

VI. ΛΟΙΜΩΞΕΙΣ ΣΕ ΚΑΤΑΥΛΥΣΜΟΥΣ ΠΡΟΣΦΥΓΩΝ

- * ΕΞΑΝΘΗΜΑΤΙΚΟΣ ΤΥΦΟΣ
- * ΥΠΟΤΡΟΠΙΑΖΩΝ ΠΥΡΕΤΟΣ



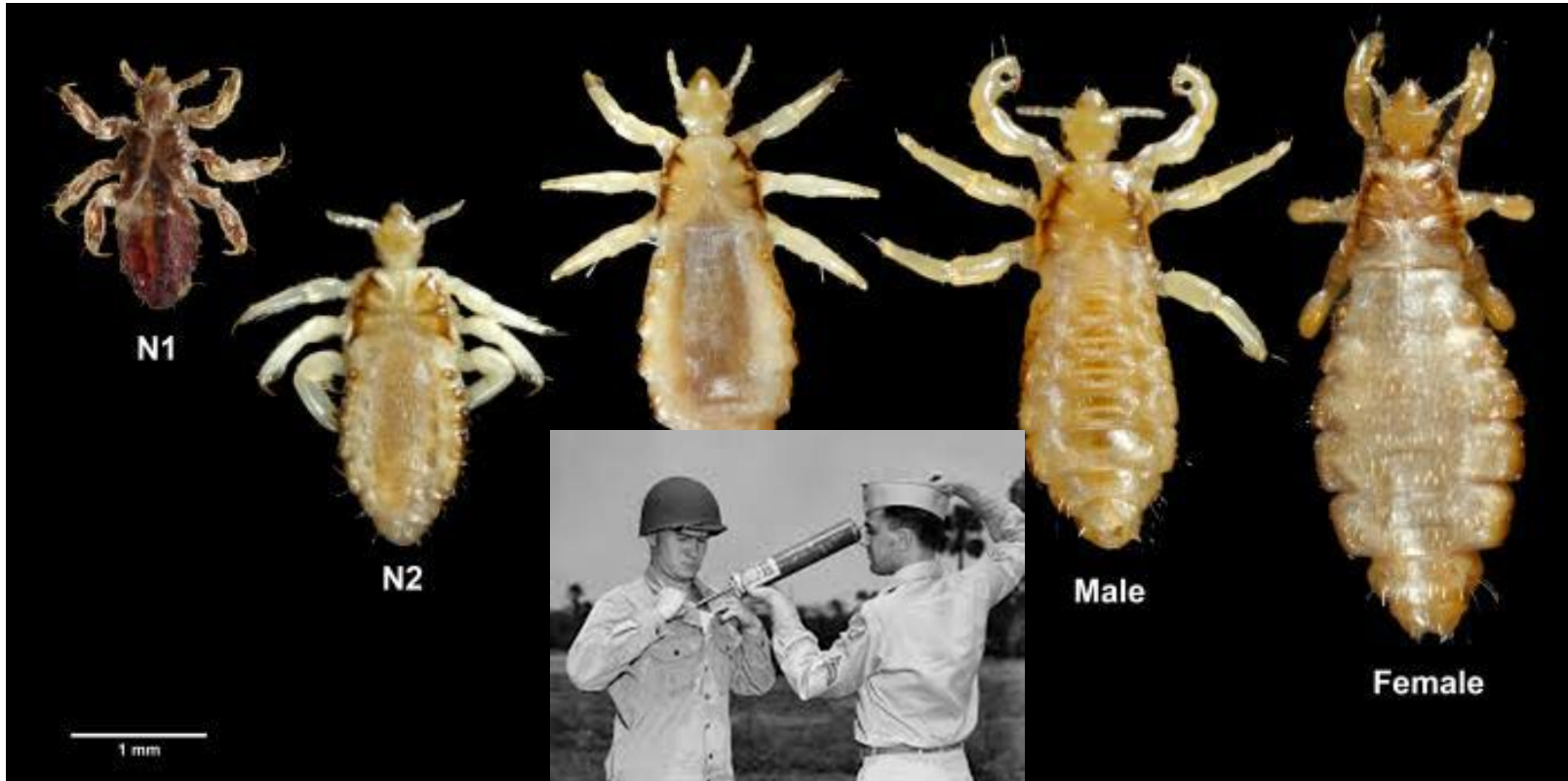
ΕΙΣΑΓΩΓΗ ΣΤΗ
ΜΕΘ

Κώμα
Υπερπυρεξία
ARDS
ΔΙΑΡΡΟΙΑ

ΨΕΙΡΑ (Pediculosis and Pthiriasis)

ΕΞΑΝΘΗΜΑΤΙΚΟΣ ΤΥΦΟΣ

Typhus Fever – *Rickettsia prowazekii*



*** Εξανθηματικός Τύφος**
Epidemic louse-borne typhus



Jail Fever
(Epidemic Typhus)
Outbreak in Burundi

*** Εξανθηματικός Τύφος**
Epidemic louse-borne typhus

Geographical distribution

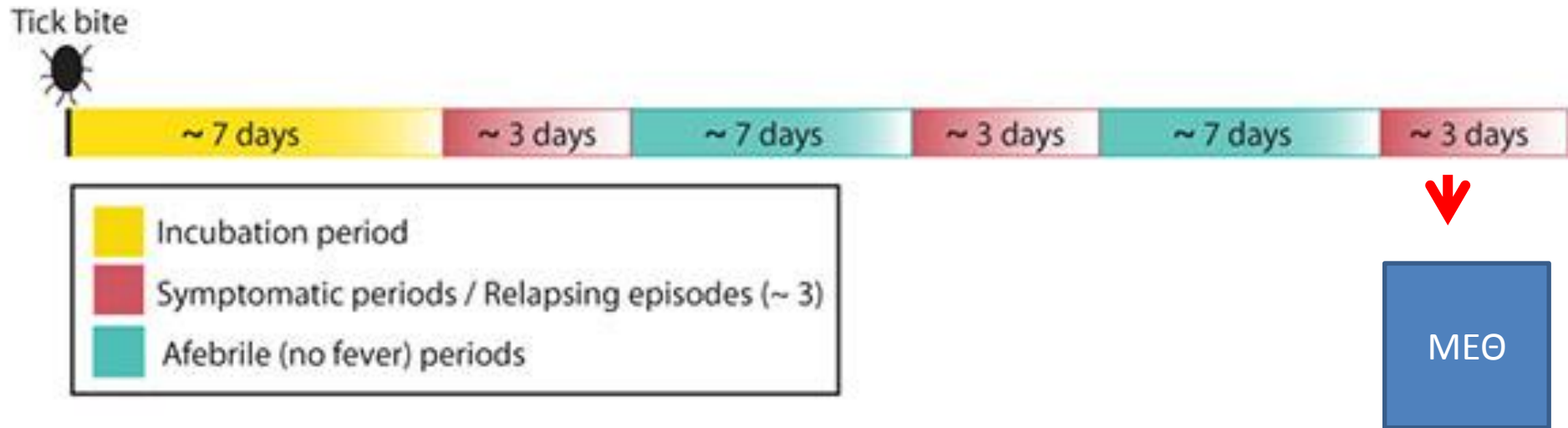
- In recent years, most outbreaks have taken place in Burundi, Ethiopia and Rwanda.
- Typhus fever occurs in conditions of **overcrowding and poor hygiene, such as in prisons and refugee camps.**

* ΥΠΟΤΡΟΠΙΑΖΩΝ ΠΥΡΕΤΟΣ

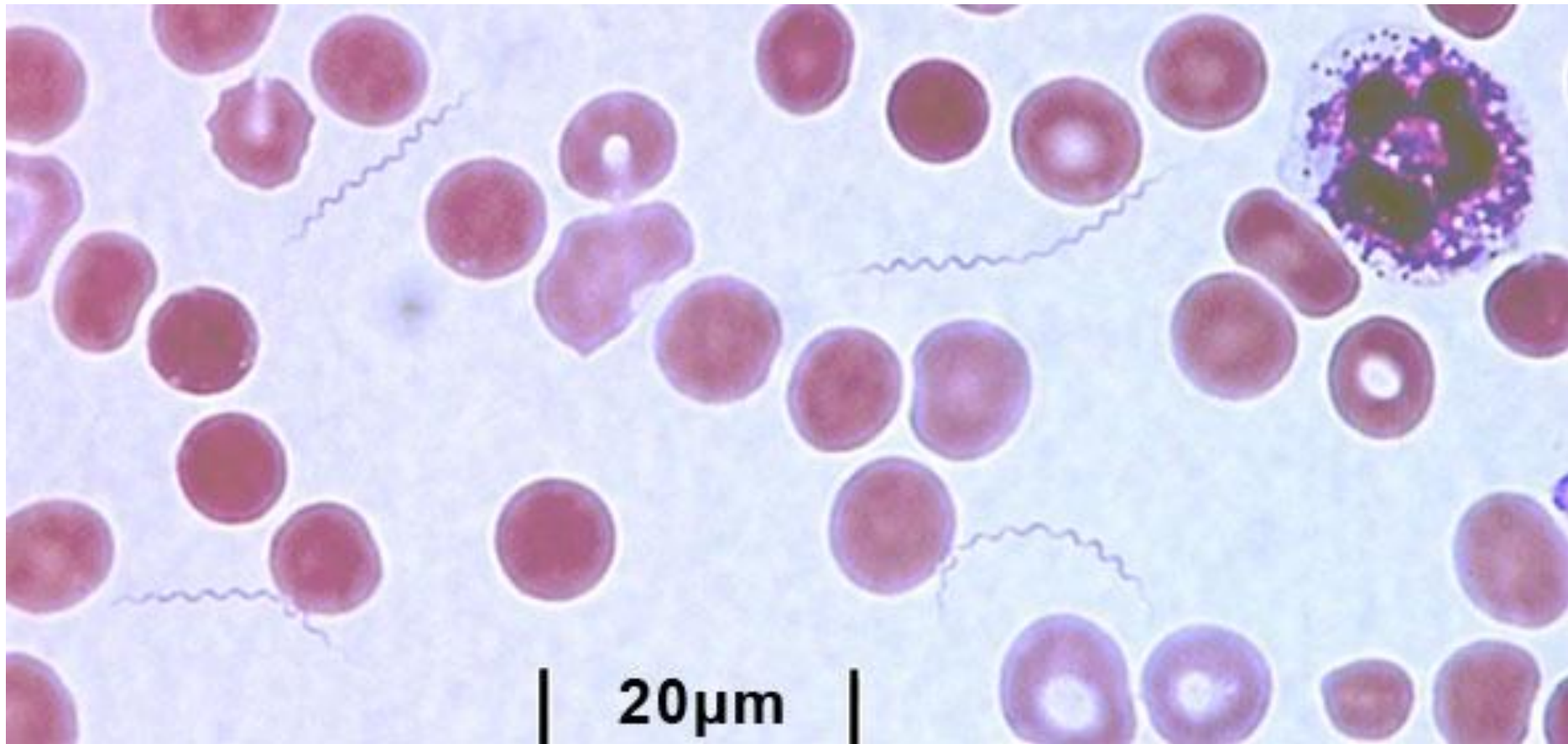
Louse-borne relapsing fever (LBRF)

- Relapsing fever is bacterial infection characterized by recurring episodes of fever, headache, muscle and joint aches, and nausea.
- It is caused by certain species of *Borrelia spirochetes*
- Louse-borne relapsing fever is transmitted by the human body louse and is generally **restricted to refugee settings in developing regions of the world.**

* ΥΠΟΤΡΟΠΙΑΖΩΝ ΠΥΡΕΤΟΣ Louse-borne relapsing fever (LBRF)



*** ΥΠΟΤΡΟΠΙΑΖΩΝ ΠΥΡΕΤΟΣ**
Louse-borne relapsing fever (LBRF)



*** ΥΠΟΤΡΟΠΙΑΖΩΝ ΠΥΡΕΤΟΣ**
Louse-borne Relapsing Fever (LBRF)



* ΥΠΟΤΡΟΠΙΑΖΩΝ ΠΥΡΕΤΟΣ

Louse-borne Relapsing Fever (LBRF)

- .
- LBRF outbreaks most commonly occur in conditions of overcrowding and social disruption.
- **Between 1919 and 1923, 13 million cases resulting in 5 million deaths occurred in the social upheaval that overtook Russia and eastern Europe.**
- During World War II, a million cases occurred in North Africa.
- **Today**, LBRF causes sporadic illness and outbreaks in sub-Saharan Africa, particularly in regions affected by war and in refugee camps. LBRF is commonly found in **Ethiopia, Sudan, Eritrea, and Somalia.**
- **Illness can be severe, with mortality of 30 to 70% in outbreaks**

ΟΔΥΣΣΕΑ ΕΛΥΤΗ : ΤΟ ΑΞΙΟΝ ΕΣΤΙ

Η πορεία προς το μετώπο - 1964



.....Και τις λίγες φορές ὅπου κάναμε στάση νὰ ξεκουραστοῦμε, μήτε ποὺ ἀλλάζαμε κουβέντα, μονάχα σοβαροὶ κι ἀμίλητοι, φέγγοντας μ' ἓνα μικρὸ δαδί, μία-μία ἐμοιραζόμασταν τὴ σταφίδα.

Ἡ φορές πάλι, ἂν ἦταν βολετό, λύναμε βιαστικὰ τὰ ροῦχα καὶ ξυνόμασταν μὲ λύσσα ὥρες πολλές, ὅσο νὰ τρέξουν τὰ αἷματα.

Τι μας εἶχε ἀνέβει ἡ ψεῖρα ὡς τὸ λαιμό, κι ἦταν αὐτό πιο κι ἀπ' τὴν κούραση ἀνυπόφερτο...

* ΥΠΟΤΡΟΠΙΑΖΩΝ ΠΥΡΕΤΟΣ

LBRF

- Patients with LBRF usually present with non-specific symptoms such as high fever, headache or pain in other parts of the body .
- Hence, presentation of LBRF may resemble many other serious infections such as
 - **malaria,**
 - **viral haemorrhagic fever,**
 - **leptospirosis, typhus,**
 - **meningococcal meningitis or**
 - **typhoid fever**
- In addition, **co-infection with malaria is common** although not detected in our patient

*** ΥΠΟΤΡΟΠΙΑΖΩΝ ΠΥΡΕΤΟΣ**
LOUSE-BORNE RELAPSING FEVER –
GERMANY : ASYLUM SEEKERS

- With symptom onset between 17 Jul 2015 and 31 Aug 2015, **11 cases** of Louse-borne-relapsing fever (LBRF) caused by **_Borrelia recurrentis_** have been diagnosed in Germany –
- among asylum seekers/refugees from **Horn-of-Africa countries (Eritrea, Ethiopia, Somalia)**.

Eurosurveillance 2015

LOUSE-BORNE RELAPSING FEVER - GERMANY : ASYLUM SEEKERS

- it seems very likely that lice bearing *B. recurrentis* are currently being transmitted among migrants in camps in Libya.

FIGURE 1

Travel route from Eritrea to Europe, louse-borne relapsing fever case, Switzerland, August 2015



SWITZERLAND

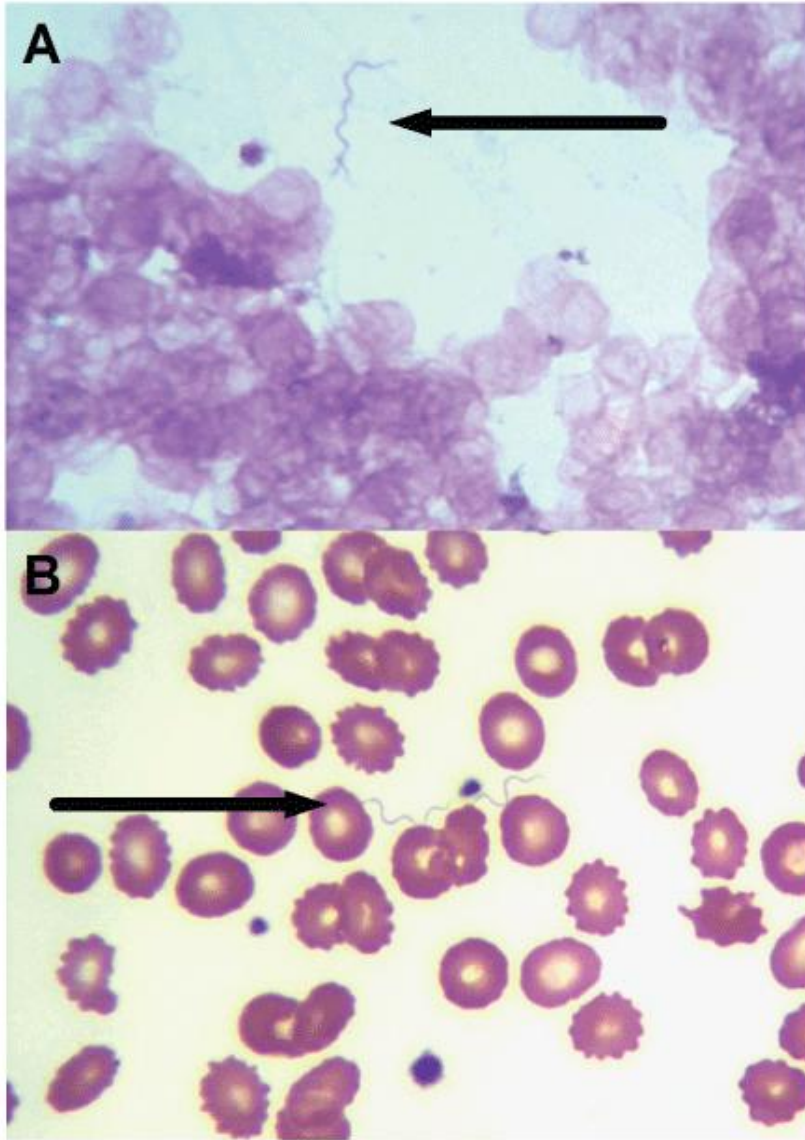
* ΥΠΟΤΡΟΠΙΑΖΩΝ ΠΥΡΕΤΟΣ

**LOUSE-BORNE RELAPSING FEVER (BORRELIA
RECURRENTIS) IN AN ERITREAN REFUGEE
ARRIVING IN SWITZERLAND, AUGUST 2015**

Eurosurveillance, Volume 20, Issue 32, 13 August 2015

FIGURE 2

Microscopic detection of spirochetes in blood, louse-borne relapsing fever case, Switzerland, August 2015



Panel A: Giemsa pH 7.2, stained thick film, 1,000-fold magnification.

Panel B: May-Grünwald Giemsa (MGG)-stained blood smear, 1,000-fold magnification.

Given the poor hygienic conditions and crowding on the way to Europe that might facilitate spread of *B. recurrentis* via body lice, we expect that cases of LBRF will be diagnosed more frequently in Europe.

Microscopic detection of spirochetes in blood, louse-borne relapsing fever case, Switzerland, August 2015

Caring for the Wave of Refugees in Munich

- Conditions not normally seen today in developed countries included **louseborne relapsing fever**
- **(one patient required intensive care treatment, intubation, and vasopressor support)**
- *Caring for the Wave of Refugees in Munich*

Thomas Nicolai,

N Engl J Med 2015; 373:1593-1595

- ***October 22, 2015***



Medical Checkup Tents for Arriving Refugees.

VI. ΛΟΙΜΩΞΕΙΣ ΣΕ ΚΑΤΑΥΛΥΣΜΟΥΣ ΠΡΟΣΦΥΓΩΝ

ΕΞΑΝΘΗΜΑΤΙΚΟΣ ΤΥΦΟΣ

ΥΠΟΤΡΟΠΙΑΖΩΝ ΠΥΡΕΤΟΣ

ΟΔΗΓΙΑ

- we consider **screening arriving refugees for lice** useful in order to prevent spreading of louse-borne diseases in refugee camps.

ECDC 2015

**LOUSE-BORNE RELAPSING FEVER - ITALY: ASYLUM
SEEKERS, POSSIBLE LOCAL TRANSMISSION**

*We report 5 cases of LRF in refugees to Italy
from East Africa that occurred during 2015.*

Lucchini A, Lipani F, Costa C, et al:

**Louse-borne relapsing fever among East African
Refugees, Italy, 2015.**

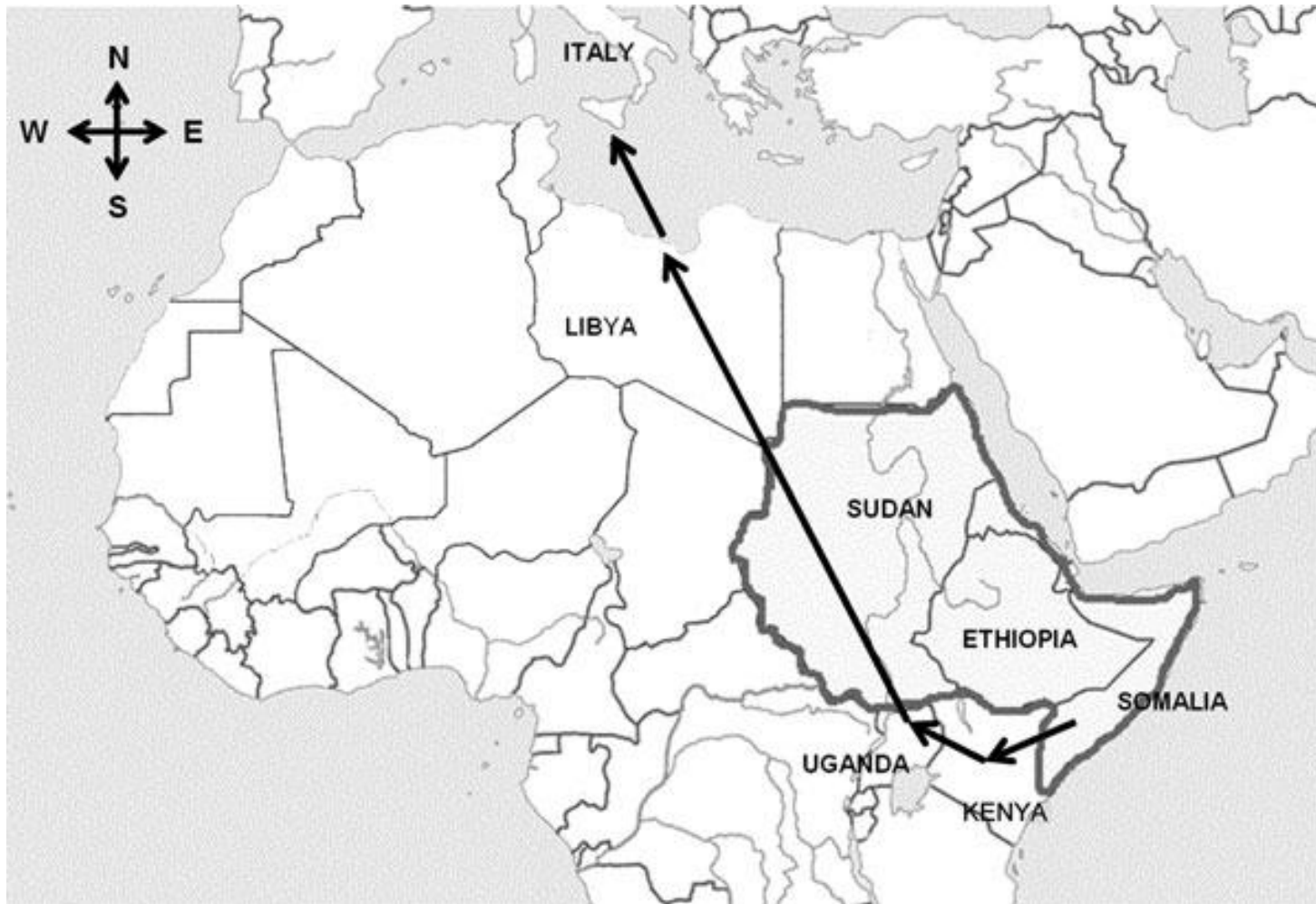
*Emerg Infect Dis. 2016;
22(2); DOI: 10.3201/eid2202.151768*

LOUSE-BORNE RELAPSING FEVER - ITALY: ASYLUM SEEKERS, POSSIBLE LOCAL TRANSMISSION

- All patients were transferred to the Infectious Disease Hospital in **Torino** for further assessment.
- LRF was suspected, and the patients were treated with **either doxycycline alone or doxycycline plus ceftriaxone**.
- Patients 1 and 5 showed an acute febrile reaction after the 1st antimicrobial dose: symptoms were compatible with a **Jarisch-Herxheimer reaction (JHR)**

Route (arrows) followed by refugees from Somalia to Libya, where they boarded a boat to Sicily.

Gray shading indicates *Borrelia recurrentis*–endemic countries.



LOUSE-BORNE RELAPSING FEVER - ITALY: ASYLUM SEEKERS, POSSIBLE LOCAL TRANSMISSION

- **No lice were found on the patients or on their clothes**
- **patient 5 had skin lesions caused by scratching.**
- **Our findings confirm the possibility of local transmission of LRF caused by *B. recurrentis*.**

United Nations High Commissioner for Refugees (UNHCR)

- civil war in Syria has left **12.2 million** people in need of humanitarian assistance.
- More than **7 million Syrians** are internally displaced and over **4 million** are registered as refugees living outside the country.
- Deteriorating security in **Afghanistan, Libya and Yemen**, as well as dire living conditions for refugees in **Lebanon and Jordan**, have also increased the number of people seeking safe haven in the European Union.

the **2.8-square-mile Zaatari refugee camp** in northern **Jordan** near the border with Syria, which provides shelter to around **100,000 Syrian refugees**.

ΤΥΦΟΕΙΔΗΣ ΠΥΡΕΤΟΣ

ΧΟΛΕΡΑ

ΠΟΛΙΟΜΥΕΛΙΤΙΔΑ

ΙΛΑΡΑ

ΓΡΙΠΗ

ΠΙΘΑΝΕΣ ΕΠΙΔΗΜΙΕΣ ΣΕ ΣΤΡΑΤΟΠΕΔΑ
ΣΥΓΚΕΝΤΡΩΣΗΣ ΠΡΟΣΦΥΓΩΝ
UNHCR 2015



ΤΥΦΟΕΙΔΗΣ ΠΥΡΕΤΟΣ

- SYRIA : (DAMASCUS) REFUGEE CAMP

- The United Nations has called for access to Yarmouk in the Syrian capital.
- The total number **of typhoid cases in the camp reached 90 on Tue 22 Sep 2015,**

UNRWA [United Nations Relief and Works Agency

ΧΟΛΕΡΑ : IRAQ, WHO

- As of **8 Oct 2015**, a total of **1263** laboratory-confirmed cases of **_Vibrio cholera_ O1 Inaba** were reported.
- These cases were reported from at least **15** governorates of the country.
- **Babylon** (469 cases),
- **Baghdad** (304 cases),
- Qadisiyyah (146 cases),
- Muthanna (155 cases)

CHOLERA, UPDATE : IRAQ, WHO OCTOBER 2015

- release oral cholera vaccine from the global stock.
- WHO has deployed a team of international experts under the **Global Outbreak Alert and Response Network (GOARN)**
- request for additional international support for cholera response.

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Εκτίμηση κινδύνου

Αντίκτυπο / πιθανότητα	Υψηλή	B Πιθανόν	C Δυνατόν	D Μη πιθανό
11-12: Καταστροφικές	A11-A12	B11-B12	C11-C12	D11-D12
8 -10: Κριτικής σημασίας	A8-A10	B8-B10	C8-C10	D8-D10
5 - 7: Σοβαρές	A5-A7	B5-B7	C5-C7	D5-D7
3 - 4: Οριακές	A3-A4	B3-B4	C3-C4	D3-D4

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Εκτίμηση κινδύνου

ΠΟΙΟΣ Ο ΚΙΝΔΥΝΟΣ -ΒΑΘΜΟΛΟΓΗΣΗ ΕΠΙΠΤΩΣΕΩΝ

Αντίκτυπο / πιθανότητα	A Υψηλή	B Πιθανόν	C Δυνατόν	D Μη πιθανό
11-12: Καταστροφικές	A11-A12	B11-B12	C11-C12	D11-D12
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5 - 7: Σοβαρές	A5-A7	B5-B7	C5-C7	D5-D7
3 - 4: Οριακές	A3-A4	B3-B4	C3-C4	D3-D4

