

ADVICE on TUBERCULOSIS (TB) SCREENING of UKRAINIAN CITIZENS ARRIVING IN BELGIUM

13/12/2022

CONTEXT AND QUESTIONS ADDRESSED

According to ECDC and WHO, Ukraine is considered a TB high priority country in the WHO European Region and is one of nine countries globally with a high burden of multidrug-resistant TB (1). The **estimated TB incidence** is 73 per 100 000 population compared to 9.5 per 100 000 in the EU/EEA (1). In 2020, 19 521 TB cases were **notified** in Ukraine, corresponding to 44.6 per 100 000 population, compared to 7.2 per 100 000 in Belgium (1,2). In 2020, 32.6% of all bacteriologically confirmed pulmonary TB cases in Ukraine were rifampicin-resistant or multidrug-resistant TB (RR/MDR-TB) compared to 2,8% in Belgium (1,2). To be noted that because of Covid-19 there was a considerable decrease in notifications worldwide in 2020.

Until now, TB-screening of Ukrainian citizens arriving in Belgium is organized differently in the respective regions, mostly related to challenges of implementation. Screening results are different across the regions, with relative high detection rates in Flanders and Brussels, compared to lower detection rates in Wallonia.

The RMG requested to compare the respective strategies and formulate an advice on the most effective approach.

RECOMMENDATIONS

The experts from FARES/VRGT, representatives of the regions, Fedasil and Sciensano agree to recommend an active screening approach for TB in all citizens of Ukraine, immediately upon arrival in Belgium. This should be done by X-ray, and organized in a centralized and accessible way, as close as possible to the entry/registration point, ideally at/nearby the new reception center Horta in Brussels.

BACKGROUND INFORMATION

CURRENT TB SCREENING STRATEGIES IN BELGIUM

Different strategies are applied for screening of Ukrainians at arrival in Belgium.

Flanders applies active screening using X-ray (3)

- Medical intake : screening for 'known' TB cases (TB medication), continuous alertness for symptoms.
- Active screening for tuberculosis.
 - All Ukrainians >5 years: X-ray

- No X-ray in pregnant women (TST - Mantoux tuberculin skin test) & children <5 years (medical screening)
- Recent launch of mobile team(s) to conduct screening, e.g. in collectivities.

Brussels applies passive screening using a questionnaire

Wallonia applies passive screening using a questionnaire.

- After registration at arrival, refugees are referred to a GP for follow-up. But because of lack of knowledge and the language barrier, almost none seeks care at those GPs.
- AVIQ requests to medical hospital directors to conduct X-ray screening for all Ukrainians presenting at emergency departments or ambulatory services.

SCREENING RESULTS

FLANDERS (Update 30/11)

- Expected number of cases based on WHO (2020) and MOH Ukraine (2015)

	Expected min. Incidence per 100.000 per year	Estimated # displaced	# expected Tb cases over 1 year
All Ukrainian displaced	73	35.037	17
Adult Ukrainians		23.224	15
<i>Adult women</i>	<i>49</i>	<i>14.538</i>	<i>7,1</i>
<i>Adult men</i>	<i>97</i>	<i>8.686</i>	<i>8,5</i>
<i>Underage Ukrainians</i>		11.813	2
<i>0 - 11 years</i>	<i>8,8</i>	<i>7.839</i>	<i>0,7</i>
<i>12 - 17 years</i>	<i>24,4</i>	<i>3.975</i>	<i>1,0</i>

- **9 cases** of pulmonary TB detected, as compared to 17 expected cases (per year): 6 via active screening, 3 based on (severe) symptoms and 0 via passive screening. Out of the 9 detected cases, 3 were MDR-TB.
- Number of X-rays: minimum 1.007 (data VRGT) – maximum 5.882 (*data from HAK – networks of general practitioners*), on a total number of 22.000 refugees eligible for X-ray (= all refugees except children <5yrs and pregnant women). Uptake of 5-25% is too low, and maybe linked to decentralized approach.
- **6 TB cases detected via screening** on a total of 1000 (min) or 6.000 (max) X-rays = incidence between 100 (min) up to 600 (max) / 100.000.

BRUSSELS (update 4/11)

- 10 suspected cases at medical screening (after completing questionnaire) among 1205 visitors of Brussels Orientation Center: all of these turned-out negative

- 5 cases, of which 3 with sensible strains (2 other pending drug sensitivity testing)

WALLONIA (update 24/10)

- **No cases detected** among Ukrainian arrivals

ECDC and WHO GUIDANCE, RECOMMENDATIONS IN OTHER COUNTRIES

In a note issued on the 7th of April 2022, ECDC and WHO Europe do not recommend the universal screening for TB disease (1). Universal screening for TB disease is an option for people arriving from high-TB incidence countries. The threshold is often defined as a TB incidence above 100 per 100 000 population. This is higher than the current incidence in Ukraine. In the past, European countries have applied different thresholds for screening migrants. In Belgium, 50/100.000 is the detection rate above which screening is still considered useful. All people requesting international protection, regardless of country of origin, are tested. In 2023, a re-evaluation is planned to see if a selection can be made.

Some other EU/EEA countries do recommend an **active screening (e.g. France, Denmark, Ireland, Norway)** while others **don't recommend (e.g. The Netherlands, Sweden)** or only when housed in collectivity (Germany) (4–6, information via BELTA (VRGT/FARES) through the EU/EEA TB Disease Network on continuity of TB care among refugees from Ukraine). Some countries are currently reviewing their screening approach.

BACKGROUND INFORMATION

The initial recommendations of ECDC and WHO were issued at the start of the crisis in Ukraine, and made under the assumption of a massive influx of citizens of Ukraine in other European countries. **The influx of citizens of Ukraine in Belgium has been less than expected and is currently at a much lower level than during the first months, allowing for a screening at entry (7).** The crisis in Ukraine has been going on for several months now, and harsh winter conditions do exist. This may have increased the actual risk of developing active TB in displaced persons from Ukraine currently arriving in Belgium. The negative impact of war on tuberculosis control has been well described, and the incidence in Ukraine is now most probably higher than the 73 mentioned from pre-war conditions (8). In addition, Belgium is currently facing a **housing crisis for refugees**, further adding the risk of development of active TB due to precarious living conditions.

The experiences in all regions have learned that this group is difficult to motivate to profit from preventive medicine and that there are some obstacles to direct those people towards the existing health care and general practitioners. Refugees have insufficient knowledge about access to health care or are feeling stigmatization, in a context of a first line healthcare sector lacking general practitioners to cover all the needs and still recovering from Covid-19. Comparison of the results between the different regions learns that the active screening approach in Flanders allowed to detect more TB cases.

Even with a more active approach the uptake is low, between 5-25%. This could be linked to a decentralized approach, and the possible lack of awareness on the importance of prevention among many first line healthcare workers. The exact coverage is difficult to measure, partly due to problems in obtaining a correct denominator.

A new reception center - Horta in Brussels - will be operational by the end of 2022. In this center, X-ray screening could be carried-out, either through a nearby hospital (as close as possible to reception center), either through (private) radiologist, either through a mobile X-ray machine. This approach would allow for a capacity of 60 X-rays/day.

FOLLOWING EXPERTS PARTICIPATED IN THIS ADVICE

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