Peer Review Report

Review Report on Diphtheria in a Swiss asylum seeker reception centre: outbreak investigation and evaluation of testing and vaccination strategies
Original Article, Int J Public Health

Reviewer: Peter Barrett
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EVALUATION

Q 1  Please summarize the main findings of the study.

No – this is for the authors to do.

Q 2  Please highlight the limitations and strengths.

Timely and important topic with lessons for other countries to learn, very applied and practical focus.
Main strengths and limitations/ considerations are outlined in section 3 below.

Q 3  Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Major amendments:
- Introduction needs more context of global vaccination coverage, including among vulnerable migrant cohorts
- Some more context is required in the Introduction about whether the demand for places in Swiss reception centres had increased or changed in the months prior to this study – if so, some elaboration on why that might have transpired would be helpful
- There is insufficient information provided on how an outbreak was defined here, and this needs to be addressed. Were two individuals with respiratory and cutaneous manifestation of disease respectively, considered to be epi–linked cases? What about any individuals with non–toxigenic strains?
- The Discussion would benefit from more parallels being drawn with outbreak reports from reception centres in other international jurisdictions (whether diphtheria outbreaks, or other infectious diseases) given that the challenges involved in accommodating asylum seekers are common to many other countries. There are only 12 references provided for the entire manuscript, which seems very few.

Minor amendments:
- Methods section in the Abstract is very short, and would benefit from some expansion
- Context of Swiss reception centres is helpful – may also be useful to draw parallels here with reception centre models in other countries, in terms of international relevance and generalisability
- Data collection: more information is required on completeness and validity of records. It is also unclear whether University Hospital Basel is the sole receiving laboratory for samples from the centre? This context is required.
- For calculation of vaccination rate after the mass vaccination event, further information is needed on where the asylum seekers (who were included as the numerator) had come from – might some of them have been captured in the mass vaccination effort?
- Please specify the date of the first positive cutaneous test result, and whether there had been turnover among the UMAs between then and 31/12/22 (when 20 cases had been identified)
For post recovery/convalescence vaccination efforts, was this the responsibility of the reception centre? How was this managed if the individual had been transferred out to another centre?

Some elaboration on how UMAs receive catch-up vaccination in the absence of parental/guardian consent would be helpful.

Many of the limitations of this report relate to administrative challenges which are commonly experienced in other European countries e.g. fragmented sources of information, incomplete records etc. It would be helpful to include more international context/references (in Discussion section) so that these issues are not perceived to be unique to Switzerland.

**Please Comment**

**Q 4** Is the title appropriate, concise, attractive?

It is not entirely clear whether this truly constitutes an "outbreak report", and the title may need to be rephrased in the context of this uncertainty.

**Q 5** Are the keywords appropriate?

Yes.

**Q 6** Is the English language of sufficient quality?

Yes, mostly.

**Q 7** Is the quality of the figures and tables satisfactory?

Yes.

**Q 8** Does the reference list cover the relevant literature adequately and in an unbiased manner?

Only 12 references provided – see final point under "Major amendments".

**Quality Assessment**

**Q 9** Originality

**Q 10** Rigor

**Q 11** Significance to the field

**Q 12** Interest to a general audience

**Q 13** Quality of the writing

**Q 14** Overall scientific quality of the study

**Revision Level**

**Q 15** Please make a recommendation based on your comments:

Major revisions.