



Challenges and options to address vaccination needs of irregular migrants, refugees or asylum seekers in the EU

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ECDC Vaccine-Preventable Diseases Programme
ProVacMed Network Meeting, 17 June 2016 – Rome, Italy

Star-marked (*) slides featured are courtesy of Teymur Noori, ECDC

High profile on EU political agenda

- “Migrants health” gaining new political momentum, following increased influx of refugees & asylum seekers



- EU Commission President Juncker’s **European Agenda for Migration**

- EU Civil Protection Mechanism in support of countries at higher exposure
- Increasingly targeted financial aid mechanisms, e.g. Asylum Migration Integration Fund; EU Emergency Assistance Instrument
 - 700 M EUR 2016-2018 (implemented through partner organisations)
 - +60 M EUR announced at end 2015 to support ‘**health needs**’

- ECDC work on migrants started in 2007 → EU Council Conclusion “Health and Migration in the EU” calling inter alia for

ECDC to produce a series of reports on migration and infectious diseases in the EU, including HIV, tuberculosis and vaccine preventable diseases

Long-standing migrant health challenges from a healthcare system perspective (1/2)

Challenge of definitions

- Broad definition of who constitutes a migrant

Challenge of data scarcity

- How many migrants are there in any given country
- High-quality data on
 - Health determinants
 - Health status
 - Challenge of carried vs. acquired health problems
 - Healthcare service utilisation not available in most EU



Long-standing migrant health challenges from a healthcare system perspective (2/2)

Challenge of horizontal & vertical health equity

- Legal restrictions on entitlements to health services
- User fees and impeded access to health insurance
- Language and underdeveloped health literacy
- Unfamiliarity with own rights
- Social exclusion and discrimination (direct & indirect)
- Discrepancies between policy and practice

- *Non-homogeneous group*
- *Diverse health needs*

Need for reinforced capability in countries?

Key role of pro-active public health and healthcare systems with capability to identify, assess, address needs

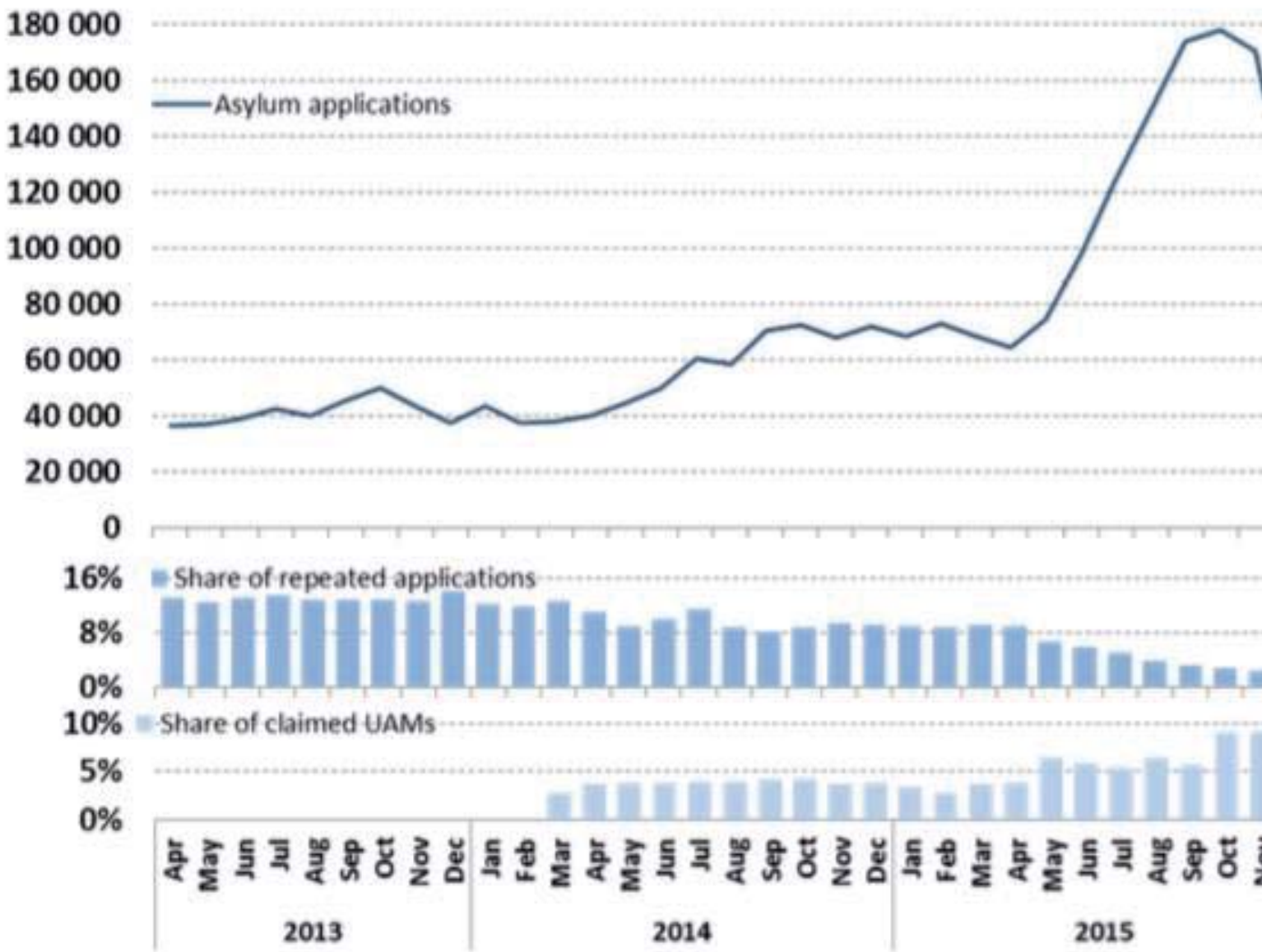
Significantly increased flow of 'irregular' migrants, refugees, and asylum seekers

SHARP INCREASE IN INFLUX

Despite 'healthy migrant effect', there is potentially higher vulnerability to communicable diseases, poor mental health, maternal-child health problems*

Factors spanning a

- Social
- Economic
- Cultural
- Legal



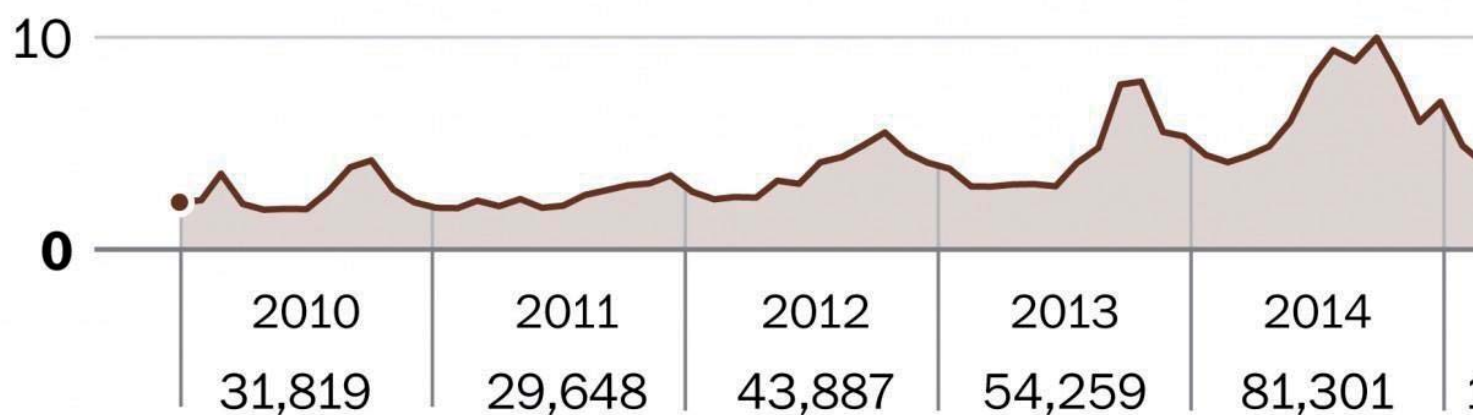
UAMS = 2.4 % (lowest since start); Afghanistan = 45% of UAMs followed by Somalia, The G

*LATEST TRENDS AVAILABLE FROM [https://www.easo.europa.eu/sites/default/files/public/Latest%20Asylum%20Trends%](https://www.easo.europa.eu/sites/default/files/public/Latest%20Asylum%20Trends%202015.pdf)

Applications for asylum received by Sweden

(In thousands)

30 — In the four-month period from August to
November, Sweden received **112,000**
20 — asylum applications. The amount is larger
than Sweden's previous annual record.

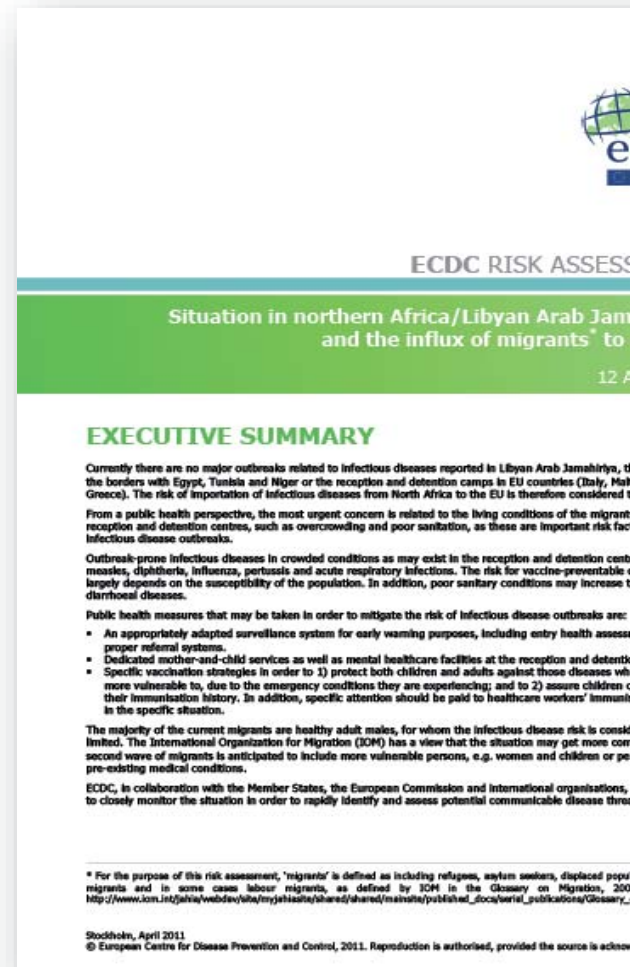


Note: 2015 data is up to November.

Source: Swedish Migration Agency

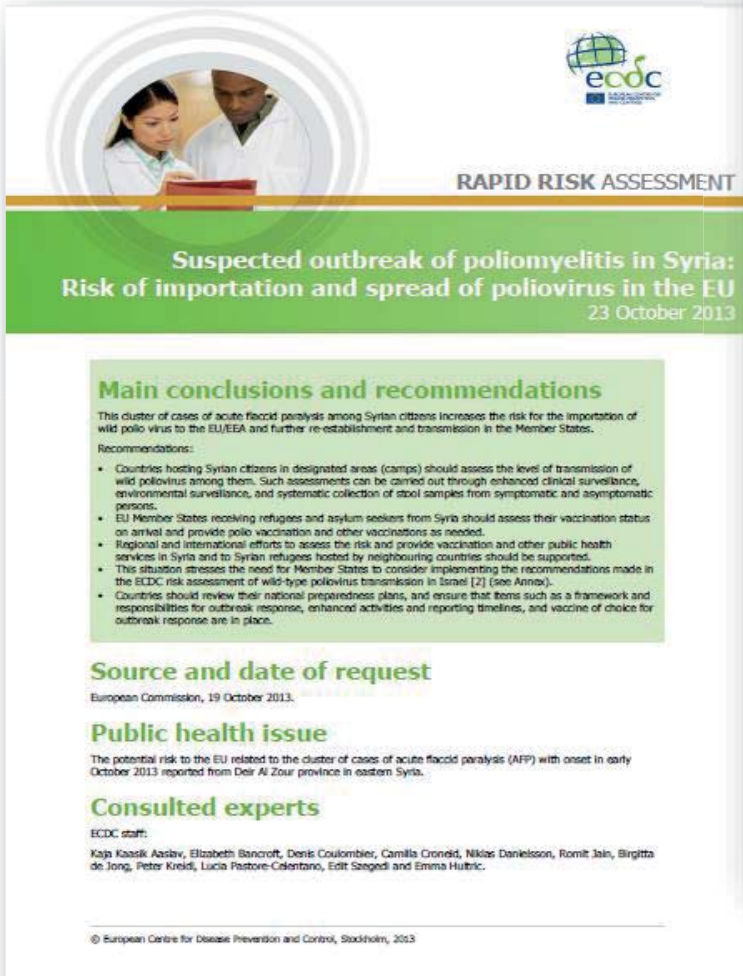
LAZARO GAMIO/THE WASH

ECDC Risk assessments and technical reports, 2011



* http://ecdc.europa.eu/en/publications/Publications/1105_MIR_Joint_WHO_Greece.pdf

ECDC Risk assessments and technical reports 2012-2014



RAPID RISK ASSESSMENT

Suspected outbreak of poliomyelitis in Syria: Risk of importation and spread of poliovirus in the EU

23 October 2013

Main conclusions and recommendations

This cluster of cases of acute flaccid paralysis among Syrian citizens increases the risk for the importation of wild poliovirus to the EU/EEA and further re-establishment and transmission in the Member States.

Recommendations:

- Countries hosting Syrian citizens in designated areas (camps) should assess the level of transmission of wild poliovirus among them. Such assessments can be carried out through enhanced clinical surveillance, environmental surveillance, and systematic collection of stool samples from symptomatic and asymptomatic persons.
- EU Member States receiving refugees and asylum seekers from Syria should assess their vaccination status on arrival and provide polio vaccination and other vaccinations as needed.
- Regional and international efforts to assess the risk and provide vaccination and other public health services in Syria and to Syrian refugees hosted by neighbouring countries should be supported.
- This situation stresses the need for Member States to consider implementing the recommendations made in the ECDC risk assessment of wild-type poliovirus transmission in Israel [2] (see Annex).
- Countries should review their national preparedness plans, and ensure that items such as a framework and responsibilities for outbreak response, enhanced activities and reporting timelines, and vaccine of choice for outbreak response are in place.

Source and date of request

European Commission, 19 October 2013.

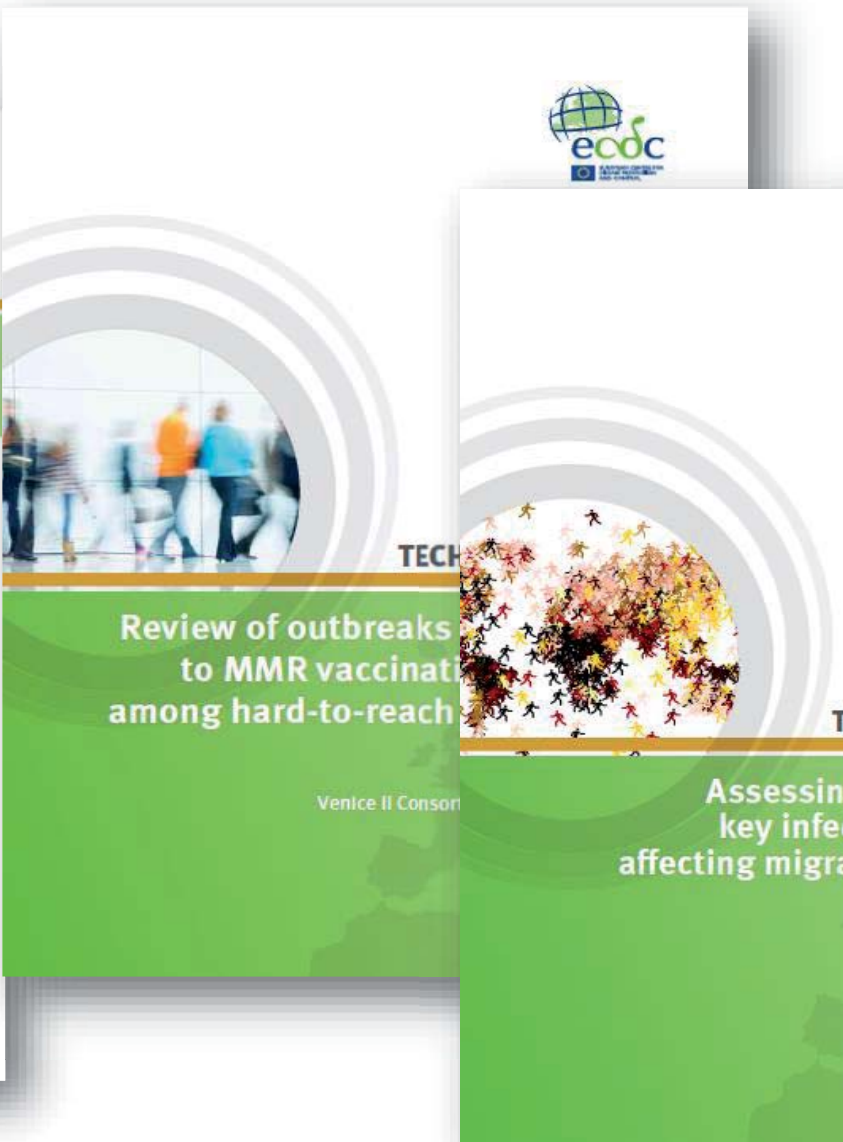
Public health issue

The potential risk to the EU related to the cluster of cases of acute flaccid paralysis (AFP) with onset in early October 2013 reported from Deir Al Zour province in eastern Syria.

Consulted experts

ECDC staff:
Kaja Kasak Aeslav, Elizabeth Bancroft, Denis Coulombier, Camilla Cronlid, Niklas Danielsson, Romit Jain, Birgitta de Jong, Peter Kreidl, Lucia Pastore-Colantoni, Edit Szegedi and Emma Hubric.

© European Centre for Disease Prevention and Control, Stockholm, 2013



Review of outbreaks to MMR vaccination among hard-to-reach populations

Venice II Consortium

Assessing the burden of key infectious diseases affecting migrant populations

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<http://ecdc.europa.eu/en/publications/Publications/RRA%20poliomyelitis%20Syria%2021%2010%202013.pdf>
<http://ecdc.europa.eu/en/publications/Publications/MMR-vaccination-hard-to-reach-population-review-2013.pdf>
<http://ecdc.europa.eu/en/publications/Publications/assessing-burden-disease-migrant-populations-summary.pdf>



Cutaneous diphtheria among refugees and asylum seekers

Main conclusions and options for response

There is currently no indication that the cases of cutaneous diphtheria reported by Denmark, Germany and Sweden in 2015 represent a new wave of infection in Europe. However, notification through the health system of cutaneous diphtheria among refugees is likely to be higher than in other population groups.

Cutaneous diphtheria is a potential risk factor for transmission of diphtheria to other countries and have travelled under conditions in the EU. This may increase the risk of diphtheria.

European travellers may become infected and develop cutaneous diphtheria. ECDC data show that most of the travellers who were notified had not received booster vaccinations or had unknown vaccination status.

Limitations in the capacity to confirm toxigenic infections may delay interventions in some EU Member States. Enhanced surveillance, of patient isolates have the potential to improve the understanding of cutaneous diphtheria.

Diphtheria caused by toxigenic *Corynebacterium* species is a notifiable infectious disease. Options for response include the following:

- Advise travellers to diphtheria-endemic countries to check vaccination against diphtheria before departure, and to receive a booster dose if more than 10 years has passed since the last dose.
- Consider all refugees and asylum seekers who lack evidence of vaccination as unvaccinated and provide vaccinations with diphtheria-tetanus according to national guidelines.
- Alert clinicians to the possibility of cutaneous diphtheria among returning from endemic areas, provide them with testing procedures and how to transport samples to the laboratory.
- Skin ulcers should be tested for diphtheria especially in refugees returning from endemic countries. Timely laboratory confirmation of cases.
- Healthcare providers in EU/EEA countries should be made aware of cutaneous diphtheria and can become asymptomatic carriers of toxin-producing strains.

Suggested citation: European Centre for Disease Prevention and Control. Cutaneous diphtheria among recently arrived refugees and asylum seekers in the EU, 30 July 2015. Stockholm: ECDC; 2015.
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RAPID RISK ASSESSMENT

Communicable disease risks associated with the movement of refugees in Europe during the winter season

10 November 2015

ECDC threat assessment for the EU

The scale of the current influx of refugees is inevitably putting pressure on public health systems in frontline receiving countries. Refugees do not currently represent a threat to Europe with respect to communicable diseases, but they are a priority group for communicable disease prevention and control efforts because they are more vulnerable. The risk to refugees arriving in Europe of contracting communicable diseases has increased due to the current overcrowding at reception facilities, resulting in compromised hygiene and sanitation arrangements. While the risk of mosquito-borne diseases has been reduced as a result of the approaching winter, the risk of other diseases whose spread is facilitated by overcrowding and lower temperatures has increased as a result of greater numbers of refugees likely to be gathering in close proximity to seek shelter from the cold weather. It is therefore expected that the incidence of respiratory and gastrointestinal conditions will increase in the coming months.

Recent weeks have seen reports of emerging outbreaks of communicable diseases affecting the refugee population. Of particular concern is the emergence of 27 cases of louse-borne relapsing fever (LBRF) in different locations along the route followed by the refugees arriving in Italy. The probable transmission of LBRF among refugee communities in the EU indicates that more cases may be seen in the near future, unless appropriate hygiene measures are implemented rapidly.

Low coverage for some vaccines, along with low immunity for some diseases, may result in susceptible refugees developing diseases such as measles and chickenpox (varicella), given the high incidence of these in some areas of the EU.

The risk to European residents of being affected by outbreaks occurring among refugee populations remains extremely low since the compromised hygiene, overcrowding and limited access to clean water responsible for their transmission are specific to the reception facilities in which they are occurring.

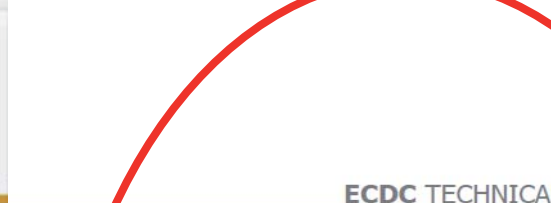
Conclusions and options for response

There are no indications that the number of people seeking refuge in Europe will decrease over the coming months, and the winter season will make the situation harder for those already living in precarious conditions across Europe. The basic information that would allow an adequate assessment of the situation is currently not available. The exact number of refugees is unknown, and assessment is hampered because refugees may avoid registration for fear of being sent back and because they move through different European countries.

While the risk of mosquito-borne diseases has been reduced as a result of the autumn and approaching winter, the risk to refugees of diseases whose spread is facilitated by overcrowding and lower temperatures has increased.

Options for reducing the risk of cases and outbreaks of communicable diseases and to improve the management of preventive and curative health services for refugees and migrants appear below.

Suggested citation: European Centre for Disease Prevention and Control. Communicable disease risks associated with the movement of refugees in Europe during the winter season – 10 November 2015. Stockholm: ECDC; 2015.
© European Centre for Disease Prevention and Control, Stockholm, 2015



ECDC TECHNICAL REPORT

Infectious diseases of specific relevance to newly-arrived migrants in the EU/EEA

1. Infectious disease risks among newly-arrived migrants in the EU/EEA

Migrant populations entering the EU/EEA, and particularly children, are at risk of developing infectious diseases in the same way as other EU populations, and in some cases may be more vulnerable. They should benefit from the same level of protection as indigenous populations with those which can be prevented by routine vaccinations. In addition, these populations are at risk of specific risks of infectious diseases in relation to their country of origin, countries visited during migration and the conditions they experienced during migration. This document serves as a guide for healthcare workers of the risks of infectious diseases for newly-arrived migrants. It does not cover chronic diseases and mental problems that may affect these populations.

The risk for EU/EEA countries of infectious disease outbreaks as a consequence of migration is extremely low. Although the likelihood that the specific infectious disease risks highlighted in this document occur among migrants is low, or in some cases very low, they should still be considered and treated in a timely manner, or prevented by immunisation when indicated, to avoid a significant risk for EU/EEA populations.

2. Infectious diseases to consider according to country of origin

Table 1 provides examples of which infectious diseases to be aware of when screening newly-arrived migrants. The countries highlighted in the table are those of origin for migrants entering the EU in 2015, excluding European countries (sources: Eurostat, 2015). This information is not exhaustive but can be used as an initial indication of where to focus attention. It is important to note that we cannot fully rely on epidemiology from the countries of origin to identify infectious diseases to be vigilant for. Those who migrate are often younger and healthier than the population of origin. In addition, a longer period in transit from their country of origin, through a number of countries and settings with different disease epidemiology, may reduce the risk of disease. Newly-arrived migrants with clinical complaints should receive a full medical history and physical examination.

* Eurostat news release. 163/2015 – 18 September 2015. Asylum in the EU. Over 210 000 first-time asylum seekers in the second quarter of 2015.

† Asylum statistics. EUROSTAT. (Retrieved 4 September 2015). Available from: <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&plugin=1>

Suggested citation: European Centre for Disease Prevention and Control. Infectious diseases of specific relevance to newly-arrived migrants in the EU/EEA – 19 November 2015. ECDC: Stockholm; 2015.
© European Centre for Disease Prevention and Control, 2015

ECDC Expert opinion on the public health needs of irregular migrants, refugees or asylum seekers

Objectives

- To produce scientific advice on the main health needs of migrant populations in relation to communicable diseases
- Provide options for addressing these needs

Methods

- ECDC conducted interviews with 14 senior experts
- Non-systematic review of available evidence



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Viewpoint (only commissioned)

Public health needs of migrants, refugees and asylum seekers: Infectious disease aspects

In the first 10 months of 2015 the total number of asylum applications to the European Asylum Support Office (EASO) recorded by European Union (EU) countries exceeded the 1 million mark, an unprecedented level since the establishment of the EU. Syria has been the most common country of origin of asylum applications, followed by Afghanistan and Iraq.¹ However, these figures do not take unregistered migrants into account in the same time period.

Screening for infectious diseases
Screening can be defined as the identification, involving laboratory tests, for and identification of individuals in a population. Although expert consultation

* ECDC. Expert Opinion on the public health needs of irregular migrants, refugees or asylum seekers across the EU's southern and south-eastern borders. ECDC; 2015. <http://ecdc.europa.eu/en/publications/Publications/Expert-opinion-irregular-migrants-public-health-needs-Sept-2015.pdf>

Public health needs identified:

- **Reception centres/ systems** to assure health assessments immediately upon arrival
- **Adequate shelter** to avoid crowding and ensuring good sanitary and hygienic conditions
- **Health education and health promotion** emphasizing the benefits of screening, immunisation, and other measures (i.e. language specific information and cultural mediators)
- **Guidance on screening** for communicable diseases
- **Vaccination services** should be reinforced (what and when to vaccinate, stock-outs)
- **Syndromic surveillance guidance** to generate alerts to initiate timely public health responses

* ECDC. Expert Opinion on the public health needs of irregular migrants, refugees or asylum seekers across the EU's southern and south-eastern borders. ECDC; 2015. <http://ecdc.europa.eu/en/publications/Publications/Expert-opinion-irregular-migrants-public-health-needs-Sept-2015.pdf>

Examples of infectious diseases to be aware of based on country of origin

Disease	Indicator	Syria	Afghanistan	Iraq	Eritrea
Diphtheria	Cases reported to WHO in 2012, 2013, 2014	0, 0, and NA	0, 0, 0	3, 4, and 5	8, 0 and NA
Hepatitis B	Prevalence of chronic Hep B	Intermediate: 5.6%	High: 10.5%	Low: 1.3%	High: 15.5%
Measles	Incidence per 100 000 in 2013, 2014	1.84 and 2.68	1.41 and 1.75	2.09 and 3.02	0.77 and 0.02
Polio	Cases reported to WHO in 2012, 2013, 2014	0, 35 and NA	46, 17, and 28	0, 0, and 2	0, 0, and 0
Tuberculosis	Incidence/ 100 000	Low: 17	High: 189	Low: 25	High: 40 to 499
Rabies	Risk level for humans to contract	High	High	High	High

Risk assessments

2015

ECDC threat assessment:

- Newly arrived migrants and refugees do not represent a threat to Europe with respect to communicable diseases
- Risk of outbreaks as a consequence of current influx of migrants is low, however it should still be considered to ensure these are recognised or prevented timely
- The risk to refugees has increased due to overcrowding reception facilities, resulting in poor hygiene and sanitation arrangements, ... and potential risk of contracting the disease in arrival or hosting country

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Cutaneous diphteria from endemic diphteria, and in the EU. This European travel countries. ECDC return had not

Limitations in the interventions of patient looks cutaneous diphteria caus

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Options for res

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• Consider unprote

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• Alert ca

• Sample

• Skin ulc

• exome

• Healthc

• providers in EU/EEA countries should be made aware that vaccinated individuals can still be infected by *Corynebacterium diphtheriae* and can become asymptomatic carriers of toxin-producing strains.

Suggested citation: European Centre for Disease Prevention and Control. Cutaneous diphtheria among recently arrived refugees and asylum seekers in the EU, 30 July 2015. Stockholm: ECDC, 2015.

© European Centre for Disease Prevention and Control, Stockholm, 2015

monitoring

ECDC recently published an Expert Opinion on the public health needs of irregular migrant asylum seekers across the EU's southern and south-eastern borders [1].

Suggested citation: European Centre for Disease Prevention and Control. Risk of Importation and other vector-borne diseases associated with the arrival of migrants to the EU – 21 October 2015.

© European Centre for Disease Prevention and Control, Stockholm, 2015

Some key challenges to protect migrants against VPDs

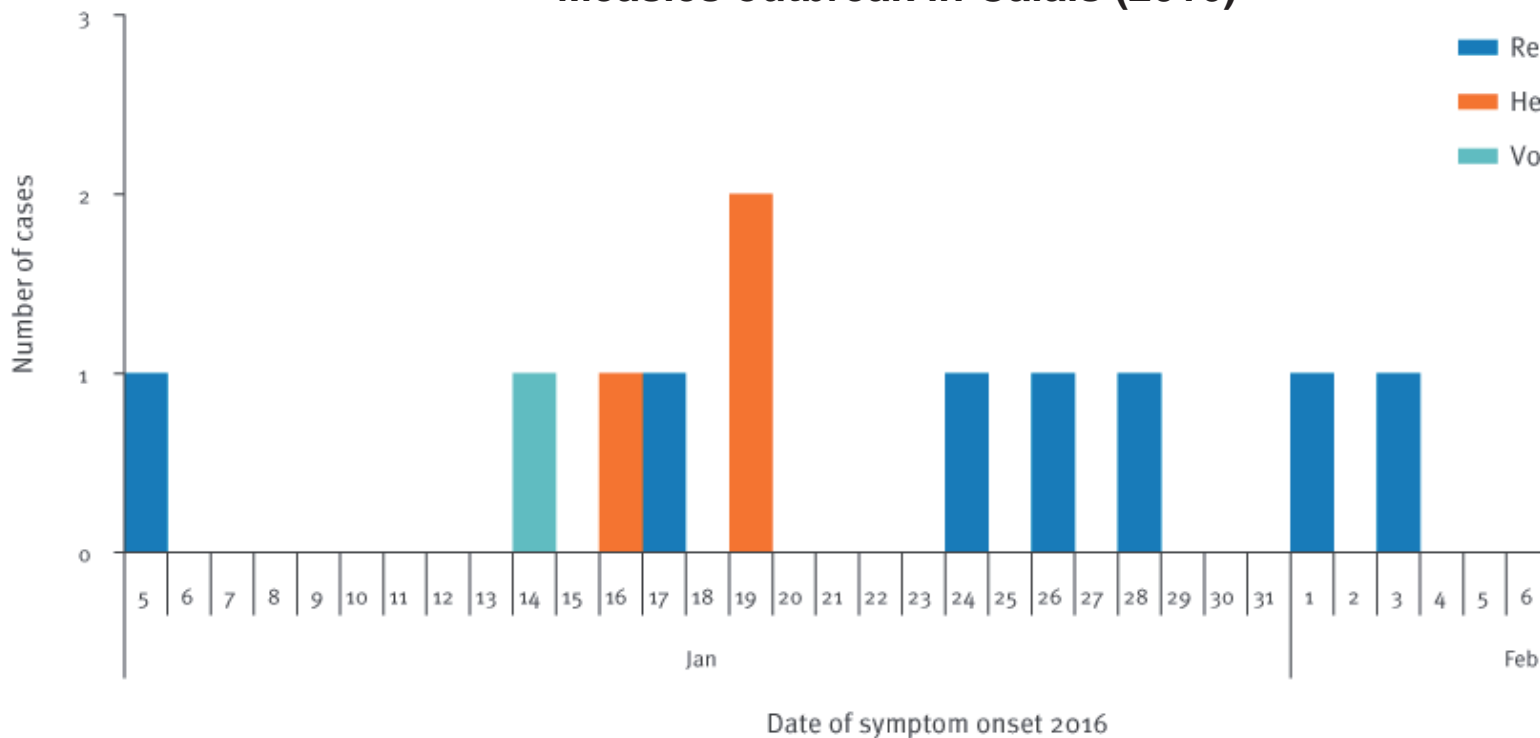
- Vaccinating immigrants “in transit” or at final destination?
- What to do in absence of vaccination record?
- How to record vaccinations being performed?
- How to address the issue of unaccompanied minors?
- Which vaccines to prioritise?
- Which schedule to follow? E.g. NIP?
- How to handle cases of shortages of vaccines in EU?

At both national and sub-national levels:

- Capacity to vaccinate?
- Capacity for effective surveillance?
- Capacity for response to potential outbreaks?

Ensuring newly arrived migrants' adequate protection, particularly vulnerable children

Measles outbreak in Calais (2016)



Jones et al (2016), Measles outbreak in a refugee settlement in Calais, France: January to February 2016. Euro Surveill. 2016;21(11):pii=30167. DOI: <http://dx.doi.org/10.2807/1560-7917.ES.2016.21.11.30167>

Options for reviewing and acting upon vaccination status (1/3)

- Vaccination to be offered based on national guidelines of hosting country
- Vaccination status to be assessed using available documentation
- If no or uncertain documentation exists, consider individual as unvaccinated and administering first doses asap following entry or registration
- When possible combination vaccines to be used to facilitate vaccination
- In case of shortage, prioritise children but aim for at least one dose dT- containing vaccine in adults
- The timing needed for completing primary series to be taken into account in relation to logistics of potential transfers to other camps or settings

Vaccinations to be offered in the absence of documented evidence of prior vaccination (2/3)

Table 3. Vaccinations to be offered in the absence of documented evidence of prior vaccination

Disease/age group	Children and adolescents (<18 years)	Adults (> 18 years)
Priority vaccinations		
Measles, mumps, rubella	Administer to individuals ≥ 9 months of age. Two doses of MMR* should be administered at least one month apart but preferably longer according to national guidelines. Measles vaccine provided before 12 months of age does not induce protection in all and should be repeated after 12 months of age.	Administer one or two doses of MMR** to individuals, according to national guidelines
Diphtheria, tetanus, pertussis, polio, Hib	Administer to individuals ≥ 2 months, three doses of DTaP-IPV-Hib (Hib-component only for children <6 years unless other country-specific recommendations) containing vaccines at least one month apart, followed by a booster dose according to national guidelines. Pentavalent- and hexavalent combination vaccines are authorised up to six years of age.	Administer to all adults, three doses of DTaP-IPV- ** containing vaccines according to national guidelines

Vaccinations to be offered in the absence of documented evidence of prior vaccination (3/3)

<i>To be considered</i>		
Hepatitis B	Administer to individuals ≥ 2 months, three doses according to national guidelines*** Administer to new-born infants of HBsAg-positive mothers within 24 hours of birth, according to national guidelines	Administer to all adults, with or without screening, according to national guidelines
Meningococcal disease	National guidelines for meningococcal vaccines against serogroups A, B, C, W135 and Y should be followed, unless the epidemiological situation suggests otherwise.	
Pneumococcal disease	Administer to individuals ≥ 2 months with 1–3 doses of conjugate vaccine at least one month apart, according to national guidelines	Administer to individuals ≥ 65 years of age according to national guidelines.
Varicella	National guidelines should be followed unless the epidemiological situation suggests otherwise. If used, administer to individuals ≥ 11 months of age, two doses of varicella at least one month apart, but preferably longer.	National guidelines should be followed unless the epidemiological situation suggests otherwise. Consider vaccinating non-immune women of childbearing age.
Influenza	National guidelines should be followed unless the epidemiological situation suggests otherwise. Consider vaccinating risk groups over six months of age ahead of and during influenza season.	National guidelines should be followed unless the epidemiological situation suggests otherwise. Consider vaccinating risk groups including pregnant women, ahead of and during influenza season.
Tuberculosis	Administer BCG according to national guidelines. Re-vaccination with BCG is not recommended.	BCG is generally not recommended unless specific reasons suggest otherwise.

In context of aP-containing vaccine shortages...

- ECDC survey targeting NFPs for VPD including the following
 - Does your government/national vaccination programme currently offer vaccinations for irregular migrants and asylum seekers?
 - Has the provision of vaccinations to irregular migrants and asylum seekers exacerbated the shortage of vaccines in your country?
 - Do you expect that the provision of vaccinations to irregular migrants and asylum seekers will exacerbate the shortage of vaccines in the coming 12 months?

In context of aP-containing vaccine shortages...

Table 3. Provision of vaccinations to irregular migrants and asylum seekers

Country	Vaccinations offered to irregular migrants/asylum seekers?			Exacerbated shortage provision of vaccination migrants/asylum seekers?	
	Children	Adults	Volume	Present	Future
Belgium	For all <18 years: according to the national vaccination programme	For asylum seekers: <ul style="list-style-type: none"> from Afghanistan, Pakistan, Somalia and Nigeria: IPV born after 1970: MMR Tdap booster 	Around 6 850 (January–August 2015)	Yes, for IPV	Yes, for IPV
Bulgaria	For asylum seekers <15 years: DTPa-IPV-Hib (pentavalent), MMR shortly after entry; then the schedule continues according to the national immunisation programme		Around 2 000, since November 2013	No	Yes, for DTPa (Pentavalent)
Croatia	For registered asylum seekers: According to the national vaccination program	For registered asylum seekers: Td, IPV, MMR	A few dozen	No	Maybe, depends on asylum seekers
Czech Republic	For those < 15 years: measles and polio			N/A	N/A
Estonia	No		N/A	No	No
Finland	For asylum seekers <18 years, according to the national vaccination program	For asylum seekers: <ul style="list-style-type: none"> IPV for those coming from polio-risk countries or those who share accommodations with them. MMR, Td 	No data	No	Maybe, depends on asylum seekers
Germany	According to official recommendations [†]		No data	Unknown	Yes
Hungary	For registered individuals, age-		No data	No	Maybe

Evidence-based guidance on prevention and assessment of communicable diseases among migrants in the EU/EEA

Objectives

- Collect and **synthesise the scientific evidence** on screening and prevention for infectious diseases among migrants;
- **Review national and international policies**, practices and guidelines on screening for ID among migrants;
- **Consult key experts** in countries working with prevention of infectious diseases among migrants;
- **Draft evidence-based guidance** on screening and prevention of infectious diseases among migrants;

Target audience

- National and sub-national policy makers in EU/EEA Member States
- Health practitioners
- NGOs and patient organisations working with migrant communities

ECDC foreseen objectives and outputs on migrants & VPD 2016-2017

Objective

- Provide MS and Commission with data and policy analysis concerning VPDs migrants population in order to support policy makers in EU;

Outputs

- Survey among MS on **current practices** on immunisation of migrants & asylum seekers entering the countries;
- Technical report **mapping policies and laws** on childhood and adult immunisation of migrants requiring health assistance in MS;
- Evidence-based guidance on prevention and assessment of communicable diseases among migrants in the EU/EEA (**VPD section**);



Thank You!

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