

Case study



Surveillance of Rickettsia in Jordan since 2013

Sultan Alqasrawi^{1, &}, Mohammad Maayaa¹, Ghaith Weiss², Malak Shaheen³, Yousef Khader⁴

¹Communicable Disease Directorate, Ministry of Health, Jordan, ²Jordan Field Epidemiology Training Program, Ministry of Health, Jordan, ³Ain Shams University, Egypt, ⁴Jordan University of Science and Technology, Jordan

&Corresponding author:

Sultan Alqasrawi, Communicable Disease Directorate, Ministry of Health, Jordan

Cite this: The Pan African Medical Journal. 2019;33 (Supp 1):4. DOI:10.11604/pamj.supp.2019.33.1.18650

Received: 10/03/2019 - **Accepted:** 08/05/2019 - **Published:** 14/05/2019

Key words: Outbreak, rickettsia, Jordan

© Sultan Alqasrawi et al. The Pan African Medical Journal - ISSN 1937-8688. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/2.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Corresponding author: Sultan Alqasrawi, Communicable Disease Directorate, Ministry of Health, Jordan (sultanmabdalla@yahoo.com)

This article is published as part of the supplement "Case Studies for Public Health in the Eastern Mediterranean Region" sponsored by The Eastern Mediterranean Public Health Network (EMPHNET)

Guest editors: Pr Yousef S Khader (yskhader@just.edu.jo) - Department of Community Medicine, Public Health and Family Medicine Faculty of Medicine, Jordan University of Science & Technology, Jordan

Available online at: <http://www.panafrican-med-journal.com/content/series/33/1/4/full>

Abstract

This case study was written based on an outbreak of fever and rash that affected 19 children in two governorates (Alkarak and Madaba) in Jordan during summer 2013. Outbreak investigation data were collected through medical records, line listing form, interview treating physicians, and laboratory results. Outbreak investigations revealed that this outbreak was due to Rickettsia, which has not been reported in Jordan previously. After that, Jordan Ministry of health introduced rickettsia to the list of notifiable diseases and to the surveillance guidelines manual (version 2015). Participants of this case study are focal points of surveillance, Field Epidemiology Training Program (FETP) trainees, and other health professionals. At the end of the case study, participants should be able to detect rickettsia, apply the principals of the outbreak investigation, use surveillance data to respond to an outbreak, engage the community to prevent the disease, and cooperate with other authorities to control the disease.

How to use this case study

General instructions: this case study should be used as adjunct training material for surveillance trainees to reinforce the concepts taught in prior lectures. The case study is ideally taught by 3 facilitators in 3 groups of 8 participants in each group. Participants are to take turns reading the case study, usually a paragraph per student. The facilitators guide the discussion on possible responses to questions. The facilitators

may make use of flip charts to illustrate certain points.

Audience: this case study was developed for surveillance officers, trainees of the Field Epidemiology Training program (FETP), and others who are interested in this topic.

Prerequisites: Before using this case study, participants should have received lectures on disease surveillance and outbreak investigation.

Materials needed: Flash drive, flip charts, markers, computers with MS Excel

Level of training and associated public health activity: Novice – Outbreak investigation

Time required: 3 hours

Language: English

Case study material

- Download the case study student guide
- Request the case study facilitator guide

Competing interest

The authors declare no competing interests.

Acknowledgement

Authors would like to acknowledge The Eastern Mediterranean Public Health Network (EMPHNET) for their technical support

References

1. Raoult D, Tissot-Dupont H, Caraco P, Brouqui P, Drancourt M, Charrel C. Mediterranean spotted fever in Marseille: descriptive epidemiology and the influence of climatic factors. *Eur J Epidemiol.* 1992 Mar;8(2):192-7.
2. Nafi O, Tarawnah Y, Tarawnah A. Epidemiological evaluation of Mediterranean spotted fever in children of the Karak province in south Jordan. *J Infect Dev Ctries.* 2017 Mar 31;11(3):242-246.

PAMJ is an Open Access Journal published in partnership with the African Field Epidemiology Network (AFENET)

