running a 24-hour care, 80 bedded Ebola Treatment Centre (ETC). It is staffed by approximately 430 national staff and 85 international staff, including clinical staff seconded from the UK's National Health Service (NHS) and from the Sierra Leonean Ministry of Health. In addition, around 65 Cuban doctors and nurses are working there.

A nurse volunteer caring for patients in the ETC operated by Save the Children in Sierra Leone was diagnosed on her return to the UK with Ebola Virus Disease (EVD) on 29 December 2014. The nurse volunteer had undergone training in the UK and initially deployed to work with another NGO in a different Ebola treatment facility at Lakka, just outside of Freetown. She was re-deployed after two weeks, on 7 December 2014, to the Save the Children ETC at Kerry Town where she worked for nearly three weeks, leaving Sierra Leone on 27 December and returning to the UK on 28 December. When she moved to Kerry Town she was given further training in Save the Children protocols but she was not able to use the standard protective goggles used there because she could not get them to fit properly. She acquired a visor that was the same as the one which she had used in her initial training, and similar to the one she had worn at Lakka, but that was not used by Save the Children. Both visors and goggles are equally safe but there are slight differences in the types of clothing worn with each, and in the protocols for putting the equipment on and taking it off.

The ETC was built and funded by the UK government and is operated in partnership with Save the Children. UK NHS volunteers are trained in the UK by other organisations before deployment to Sierra Leone to work in a treatment facility (of which the Save the Children ETC is one). Once in the ETC they are managed by Save the Children and are trained in the use of Save the Children protocols. Assurance of the safety and quality and assurance processes used in the ETC is vital to mitigate against transmission of EVD, as well as in maintaining the confidence of potential volunteers, sponsors and supporters of the ETC.

A panel was convened on 6 January 2015 by Save the Children to examine events that might have led to this infection. It was chaired independently on their behalf by a senior official from Public Health England. The panel has reviewed all available information relating to the incident and considered whether changes need to be made to procedures and practices in the ETC.

This report attempts to draw conclusions about the circumstances that may have contributed to transmission of the disease in order to give assurance about the safety of current practices and to make recommendations about improving governance.

### Methodologies

Panel members considered a range of available information related to the practice and procedures of staff working at the ETC, and the training given to volunteers. Interviews were conducted with the nurse volunteer and colleagues working with her at the time, and the results of these interviews were available to the panel. Panel members have also considered a report prepared by Save the Children into the events and protocols in place at the time that the nurse volunteer was in Sierra Leone, as well as a quality survey carried out by the World Health Organisation. In addition it considered possible contact with infected people outside of the ETC.

## **Key Conclusions**

The panel reached the following conclusions:

- While there is no conclusive evidence about when or how the nurse volunteer
  might have contracted EVD, having reviewed the available evidence about work
  practices and social contact the panel is of the view that she probably acquired
  her illness while at the Kerry Town ETC in Sierra Leone. They think it is unlikely
  that she caught it in the community.
- Overall the panel concluded that, if used as prescribed, the procedures, equipment and protocols used by the ETC are safe and meet required standards, but made suggestions where they might be improved. They noted that the nurse volunteer was using a variant of the standard equipment and protocols on which she had been trained.
- The panel was satisfied that the nurse volunteer was not aware that she was
  potentially infected and showed no symptoms at the point when she left the
  ETC. When the subject left Lunghi airport, health screening at departure was
  apparently normal. Her temperature was recorded as 36.7 degrees centigrade.
- Training was acknowledged to be of a good standard. It is provided to volunteers by other organisations before their attachment to treatment centres and further training is provided in country at the ETC then reinforced in practice before volunteers enter the high risk area the "red zone". However, at the time of this incident there were differences in the protocols and personal protective equipment that volunteers were trained on in the UK and those used in the different treatment facilities in Sierra Leone where the volunteer nurse worked. This had potential for confusion in a situation where any mistakes could have serious consequences.
- Although the procedures, equipment and protocols used at the ETC are considered safe, they are only effective if applied as prescribed. Compliance

(human factors) is a key factor. The panel was concerned with evidence that where deviations from endorsed protocol had happened, or the prescribed equipment was not used, this might not be picked up immediately and therefore appropriate corrective action might not be taken.

#### **Key Recommendations**

The panel has the following key recommendations to make:

- The assurance and governance systems at the ETC must be consistently
  applied and reviewed to ensure that all protocols and policies are understood
  and adhered to. Departures from prescribed practice should be consistently
  challenged when identified, and addressed as part of the governance
  arrangements, particularly in the context where staff are rotating frequently.
- There should be good coordination between the foundation training organisations and the treatment centres so that equipment and protocols are aligned and volunteers are trained whenever possible to use the same equipment that they will be using in the field, and to follow the correct protocols.
- Protocols and guidance should be checked for consistency and harmonised in the training and the delivery organisations, and assessed against best practice guidelines.

The panel notes that Save the Children had already embarked on a process to strengthen weaknesses in supervision that have been identified. Revision of protocols and guidance is also underway to ensure that there is consistency between different policies and that these are simpler and clearer.

3 February 2015