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(Epidemiological surveillance according to Law 3370/2005)

Epidemiological surveillance in points of care for refugees/migrants

Weekly Report

Week 22/2019 (27/05 to 02/06)

SUMMARY

In week 22/2019 (27/05 to 02/06) the system for epidemiological surveillance in points of care for refugees/migrants received data from 27 centres hosting refugees/migrants out of a total of 27 centres participating in the system (rate 100%).

During this week, the observed morbidity ranged within the expected limits.

No case was recorded for the following syndromes/health conditions: [7] Malaria (with positive rapid test), [8] Suspected diphtheria (respiratory or cutaneous), [9] Jaundice of acute onset, [10] Paralytic manifestations of acute onset, [11] Meningitis and/or encephalitis, [12] Haemorrhagic manifestations with fever, [13] Sepsis or shock (septic, of unknown aetiology), [14] Death of unknown aetiology.

This report is based on data recorded and sent by a large number of health professionals who provide health care, often under very difficult circumstances, in centres hosting refugees/migrants.

We thank all these professionals for their valuable contribution to monitoring morbidity among refugees/migrants , which is necessary for appropriate public health action.

A. Information from the system for epidemiological surveillance in points of care for refugees/ migrants

During week 22/2019 (27/05 to 02/06), the system for epidemiological surveillance in points of care for refugees/migrants received data from 27 centres hosting refugees/migrants out of a total of 27 centres participating in the system (rate 100%).

Table 1 presents observed and expected morbidity data from centres hosting refugees/migrants.

Graphs 1 to 5 depict the time trend of the morbidity of the most frequent syndromes/health conditions monitored (for the rest of the syndromes, graphs are not shown, due to the small numbers of cases).

Note. Data presented here can be modified in the future, as delayed reports are included.

Table 1: Number of cases, proportional morbidity and statistical warning/alert signals by syndrome/health condition under surveillance, total of reporting centres hosting refugees/migrants, week 22/2019 (27/05 to 02/06).

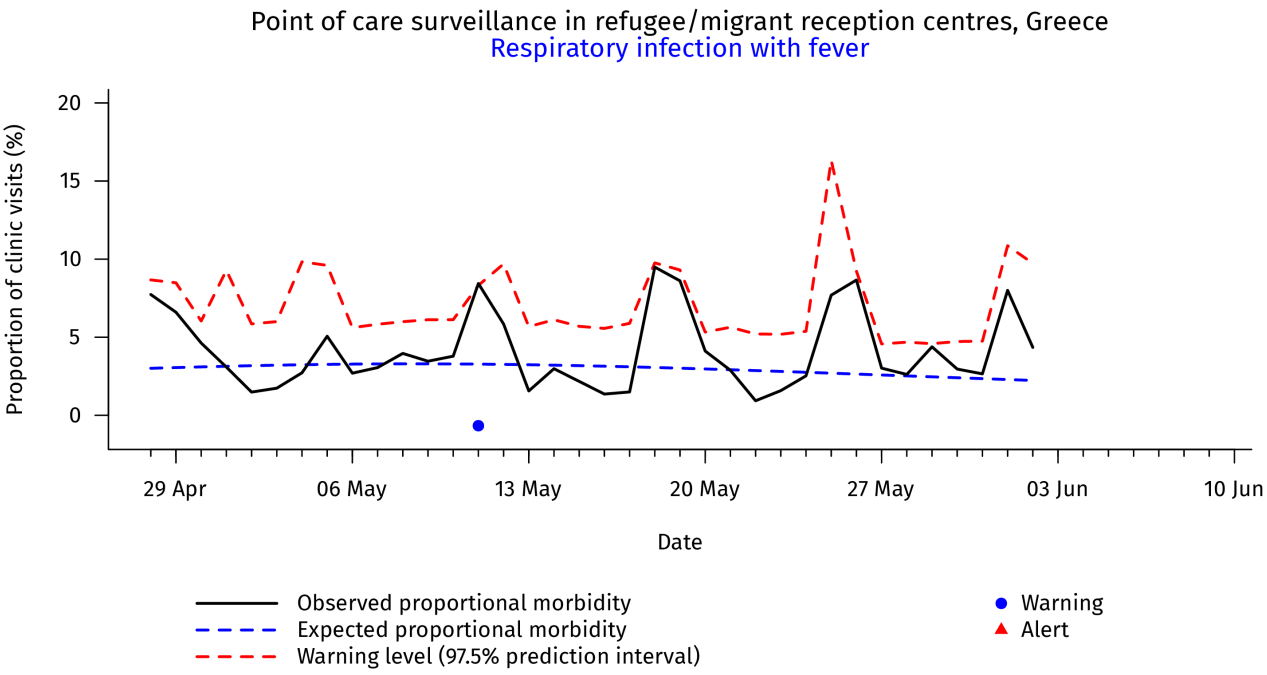
Syndrome	No of cases	Observed proportional morbidity	Expected proportional morbidity	Z-score
[1] Respiratory infection with fever	150	3,3	2,4	1,507
[2] Gastroenteritis without blood in the stool	48	1,0	0,9	0,419
[3] Bloody diarrhoea	1	0,0	0,0	-0,509
[4] Rash with fever	12	0,3	0,5	-1,228
[5] Suspected scabies	55	1,2	1,3	-0,354
[6] Suspected pulmonary tuberculosis	6	0,1	0,1	0,681
[7] Malaria with positive RDT	0	0,0	0,0	-0,223
[8] Suspected diphteria, respiratory or cutaneous	0	0,0	0,0	0,000
[9] Jaundice of acute onset	0	0,0	0,0	0,000
[10] Neurological manifestations of acute onset	0	0,0	0,0	-0,223
[11] Meningitis and/or encephalitis	0	0,0	0,0	-0,432
[12] Haemorragic manifestations with fever	0	0,0	0,0	0,000
[13] Sepsis or shock (septic, of unknown etiology)	0	0,0	0,0	-0,200
[14] Death of unknown etiology	0	0,0	0,0	-0,188

Notes:
- Proportional morbidity: consultations for a given syndrome/health condition as a proportion of total consultations (for all causes).
- Observed proportional morbidity: refers to the week of the current report.
- Expected proportional morbidity: reflects the trend of the past 4 weeks.
- Z-score: difference between the observed and the expected proportional morbidity, expressed in number of standard deviations (Z-score > 2: observed proportional morbidity “statistically significantly” larger than the expected).

Time trend of proportional morbidity of the monitored syndromes/health conditions with the highest frequency of occurrence in the total of participating centres hosting refugees/migrants

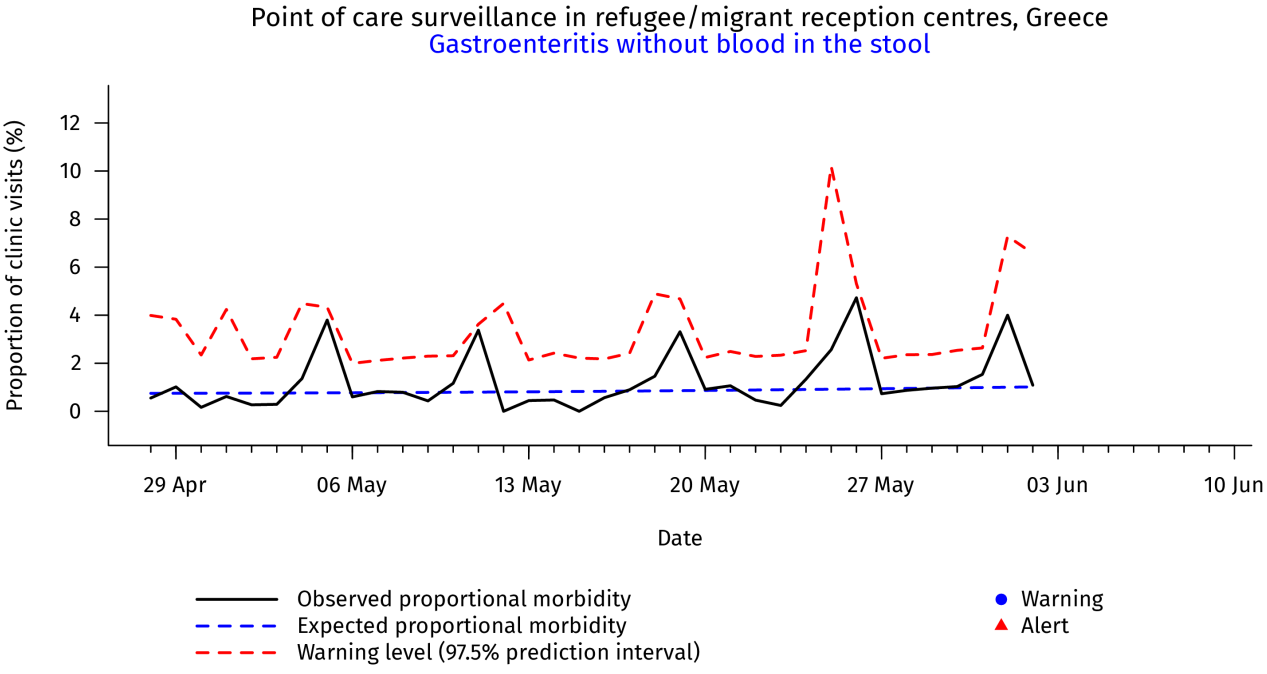
1. Respiratory infection with fever

Graph 1: Proportional morbidity of Respiratory infection with fever, based on reports from all camps in Greece



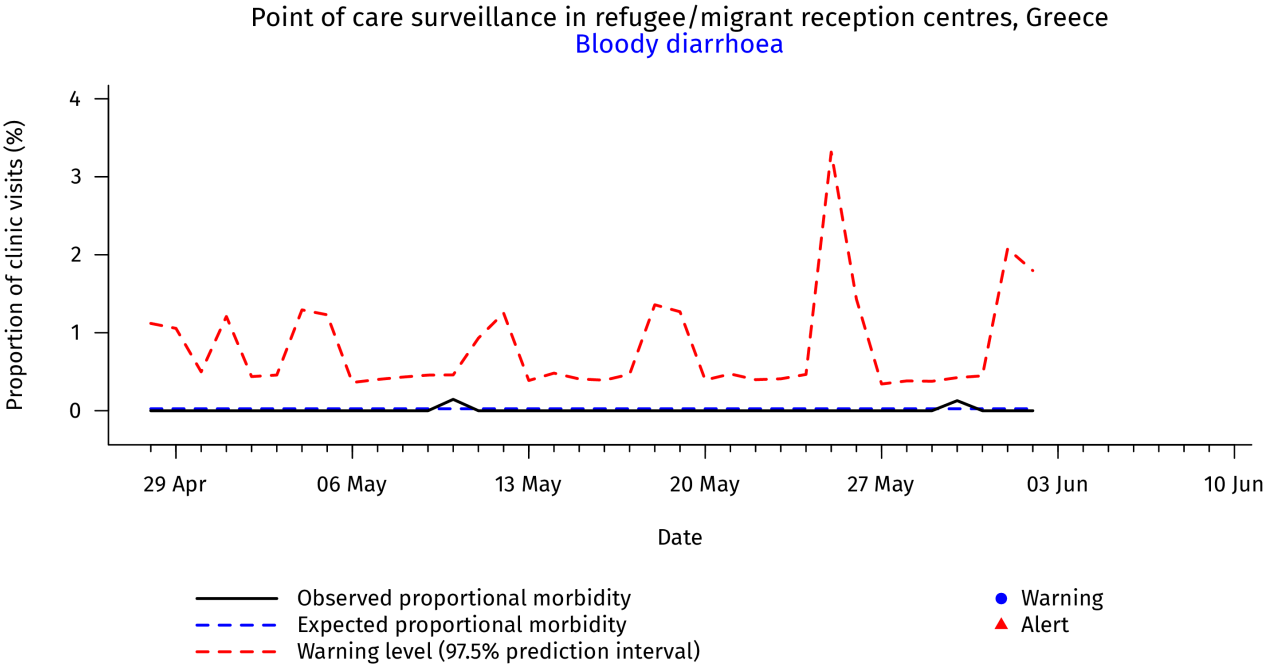
2. Gastroenteritis without blood in the stool

Graph 2: Proportional morbidity of Gastroenteritis without blood in the stool, based on reports from all camps in Greece



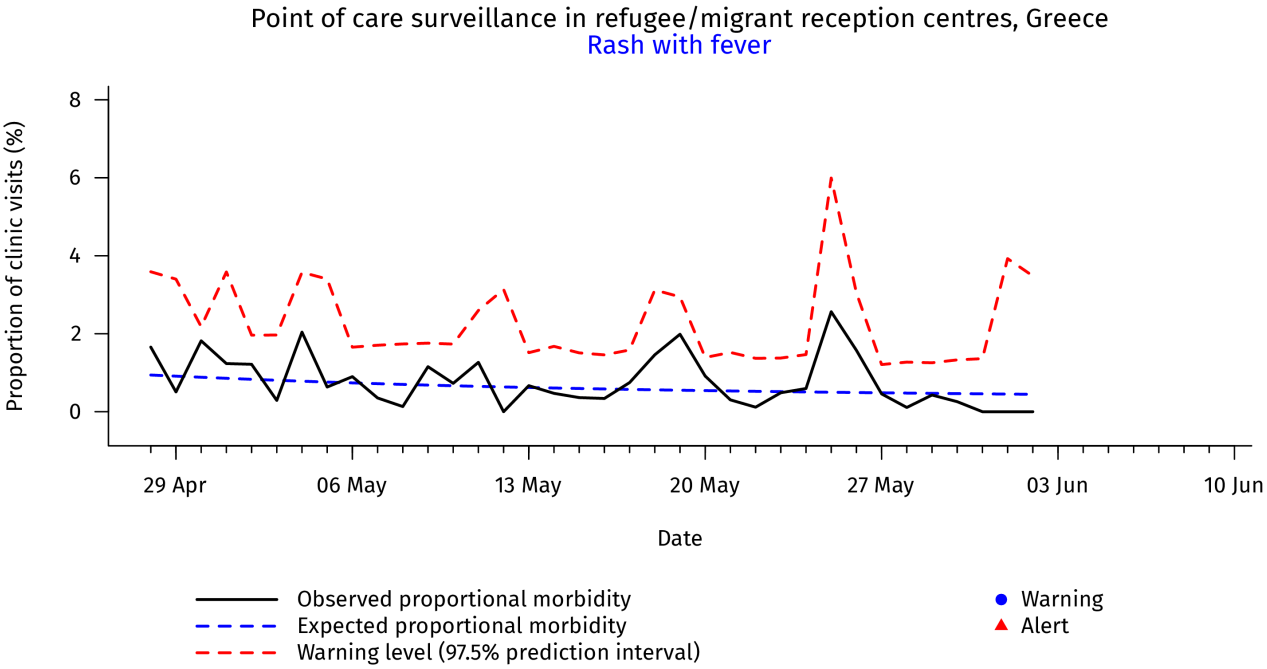
3. Bloody diarrhoea

Graph 3: Proportional morbidity of Bloody diarrhoea, based on reports from all camps in Greece



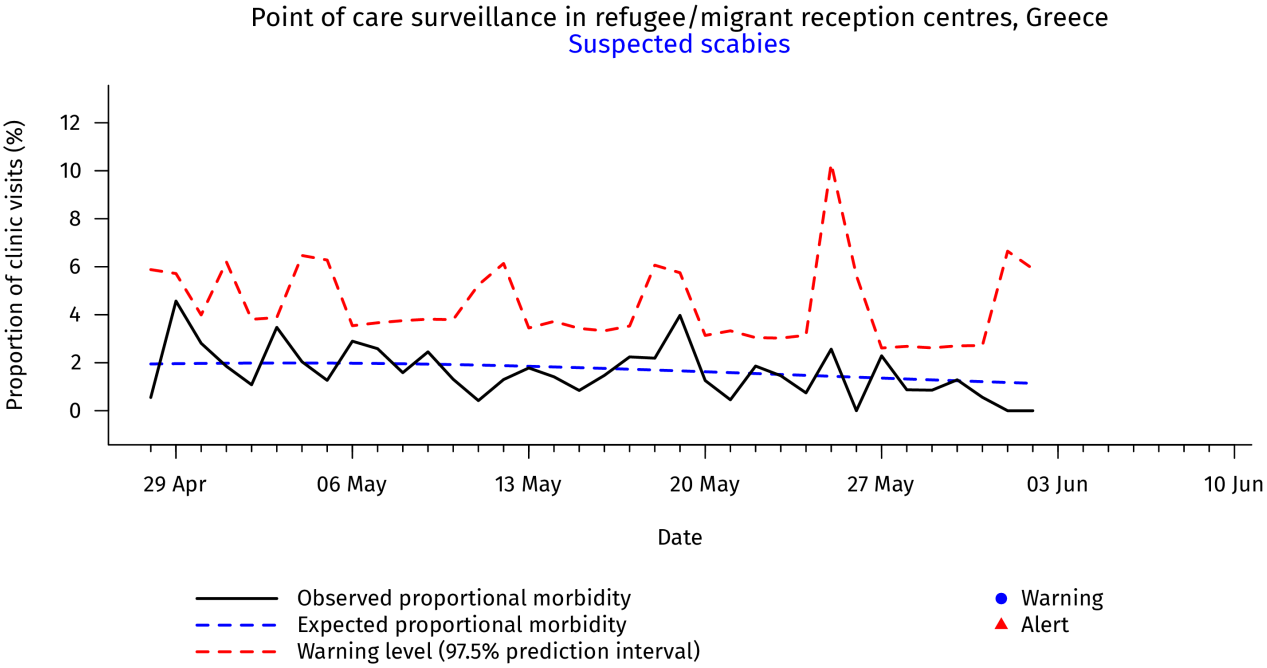
4. Rash with fever

Graph 4: Proportional morbidity of Rash with fever, based on reports from all camps in Greece



5. Suspected scabies

Graph 5: Proportional morbidity of Suspected scabies, based on reports from all camps in Greece



B. Additional information and public health measures taken

During week 22/2019 (27/05 to 02/06), the observed morbidity ranged within the expected limits.

During this week, 12 chickenpox cases were reported in total, 11 of whom aged up to 15 years old. Chickenpox is usually a mild disease in childhood; populations in which childhood vaccination has not been introduced (i.e. populations from the countries of origin of refugees/migrants hosted in the centres) experience chickenpox as a "childhood disease", with periodic outbreaks. The HCDCP has issued instructions for the management of chickenpox cases in centres hosting refugees/migrants (www.keelpno.gr/).

C. Methods

Public health surveillance in points of care for refugees/migrants operates in its present form from 16 May 2016 (and as a pilot from April 2016) with daily collection of epidemiological data for selected syndromes/health conditions that are important from a public health point of view. The 14 syndrome or health conditions under surveillance are shown in Table 1.

Data recorded refer to consultations for each syndrome/condition under surveillance in primary health care facilities in refugee/migrant reception centres (RMRC). For syndromes #1 to 5, which have the highest incidence, cumulative data are collected (i.e. number of consultations without any additional information), while for syndromes #6 to 14 some important individual-level information is also collected for patients. In addition, individual-level information is collected for cases with clinical suspicion of measles, rubella, mumps and varicella.

Data are sent daily to the Department of Surveillance and Intervention of KEELPNO by doctors, nurses and other health professionals from services and NGOs staffing primary care facilities in RMRCs.

Data for a given 24-hour period are analysed on the next day and proportional morbidity indices are calculated (consultations for each syndrome/condition under surveillance as a percentage of the total number of consultations, i.e. the number of consultations for all causes). This analysis is carried out for all RMRCs in the country participating in the system as a whole, and for each RMRC separately. Moreover, weekly data are also analysed (see Table 1), following the crosscheck/confirmation of some of the collected information, which takes place on the first days of the week following the week of reference.

The index of proportional morbidity (observed proportional morbidity) is compared with the expected proportional morbidity, which is calculated using a statistical model*. The expected proportional morbidity reflects the trend of the preceding 4 weeks; determining the warning threshold takes into account the dispersion of the daily values of proportional morbidity during the whole period since 16/05/2016. Observed proportional morbidity higher than the expected by more than 2 standard deviations (Z-score > 2) is equivalent to a "warning signal". A "warning signal" that appears for at least two consecutive days is equivalent to an "alert signal". The signals are evaluated in terms of importance for public health and, if necessary, they are further investigated, and –if considered appropriate– public health action is organized.

* The expected proportional morbidity is calculated using a quasi-Poisson regression model (Farrington et al, 1996). Long-term trends are incorporated in the model using natural cubic splines (with knots every 4 weeks), rejecting outlier values (Z-score> 3) and –if considered necessary– values corresponding to a confirmed outbreak.