Infectious disease risk assessment

Mass emigration and long-term collective accommodation may pose an increased risk of infectious diseases or clustering of infectious diseases, with particular regard to infectious diseases that can be prevented by vaccination, but also other infectious diseases such as intestinal infectious diseases or infestations such as pediculosis. Due to the fact that Ukraine had had a very low vaccination coverage until recently, and that in late 2021 rapid growth in circulating vaccine-derived type 2 poliovirus (cVDPV2) was detected, in combination with a relatively high prevalence of blood-borne infectious diseases (HIV, hepatitis B) and tuberculosis, the health care of refugees from Ukraine should focus on the early detection of such infectious diseases as the measles, rubella, acute flaccid paralysis (AFP) associated with cVDPV, blood-borne diseases and tuberculosis (clinical care should consider the possibility of multidrug-resistant tuberculosis, especially in combination with HIV).

The above risk assessment is subject to change, depending on the current epidemiological situation.

In order to reduce the risk of transmission of said infectious diseases, the measures can be divided into two basic categories:

A) Measures at the reception centres characterized by a large flow of people with short retention time

It is necessary to ensure adequate accommodation in reception centres that should meet the conditions that minimize the risk factors for the transmission of infectious diseases (overcrowding, unsatisfactory hygienic and sanitary conditions, conditions conducive to the development of vectors for the transmission of infectious diseases, etc.). Before introducing any measures, it is important to make an epidemiological investigation by the competent epidemiological team.

Accommodation facilities should meet the hygienic and sanitary conditions for the reception of a larger number of people: continuous clean water supply (tap water, cistern water, bottled water), surveillance over the hygienic safety of food (storage, preparation and distribution), disposal of faecal and waste matter, satisfactory amount of consumables (e.g. paper towels, toilet paper, liquid
soap, disinfectants). Accommodation premises should be kept clean, and it is recommended to implement preventive measures of disinfection, disinfestation and pest control (DDPC) of the shelter facilities and its surroundings on the basis of an epidemiological investigation and assessment of the situation. The epidemiological investigation is performed by a team of the competent public health institute, while the implementation of measures may also be performed by a subcontractor under the supervision of the competent institute.

DISINFECTION, DISINFESTATION AND PEST CONTROL (DDPC) PLAN

Prior to the reception of refugees at the reception centres, it is necessary to carry out measures of disinfection, disinfestation and pest control around the premises and area of the reception centre, based on an epidemiological risk assessment, at least one week prior to the reception, if possible.

Written guidelines with basic instructions for maintaining personal hygiene and space sanitation need to be drawn up in the relevant language. The instructions will be elaborated by the Croatian Institute of Public Health (CIPH), and translated, printed and distributed by the Ministry of Foreign and European Affairs.

Prior to the reception of refugees, it is necessary to organize an area where triage will be carried out under the coordination of the Croatian Red Cross and the local civil protection staff, including testing for SARS-CoV-2, personal hygiene measures and, if necessary, washing, changing and possibly disinfestation of refugees’ clothes and lice treatment (including hair and other hair-covered parts of the body), Pursuant to the Ordinance on the content of the medical examination of asylum seekers, asylees, foreigners under temporary protection and foreigners under subsidiary protection (OG No. 39/2008).

In doing so, care should be taken to establish separate spaces for men, women and children.

It is necessary to provide an area for the isolation of persons who tested positive for SARS-CoV-2 and a separate area for their close contacts.

Disinfection, disinfestation and pest control (DDPC) contractors - facilities authorized to implement DDPC measures, including the competent county public health institutes (C PHI), if they hold an approval by the minister of health in keeping with the legal regulations. (The Ministry may issue a temporary work permit).

If the competent CPHI does not hold an approval by the minister of health to implement counter-epidemic DDPC measures, the measures will be implemented by other authorized legal entities under the supervision and by order of the competent CPHI and/or CIPH Epidemiology Division, in accordance with the rules of profession.

Teams

- Person responsible for the implementation of DDPC measures: MD, B.Sc. sanitary or biology engineer or B.A. biology professor, if having met all legal requirements.
- DDPC contractors: sanitary engineers, sanitary technicians and contractors of other professions, if
having met all legal requirements.

**Makeup of the contractor team:** The team leader for the implementation of DDPC measures must be a sanitary engineer, i.e. at least a sanitary technician with relevant experience.

**INSTRUCTIONS FOR SARS-CoV-2 TESTING AND TRIAGE**

- Before entering the reception centre, all persons over the age of 6 are to be tested by SARS-CoV-2 rapid antigen test, and, regardless of age, all persons are asked to state their symptoms of infectious diseases and infestations, and undergo a rapid orientation physical examination, if necessary.
- Persons who test positive for SARS-CoV-2 are grouped in an isolation unit and their close contacts in a separate quarantine area. They are provided with adequate medical care, depending on the condition. Persons who show signs of other infectious diseases or infestations are provided with adequate separate accommodation within the shelter or their transport to a health care facility is organised for further examination and provision of health care, depending on the clinical condition.
- SARS-CoV-2 testing is performed on all persons, regardless of age, vaccination status and illness, if they show symptoms of a disease compatible with COVID-19.

**Teams**

- Person responsible for medical care (testing for SARS-CoV-2 and orientation medical examination to determine the need for depediculation and remediation of possible emergencies: medical doctor and 3-4 nurses.

**Makeup of the contractor team:** The leader of the medical team must be a medical doctor.

Before entering the shelter itself, a physically separate reception centre should be provided for the reception and registration of new migrants, with sanitary facilities (separate for men and women) and water for washing the hands and drinking. Keeping records of migrants by sex, age and country of origin, conducted by the Ministry of the Interior, is important for planning and meeting the basic needs of shelter users and medical supervision during their stay at the shelter.

The shelter should have several organisational units:

- Refugee triage area (at the entrance to the shelter)

- Administrative record area

- Area for depediculation (lice treatment) and other preventive counter-epidemic procedures, and distribution of face masks

- Sleeping area

- Sanitary facilities (toilets, showers, washbasins)

- Food preparation and distribution area

- Food storage area

- Food consumption area
HZJZ

- Area for hygienic and sanitary supplies, clothes and shoes
- Laundry
- Improvised dispensary for the examination of persons referred for medical examination during triage
- Medical / operational / coordination centre.

The minimum conditions to be met by the shelter are shown in Table 1.

Table 1. Meeting the basic needs in emergency situations

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>Average needs</td>
</tr>
<tr>
<td></td>
<td>- 20 l of clean water per person daily</td>
</tr>
<tr>
<td></td>
<td>- 100 persons per outtake point, no more than 150 m away from the accommodation</td>
</tr>
<tr>
<td>Sanitation</td>
<td>A minimum of 1 toilet per 20 persons, separate facilities for men and women, at least 30 m away from the sitting area</td>
</tr>
<tr>
<td>Sufficient surface area</td>
<td>3.5 m² per person</td>
</tr>
<tr>
<td>Food*</td>
<td>2,100 kcal/person/day</td>
</tr>
<tr>
<td>Energy</td>
<td>17-20% overall energy from edible fats or oils</td>
</tr>
<tr>
<td>Fats</td>
<td>10-12% overall energy from proteins</td>
</tr>
<tr>
<td>Proteins</td>
<td>Recommended daily protein intake: 46 g</td>
</tr>
</tbody>
</table>

* daily requirements for calculating daily rations in emergency situations, according to the WHO Food and Nutrition Needs in Emergencies manual (2005); necessary adjustments in case of vulnerable groups; Food preparation and distribution of meals to refugees, as well as taking away dirty dishes and leftover food, should be ensured at least three times a day, while adequate cleaning and disinfection of the premises should be organised at least once a day, which is not the responsibility of the medical team.

When planning sanitary facilities, one should take into account the needs of young children, women and people with special needs (disabled). Safe disposal of faecal contents and other human excreta should be ensured in a way that does not endanger the water sources and water supply centres, far enough from the food preparation and distribution unit, warehouses and improvised dispensary.

Sanitary disposal of municipal waste (waste bins / garbage containers with lids properly placed, regularly emptied, washed and disinfected, as needed).

Epidemiological investigations for the purpose of hygienic and sanitary inspection at the shelter are carried out periodically and after consulting with the medical staff at the shelter.
Pursuant to the Ordinance on the content of the medical examination of asylum seekers, asylees, foreigners under temporary protection and foreigners under subsidiary protection (OG No. 39/2008), upon arrival at the shelter, the following protection measures should be implemented in coordination with the Croatian Red Cross and local civil protection staff:

1. Personal hygiene, including the washing, changing and disinfestation of clothes, as needed.
2. In cooperation with the Ministry of the Interior and relevant stakeholders, the medical staff who will carry out the procedures described below should be provided with minimum data on all persons entering the reception centre: identification data (e.g. first and last name, age), country of origin, route to Croatia to assess the possible risks of infectious disease transmission from the country of origin.
3. Medical teams will conduct triage of persons accommodated at the reception centre in order to determine the ‘healthy / acutely ill’ status, which is done for the purpose of identifying acutely ill persons. This procedure should be carried out with the mediation of an interpreter or mediator (persons from the group of migrants who speak English or Croatian). The availability of interpreters or mediators should be agreed upon with the Ministry of the Interior. The examination of acutely ill persons will be carried out by medical teams. The medical team will be headed by a general practitioner / family doctor or paediatrician who speaks English, Ukrainian or Russian and will receive persons referred by triage where a disease was confirmed. The following medical / health profiles may be included in a team: nurse, a student of medical school or health studies, medical intern, retired physician. Medical teams are established by health centres in coordination with their founding counties or the City of Zagreb.

In order not to interfere with the normal functioning of the national health care system, and given the increased demand for medical staff, it is recommended to hire unemployed physicians / medical staff of various profiles with passed medical exam registered at the Croatian Employment Service, as well as physicians, including retired physicians through professional societies of the Croatian Medical Association. If necessary, paediatricians should be hired to examine small children.

The person in charge of forming the medical teams is the director of the county health centre where the reception centre / shelter for refugees is located. The medical office should be open 24/7, which requires 4 medical teams per office. The necessary equipment in the office is defined by the Ordinance on minimum requirements for space, staff, and medical and technical equipment for performing health care activities (OG No. 61/2011). It is necessary to have a medication depot adjacent to the dispensary. For dispensaries and drug depots, the Ministry of Health will issue a temporary authorisation to perform health activities. The head of the medical team calls 194 to reach the competent county emergency dispatch unit, required to respond to an emergency call triaging based on the Croatian index of emergency call receipt for the following emergencies:

- Sudden breathing difficulties;
- External suffocation;
- Cardiac and respiratory arrest;
HZJZ

- Loss of consciousness;
- Sudden chest pain;
- Sudden acceleration or slowing down of the heart rate, or irregular heartbeat
- Cramps (convulsions);
- Difficulty speaking, weakness or paralysis of a body part, facial distortion
- Injuries caused by traffic accidents and other traumas (falls from a height / animal bites / stings / shots);
- Unusual bleeding from a body orifice;
- Burns;
- Electric shock or lightning strike
- Hypothermia, heat stroke
- Drowning
- Drug / narcotic / chemical intoxication;
- Severe allergic reaction;
- Sudden and unusual pain (severe headache, severe chest / abdomen / back pain);
- Sudden changes in behaviour that endanger the patient or the environment (attempted suicide / murder)

An emergency medical service leaflet with instructions will be made available to the medical team at the dispensary.

A competent health centre or institute of emergency medicine is called for transport by qualified ambulance, depending on the provider. The director of the health centre or county institute of emergency medicine is in charge of transport organisation.

After the setting up of the shelter, the head of the medical team cooperates daily with the epidemiologist in charge.

Initial triage on signs of acute illness is performed by nurses / final year medical students / interns, by asking the following questions:

• Do you feel ill?
• Do you cough?
• Do you vomit? Are you experiencing nausea or diarrhoea?
• Do you have a rash or other skin changes?
• Do you feel abdominal pain??

After taking the above anamnestic data, each person should have their body temperature taken. Infrared thermometers should be provided for this purpose.

If the answers to all the above questions are negative and the body temperature is within normal limits, it is estimated that the person’s health is in order.

If the answer to one or more questions is positive, if the examinee reports fever or disturbance of consciousness, unbearable headache or chest pain / discomfort not caused by trauma, or a pronounced mental disorder, and the triage staff assess that the person’s health is damaged, they should be referred for an orientation medical examination to the head of the medical team.
At the same time, the examinee should undergo a SARS-CoV-2 rapid antigen test.

Prior to the opening of the shelter, a dispensary area should be provided for medical examinations, as well as an additional isolation room (infirmary) and necessary basic medical and protective equipment, in accordance with the instructions of the Outpatient Health Care Directorate, plus a sanitary facility.

If the medical staff assess / determine that the examinee is acutely ill, they should be referred to health care and / or treatment.

Persons with an acute medical emergency should be cared for in accordance with the International and Temporary Protection Act (OG No. 70/2015).

Persons who test positive on the SARS-CoV-2 rapid antigen test and show no severe symptoms of COVID-19, are temporarily accommodated with their closest travelling companions in the isolation room, where they are ensured the necessary hygiene, food and health care, as needed, until transfer to an organised unit for the isolation of COVID-19 patients. If at all possible, close contacts of the infected persons should be physically separated from the infected and other refugees, taking care to ensure all other forms of contact with family members and fellow travellers, and to reunite them after the isolation is over.

The head of the medical team is in charge of writing a daily report on the total number of migrants in the shelter, the number of healthy and ill migrants, as well as the number of persons suffering from infectious or non-infectious diseases, and the number of patients cared for in the shelter, as well as those referred to other health care facilities or hospitals. This report is then submitted to the competent epidemiologist on a daily basis.

A report of suspected infectious diseases is submitted to the epidemiology service without delay, i.e. for each new patient daily, collected on the official Infectious disease / death report form (the so-called ‘Yellow Card’) that must be made readily available to the medical team. Epidemiological intervention by the competent epidemiological team is carried out as needed, especially in cases of infectious disease clusters. In order to further monitor a person suspected of and reported for having an infectious disease, it is necessary to notify the competent epidemiological team of the patient’s further whereabouts or departure outside of the Republic of Croatia immediately upon leaving the reception centre. The competent epidemiological team shall, in the case of a temporary change of residence within the territory of Croatia, inform the currently competent domestic epidemiological team thereof, or the CIPH, in case of refugee leaving the country.

4. Disease control at the shelter (the patient can turn to a designated staff) with a view to timely detecting potential infectious diseases.

In order to monitor the health status of refugees, it is necessary to introduce syndrome monitoring and reporting. At the end of each day, a report needs to be sent to the Crisis Centre, the county public health institute (CPHI) and the CIPH on the number of persons examined in the dispensary, according to the following syndromes: nonspecific fever, fever and rash, watery diarrhoea, bloody diarrhoea, pneumonia, haemorrhagic syndrome (bleeding
in the skin and visible mucous membranes), acute flaccid paralysis, pediculosis (lice infestation).

B) Measures in accommodation facilities characterized by longer retention times

1. Retention in accommodation facilities usually lasts longer than in reception centres, which is why the accommodation facilities should have all the infrastructure of the reception centres, but also dormitories with sanitary facilities providing more privacy and less accommodation density than at the reception centres. Accommodation facilities are most often hotels or resorts.

2. Given the impossibility of predicting the exact number of refugees at a given time, it is necessary to provide additional medical teams in the area where the migrants are accommodated.

3. Immediately upon arrival at the accommodation centre, users are tested by SARS-CoV-2 rapid antigen test, if more than 48 hours have elapsed since testing at the reception centre, if they have not been tested at the reception centre, or if they have been in contact with a person who tested positive for SARS-CoV-2 during travel or at the reception centre.

   Within 48 hours of arrival at the accommodation centre, users undergo a medical examination.

If necessary, targeted medical examinations will be organised on the basis of clinical and epidemiological assessment, and may include the following:

   a. Medical history and physical examination for tuberculosis
   b. Blood test for basic indicators of infectious diseases:
      - total leukocytes, differential blood count (DKS), sedimentation
   c. Medical history and stool test for salmonella, shigella and parasites
   d. Examination and blood test for HIV and viral hepatitis

A report of suspected infectious diseases is submitted to the epidemiology service without delay, i.e. for each new patient daily, collected on the official Infectious disease / death report form (the so-called ‘Yellow Card’) that must be made readily available to the medical team. Epidemiological intervention by the competent epidemiological team is carried out as needed, especially in cases of infectious disease clusters. In order to further monitor a person suspected of and reported for having an infectious disease, it is necessary to notify the competent epidemiological team of the patient’s further whereabouts or departure outside of the Republic of Croatia immediately upon leaving the reception centre. The competent epidemiological team shall, in the case of a temporary change of residence within the territory of Croatia, inform the currently competent domestic epidemiological team thereof, or the CIPH, in case of refugee leaving the country.

4. Vaccination

   a) The vaccination status should be determined for each person as part of the medical examination and taking a history (review of medical records, BCG scar check), as well as any counter-indications to vaccination (including pregnancy in case of the measles vaccination)
b) The following vaccinations must be documented:

- vaccination against the **measles** (measles, rubella, mumps)
- base vaccination against **diphtheria and tetanus** (including pertussis)
- base vaccination against **poliomyelitis** (live attenuated or inactivated polio vaccine)

- All children are required to have a record of having received all vaccines and vaccinations pursuant to the currently valid vaccination program in Croatia for corresponding ages.

a) All children under the age of 6 who have not received all above vaccinations should be vaccinated immediately upon arrival to the accommodation centre as follows:

1. a single dose of measles, mumps and rubella vaccine (MMR); Children must be at least one year old to be vaccinated;
2. a single dose of polio vaccine (IPV) and re-vaccinations, depending on the documented vaccination status and age;
3. a single dose of diphtheria and tetanus vaccine (DT) simultaneously and re-vaccinations, depending on the documented vaccination status and age.

Subsequently, depending on the age, vaccinees are to be included in the regular Croatian vaccination program and calendar.

b) Everyone over the age of five should be offered vaccination against COVID-19, administering such vaccine as is suitable for the person's age. In case the person is a holder of a foreign COVID certificate, an EU digital COVID certificate should be issued for all vaccines received in and / or outside Croatia to the citizens of Ukraine even if they lack a regulated residence status in Croatia.

5. Medical records

on health surveillance, medical examinations and vaccinations kept by name, issued from a physician implementing some or all of the measures from this program to a foreign person / guardian shall include:

- a health certificate (a copy remains with the doctor)
- a vaccination card, if applicable
- a standard certificate of health surveillance, if legally ordered, including a test finding, if indicated.

Vaccinations are free of charge and mandatory under the Act on the Protection of Population from Infectious Diseases.

Examinations and tests ordered herewith shall be borne by the Ministry which requests or enables an extended or permanent residence (?).
Complementary diagnostics and treatment of a disease established by this examination for refugees is provided free of charge, as for all other patients with infectious diseases in Croatia, under the Act on the Protection of Population from Infectious Diseases.

Protection of persons who will work in close contact with migrants in facilities such as shelters for foreigners in transit:

- personal protective equipment based on epidemiological assessment
- vaccination status check (e.g. polio, measles, hepatitis B, COVID-19)
- subsequent vaccination against diseases for which they have not been vaccinated according to the Compulsory Immunization Programme (e.g. against measles)
- re-vaccination is considered, if necessary and epidemiologically indicated.

Annexes

1. Template of a certificate on immigrant’s medical examinations and prophylaxis
2. Instructions for disinfection of facilities and necessary DDPC equipment
3. Dispensary and infirmary equipment
4. Protective medical equipment (disposable gloves, masks, aprons, goggles)
5. Instructions for depediculation

**ANNEX I** Template of a certificate on immigrant’s medical examinations and prophylaxis

Croatian Institute of Public Health, Epidemiology Division

<table>
<thead>
<tr>
<th>MEDICAL CERTIFICATE FOR FOREIGNERS WITH EXTENDED (OR PERMANENT) RESIDENCE IN CROATIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name ..............................................</td>
</tr>
<tr>
<td>Place of birth ..............................</td>
</tr>
<tr>
<td>Country of permanent residence ..................................................................................</td>
</tr>
<tr>
<td>Date of arrival in Croatia ......................... Collective accommodation  No  Yes</td>
</tr>
<tr>
<td>Name of facility, city/place: .................................................................</td>
</tr>
</tbody>
</table>

**Person was examined in this facility and the following was established:**

Examinee holds – does not hold – a certificate on medical condition and vaccination consistent with the above requirements.

Based on inspection of medical records, the following was established:

1. No abnormalities detected Yes No
If abnormalities detected, please state:

Examinee was vaccinated consistently with point B-4 of this procedure. Yes No
Missing: Measles/MMR DT(P) Polio
Examination performed established:

1. Active tuberculosis: No / Yes / not established
   - X-ray finding: ........................................ PPD/IGRA test: Yes - No  If yes, finding:..........................
   - Information on earlier recovery from tuberculosis or close contact with active tuberculosis
     (family members, etc.): □ Yes (please, state):.................. □ No □ Unknown

2. Typhoid fever: No / Yes  Stool for S. typhi: negative / positive

3. Test for the following microorganisms (APPLICABLE IF SUSPECTED):
   - Shigella stool test finding: negative  positive ................................ Amoeba
   - hystolitica stool test finding: negative  positive............................. Giardia lamblia
   - stool test finding: negative  positive.................................

Basic laboratory tests, as needed: SE ......................... L .........................

do not support / support the suspicion of an infectious disease.

Other relevant findings:
..........................................................................................................................
..........................................................................................................................

Immunization performed (upon arrival at the accommodation centre):

Measles (MMR) date .............. Polio / IPV date .............. Di Te / DTP date ..............

Other ............................................................................................................................... 

Finding:

After examination of medical records, performed examinations as indicated and monitoring for 21 days, it was established that the examinee does not suffer from the infectious diseases included in the examination programme, nor excretes their causative agents, and that they have received the necessary vaccinations.
In case of positive finding for an indicated test

Note on administered indicated treatment (where, when)

Place and date ........................................ Signature of physician
Health care facility................................. ........................................

Attached: original, or a copy of, presented medical records
Annex II  INSTRUCTIONS FOR DISINFECTION OF FACILITIES AND NECESSARY DDPC EQUIPMENT

INSTRUCTIONS FOR DISINFECTION OF FACILITIES

- The services in charge of sanitizing the area must organise the removal of bulky and other waste, and the cleaning and washing of the reception facilities and the immediate environment.
- Cleaning and washing will require sufficient amounts of clean water; i.e. in areas that lack public water supply facilities providing clean water, it is necessary to ensure a sufficient number of water tanks.
- After thorough cleaning and washing, disinfection should be carried out by immersion, wiping, spraying, dewing or cold fogging.
- Preparation of stock solutions for immersion should take into consideration the fact that immersed objects must not take up more than 2/3 or 75% of the predicted volume, i.e. immersed objects should be completely covered with the solution. The procedures of spraying, dewing or cold fogging with disinfectants should be applied to treat larger areas after the area has been thoroughly cleaned and washed. This may only be carried out by authorized and trained contractors with the obligatory use of standard work clothes. Disinfection should be applied consistently with the standards and manufacturer's instructions. After application, it is necessary to adhere to the prescribed disinfectant contact time and waiting period, and be sure to ventilate the room (min. 15 min). For facilities of approx. 100 m², the implementation time is about 1 hour.
- Disinfection is carried out by a PHI or an authorized contractor under the supervision of the competent epidemiologist.
- Daily disinfection should be part of the regular cleaning and washing by wiping the most frequently touched surfaces with a disinfectant solution. This can be done by the cleaning staff with use of protective equipment.

Disinfectants:
- For objects and surfaces: Agents registered for disinfection of areas and surfaces are to be used according to manufacturer's instructions. The agent is applied by spraying or cold fogging of the entire area, without rinsing with water.
- To prepare the stock solution of the disinfectant, it is necessary to ensure clean water.

Work equipment: motor, back or hand sprayers, cold fogging device

Protective equipment: rubber gloves resistant to acids, alkalis and organic solvents, rubber boots, protective work clothing and eyewear. Use of combined dust respirators and eye visors is compulsory outdoors, while use of protective masks with a strainer is obligatory indoors.

DISINFESTATION

It is necessary to carry out larvicidal treatment of mosquitoes of all stagnant waters, sewage settlement tanks and septic tanks in the immediate vicinity of the shelter. The treatment should be performed by professional and authorized persons, by applying agents registered in the Republic of Croatia, in doses and quantities consistent with the manufacturer's instructions, and repeated every 7 days, continuously until the end of the mosquito season. Adulticidal treatment from the ground should be performed by applying the ULV method and repeated every 7 days.

If necessary, fly control measures should be applied by spraying with motor sprays using insecticides with residual action and a combined adulticidal and larvicidal effect. Disinfestation should be repeated every 30-40 days during the warm season. If this cannot be achieved with motor sprayers, the use of ULV applicators with sufficient capacity is allowed (cold procedure).
PEST CONTROL
On the very rim of the waste dump site, a 50-100 m wide rodenticidal barrier (barrage) should be built. Pest control should apply rodenticides of the second generation anticoagulant type: e.g. Bromadiolone 0.005 % or Brodifacum 0.005 % in form of solid paraffin-type rodent baits weighing 50, 100 or 200 g, free or tied to a wire. The baits can be exposed untied or tied to a wire or longline, according to the norm of approx. 15-30 kg / ha, but always in hidden places inaccessible to people. Bait positions should always be marked adequately. The distance between the baits when establishing a rodenticidal barrier should approximate 5-10 m. To cover hard-to-reach areas, the guiding norm should be approx. 15-30 kg / ha. Baits need to be checked every 10 days and replaced, as necessary.

Note: Do not place rodenticides in the vicinity of the shelter for child safety.

Work equipment: wires or longlines for securing
Protective equipment for contractors: rubber gloves and boots, disposable protective suits, disposable face masks
Outdoors, use of combined anti-dust respirators and visors is compulsory.
Indoors, use of protective masks with a strainer is compulsory.

The reception of refugees can begin, if at all possible, only after eliminating any potential safety oversights by epidemiological investigation and situation assessment. Alternatively, any such oversights must be rectified as soon as possible after the reception of refugees.

Protective equipment for DDPC contractors:
- disposable waterproof protective gloves - 5,000 pieces per shelter
- disposable protective medical masks - 5,000 pieces per shelter
- protective eyewear (safety goggles) - 10 pieces per shelter
- disposable coveralls / body suit with hood and head cover - 1,000 pieces per shelter

REQUIRED MATERIAL:
pediculicidal agents (for lice removal)
permethrin for 0.5 % permethrin powder and permethrin lotion (1 %) - 50 g per person / refugee
water sprayer
disposable protective medical masks - one per person
Eye protection - 100 pcs
Disinfestation and pest control agents:

1. Rodenticides of second generation anticoagulant type: e.g. Bromadiolone 0.005 %, Brodifacum 0.005 % in form of solid paraffin-type rodent baits weighing 50, 100 or 200 g, free or tied to a wire - 30 kg / ha for an area of 100 m around the shelter;

2. Permethrin and Allethrin, and Piperonyl Butoxide - 100 ml/ha;

3. Diflubenzuron - active substances 150 g/ha;

4. Diflubenzuron tablets - 1 tbl per 1000 l of stagnant water

Disinfectants: Agents registered for disinfection of areas and surfaces, used according to manufacturer’s instructions.

Disinfectant, as needed

Laundry detergent

Equipment:

Hand pressure sprayers - 10 pieces per shelter

PROVIDED by the CIPH:

1 Adult mosquito control ULV applicator

1 Hurricane ULV aerosol applicator

Annex III  **DISPENDARY AND INFIRMARY EQUIPMENT** - pursuant to the Ordinance on minimum requirements for space, staff, and medical and technical equipment for performing health care activities (OG No. 61/2011)

Annex IV  **PROTECTIVE MEDICAL EQUIPMENT**

- disposable latex gloves

- disposable medical face masks and, if necessary, FFP2 / N95 masks

- disposable aprons
Annex V  DEPECICULATION INSTRUCTIONS

a) Depediculation (lice removal), if pediculosis is suspected, must be carried out as soon as possible on as many people as possible.

I. Dusting

Individual or collective dusting is an effective method and one of the best methods in lice removal in general, according to the availability of insecticides (e.g. 0.5 % Permethrin powder). The required amounts of insecticides are 30 g for manual procedures, and 50 g for the use of motor sprayers. The powder does not affect the nits, so treatment should be repeated in 1 to 2 weeks. When dusting, attention must be paid to the following parts of garments: the end of the sleeves or legs, the collar, the hem around the waist on either side and headgear (Figure 1).

II. Lotion application

Lotions are prepared from Permethrin (1 %) and applied to the head after washing. It takes 10-20 ml of emulsion or 5-10 ml of solution per head, after which the head is not to be washed for 24 hours, and, in small children, for 12 hours (even if this is neglected, nothing bad will happen). Liquid preparations are best applied by rubbing with gauze until the scalp is moist, but not soaked through, as, due to the limited amount of emulsion, no major emulsion dripping should occur. Eyes should be protected. Clothes can be depediculated by washing with detergent at 30 ° C or by treating with steam at 50 ° C for 20 minutes.
POSSIBLE SOLUTIONS TO PROBLEMS THAT MAY OCCUR IN EMERGENCY SERVICES DUE TO THE ARRIVAL OF REFUGEES FROM UKRAINE TO CROATIA

Possible problems in receiving refugees:

1. **Language barrier** – potential solutions:
   a. availability of interpreters
   b. use of electronic translators (vocal or textual), e.g. Google Translate
   c. use of standardized communication channels

2. **Medical specificities**
The epidemiological situation of the refugees’ homeland differs from the situation in the Republic of Croatia, primarily in terms of infectious diseases. According to official data, vaccination coverage against diseases from the Croatian compulsory vaccinations program is compatible with Ukraine’s requirements, and no major problems are expected. However, there is an increased risk of cVDPV2 uptake and spread as a result of a recent epidemic in Ukraine, which has not been adequately suppressed. This risk of transmission to other parts of Europe is significantly increased due to the fact that a large influx of refugees from this area is expected in a short period of time, which is why it is necessary to administer vaccinations and revaccinations in absence of a vaccination certificate.

Increased prevalence of tuberculosis, including its resistant forms, can be expected among the refugees, so a detailed history of possible exposure / close contact with active tuberculosis should be taken and tuberculosis-compatible symptoms (lingering cough, weight loss, weight loss, slightly elevated temperature, etc.) excluded.

Given the COVID-19 pandemic and the high infectivity of the virus, especially the SARS-CoV-2 Omicron variant, attention should be paid to vaccination against COVID-19 and unvaccinated persons actively encouraged to get vaccinated.

Potential solutions:
   a. sensitization of health professionals to possible specificities
   b. education
   c. elaboration of guidelines for the management of suspected cases, in consultation with an infectious disease specialist, and set-up of an infirmary (isolated area), in case of need for hospitalization

3. **Quantitative burden on emergency services**
With regard to the pandemic, it is necessary to enforce all counter-epidemic measures among both the refugees and Croatian citizens (triage, testing, wearing a mask, physical distance). The pandemic, as well as the fact that the flu and other respiratory infections are still in season, may bring about a large number of patients reporting to emergency medical services.

Potential solution: organisational preparedness for possible situations, including physicians’ readiness in the event of a sudden increase in the number of patients in emergency units.
4. Psychological problems
Psychological and psychiatric care should be designed to cater to those who need psychiatric and psychological help. With this in mind, let us start from the following assumptions:

1. Conclusion can be made that virtually every refugee in exile is in a state of mental crisis.
2. An assumption can be made that more severe psychiatric patients will not go into exile.
3. Translators must be engaged to overcome the language barrier.

It is not expected that a significant number of refugees should experience psychotic decompensation. If they do, they will be hospitalized in the nearest psychiatric institution (free beds will be provided in coordination with all heads of psychiatric institutions).

In case of extended reception of a certain number of refugees, a psychological and psychiatric service will be formed and placed at their disposal by the Mental Health, Addiction Prevention and Outpatient Treatment under the competent PHI, by accommodation location.

Croatian experts are not expected to have an active approach (individual requests should be made from the refugees’ first-instance health care providers).