

Viral hepatitis control in Ukrainian refugees in Poland



Robert Flisiak

**Department of Infectious Diseases and Hepatology
Medical University of Białystok, Poland**

VHPB TECHNICAL MEETING

Addressing Viral Hepatitis Among Europe's Migrant and Refugee Population: lessons learnt and the way forward

Antwerp, 26-27 March 2024

Disclosures

Grants: AbbVie, Gilead, MSD, Pfizer, Roche.

Advisory: AbbVie, Baush, Gilead, MSD, Moderna, Novo Nordisk, Pfizer.

Honoraria: AbbVie, Baush, Gilead, MSD, Pfizer.

24th February 2022 – 24th February 2024

← 19 million

17 million →



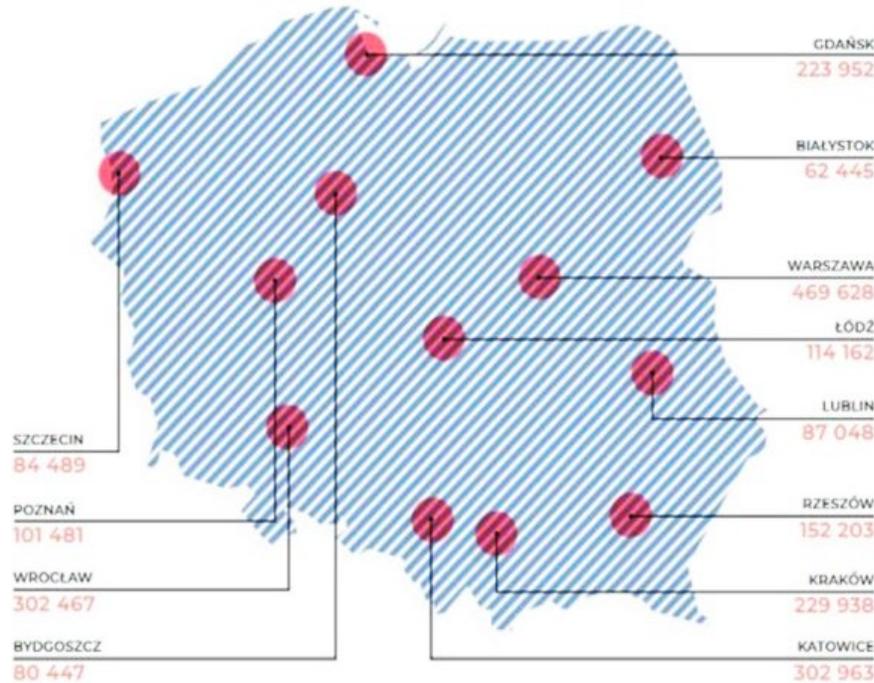
1.5 million Polish Resident Identification Numbers (PESEL) were issued

The increase in the population of Poland – April 2022

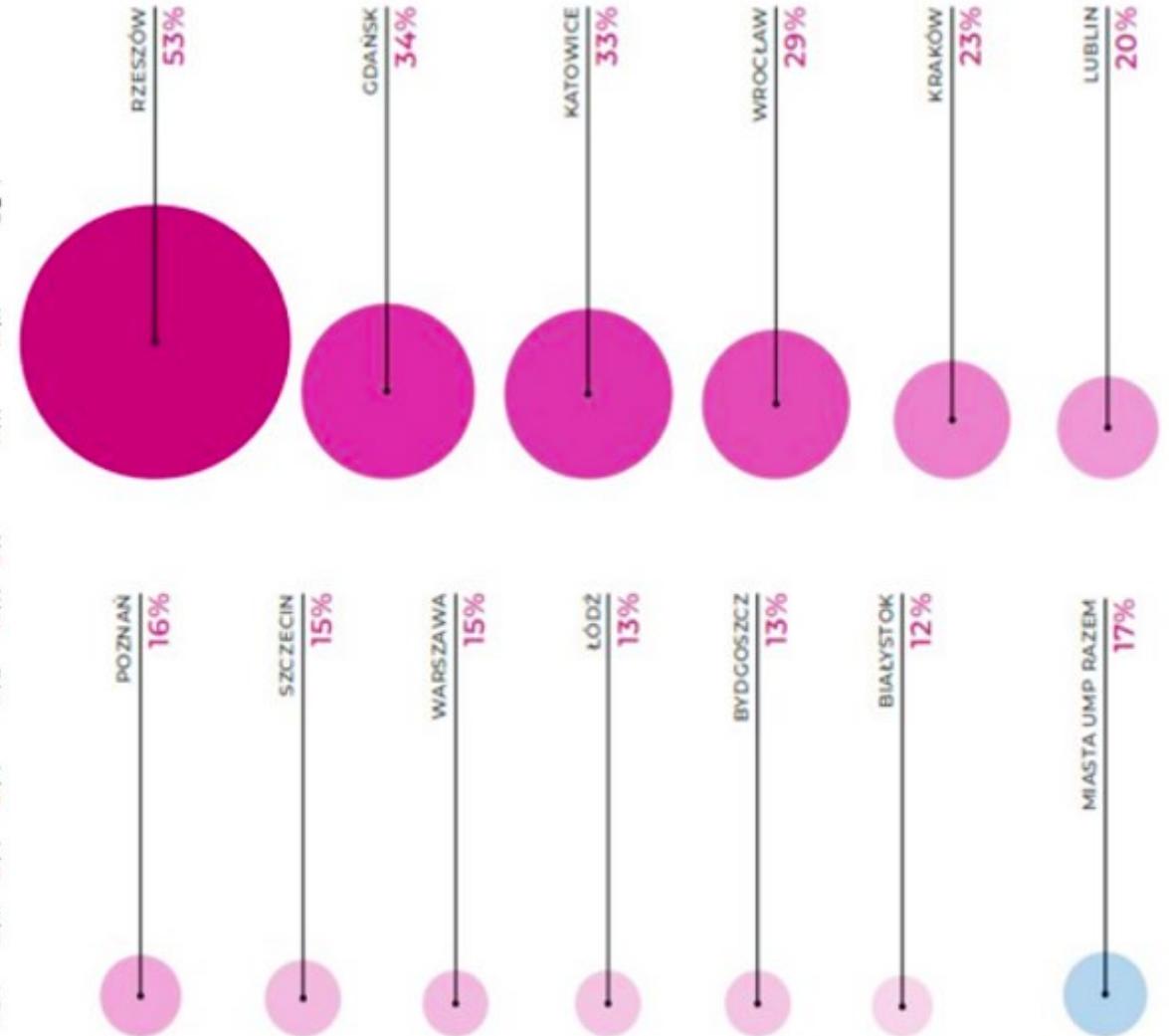
Despite the demographic crisis, in 2022, for the first time in history, Poland's population exceeded 40 million inhabitants.

>40
millions

The vast majority of refugees from Ukraine settled in large cities, which resulted in a rapid increase in the number of their inhabitants.

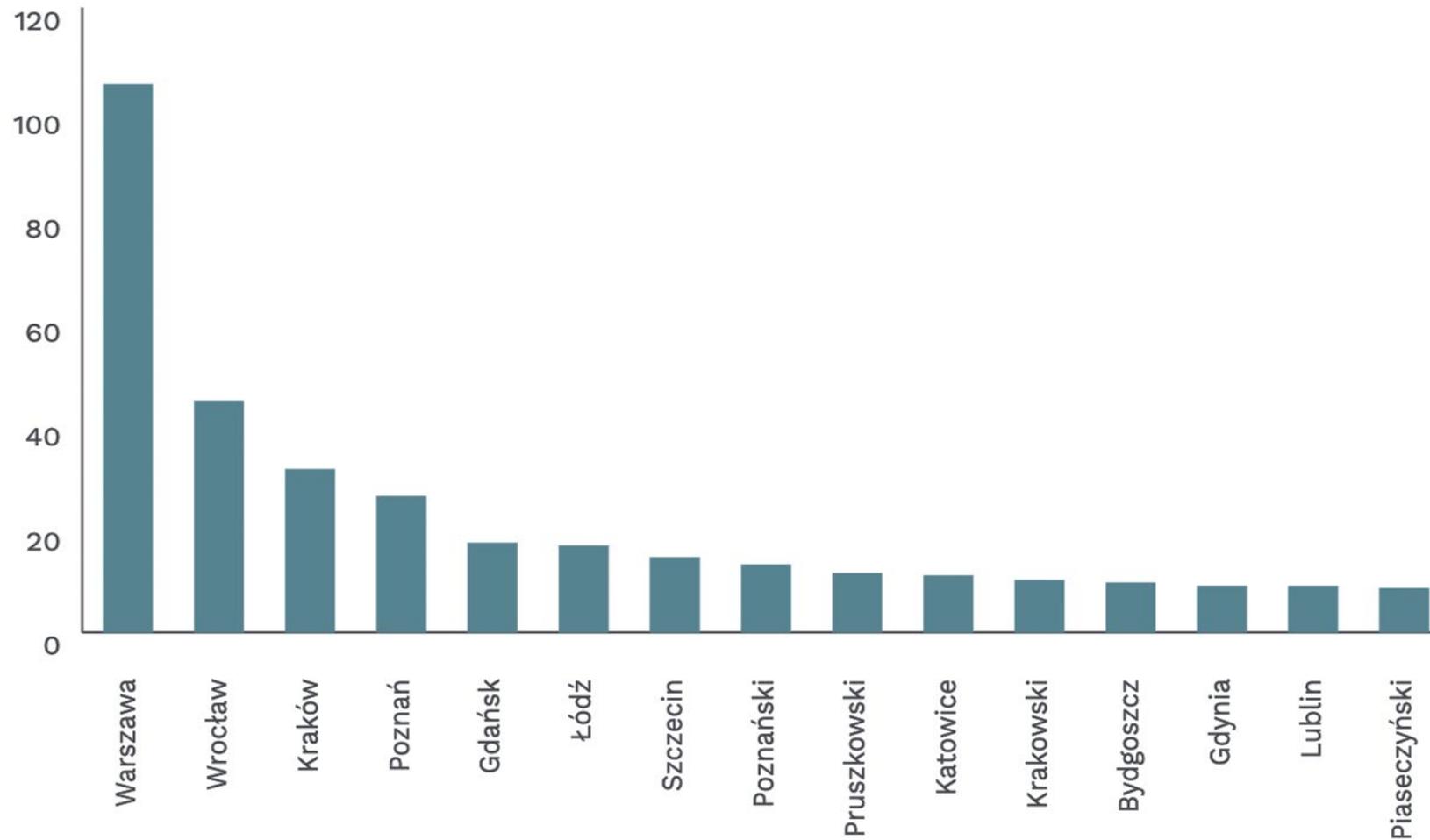


LICZBA WSZYSTKICH UKRAJNCÓW
W ORSZARACH METROPOLITALNYCH
(DOROŚLI I MŁODZIEŻ + DZIECI)



<https://www.qdansk.pl/wiadomosci/Ukrajnicy-pozdrawiaja-qdanzszczan-z-okazji-Narodowego-Swieta-Niepodleglosci,a,231426>

Polish counties with the largest number (thousands) of refugees from Ukraine - 02.2023



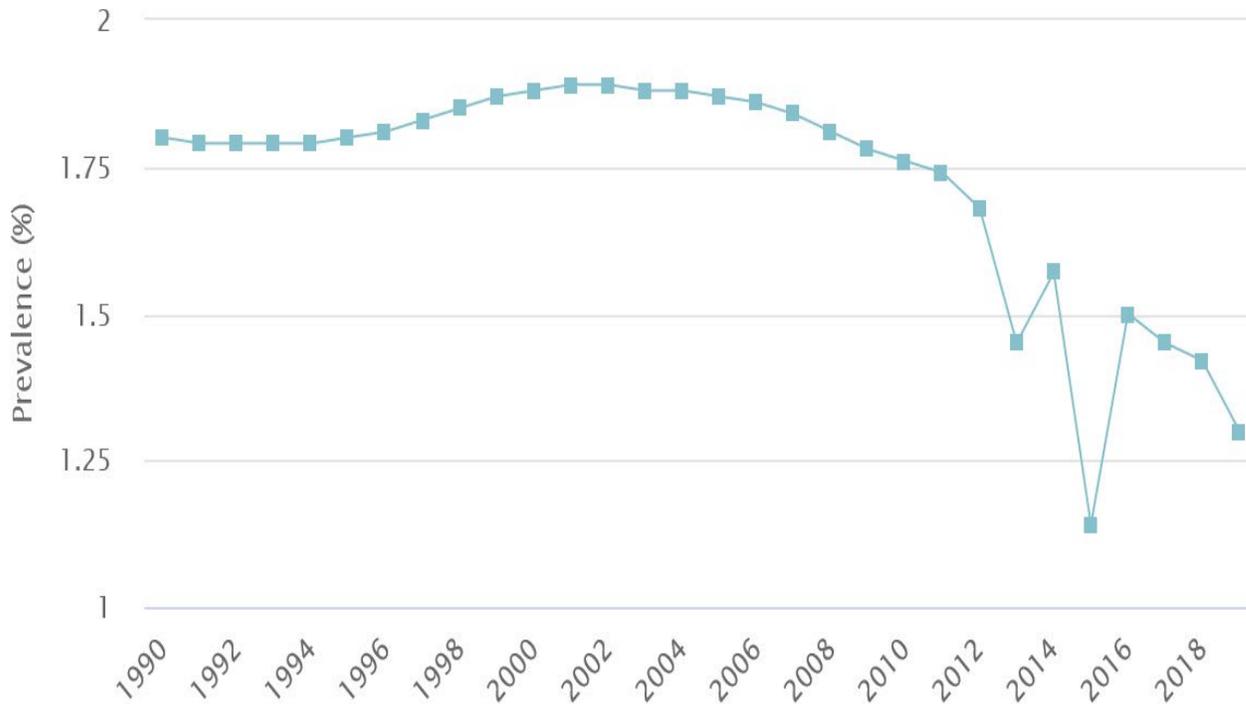
Issues related to migration movements from Ukraine in the context of infectious diseases

- **Unclear epidemiological situation of vaccine-preventable infectious diseases (measles, pertussis, polio, tuberculosis, HBV, COVID-19).**
- **High prevalence of diseases against which there is no vaccination (HCV, HIV infections).**
- **Sanitary conditions in which refugees were housed and traveled (infectious diarrheas, HAV).**
- **Medical care in a refugee host country (treatment of emerging diseases, initiating and continuing therapies for chronic infectious diseases – HIV).**
- **Vaccination against COVID-19 (medical documentation, falsification of documentation).**
- **Routine vaccination program in Ukraine different from Polish.**

HBV - Ukraine

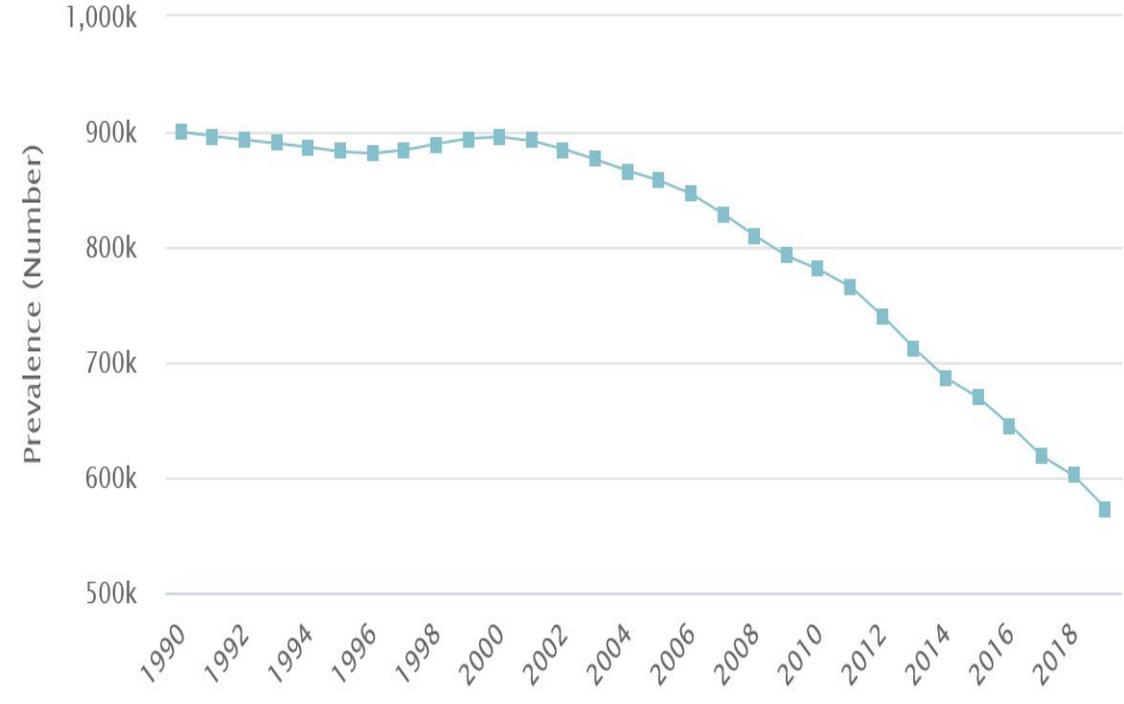
Prevalence of chronic HBV (HBsAg+) (National)

Ukraine



Number of people living with chronic HBV (National)

Ukraine

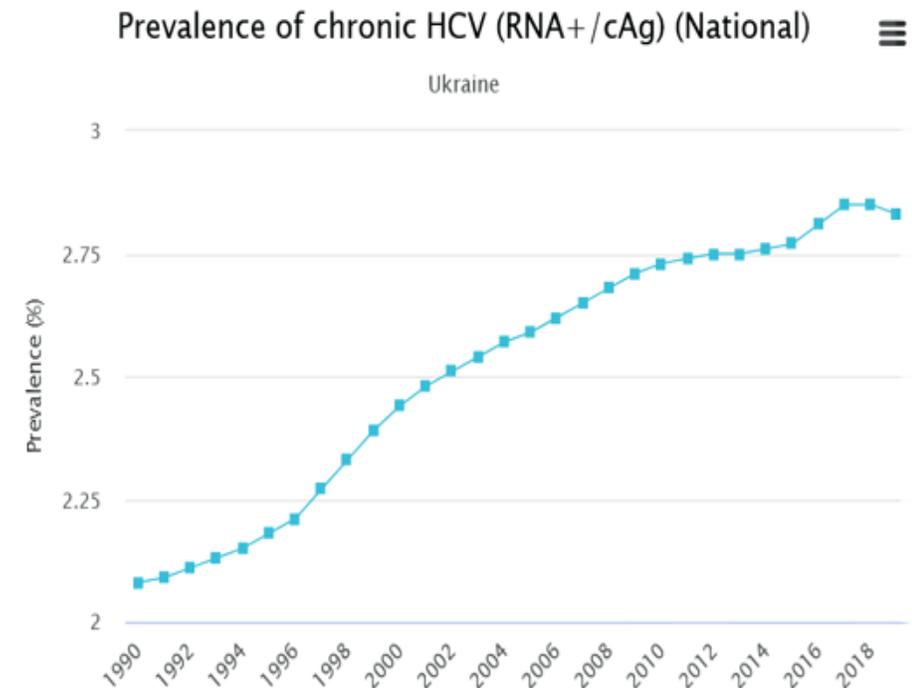


HBV - Ukraine

- **Approximately 1.3% of the general population HBsAg(+).**
- **Prevalence higher in men, in the elderly, among intravenous drug users (8.5%) and in people living with HIV.**
- **Very low percentage of infected persons receive antiviral treatment.**
- **Continuation of therapy in patients on treatment.**
- **Recruitment and start of therapy in those meeting criteria for treatment according to the Polish reimbursed treatment program.**
- **Testing of refugees for HBV infection on a voluntary basis.**

HCV - Ukraine

- **anti-HCV(+) about 3.6%, HCVRNA almost 3% (according to data from patients' organisation 5% are infected with 10% awareness)**
- **prevalence higher in men, in older people, among intravenous drug users (56.3%) and in people living with HIV**
- **since the beginning of 2022 until March 2023 1,345 new cases of HCV infection were reported**
- **very low percentage of infected receive antiviral treatment (2020 – 6.5%)**
- **issues related to refugees: continuation and inclusion of therapy; testing in Poland on a voluntary basis**



U S T A W A

z dnia 12 marca 2022 r.

o pomocy obywatelom Ukrainy w związku z konfliktem zbrojnym na terytorium tego państwa

Art. 1. 1. Ustawa określa szczególne zasady zalegalizowania pobytu obywateli Ukrainy, którzy przybyli na terytorium Rzeczypospolitej Polskiej z terytorium Ukrainy w związku z działaniami wojennymi prowadzonymi na terytorium tego państwa, oraz obywateli Ukrainy posiadających Kartę Polaka, którzy wraz z najbliższą rodziną z powodu tych działań wojennych przybyli na terytorium Rzeczypospolitej Polskiej.

ACT

of March 12, 2022

on assistance to citizens of Ukraine in connection with the armed conflict on the territory of this country

Art. 1. 1. The Act specifies specific rules for legalizing the stay of citizens of Ukraine who came to the territory of the Republic of Poland from the territory of Ukraine in connection with hostilities conducted in the territory of this country, and citizens of Ukraine holding a Pole's Card who, together with their immediate family, due to these hostilities came to the territory of the Republic of Poland.

Art. 37. 1. A citizen of Ukraine whose stay on the territory of the Republic of Poland is considered legal pursuant to Art. 2 section 1, **is entitled to medical care provided in the territory of the Republic of Poland**, including health care services on the terms and to the extent to which persons covered by compulsory or voluntary health insurance are entitled to benefits under the Act of 27 August 2004 on health care services **financed by public funds**.

extended by the Acts of January 13, 2023 and February 9, 2024
currently until June 30, 2024

Availability of anti-HCV testing for Ukrainians the same as for Poles

We do not have a national HCV screening program

- Primary health care „budget entrusted” (limited numbers).
- Specialized clinics and hospital departments (depending on physicians judgement).
- Consultation and Diagnostic Points (offered together with HIV testing).
- Private networks of diagnostic laboratories dependent on sponsorship by pharmaceutical companies.
- Local testing campaigns supported by local governments and non-governmental organizations.

Reasons for not testing for anti-HCV among Ukrainians

1. Difficulties in communication discourage contact with health care unless absolutely necessary.
2. The priority is to earn a living. Taking care of your health takes a back seat. If anything, it is diagnosis and treatment of current health problems, not preventive tests.
3. Uncertainty of permanent residence resulting from the validity period of a special act; the fear that a documented illness may make it difficult to obtain "residence card", which guarantees the right to legal residence for 3 years (then requires extension).
4. Avoiding contact with institutions for fear of the risk of being called into the army if Poland, like some countries, signs an agreement with Ukraine.



FUNDACJA
GWIAZDA
NADZIEI

Non-governmental organizations **the example of Gwiazda Nadziei (Star of Hope) Foundation**

- Patronage of the Polish Society of Epidemiologists and Infectiologists and the Polish Society of Hepatology.
- One of the largest laboratory networks in Poland - ALAB offers free testing.
- Duties of a Ukrainian-speaking doctor on the hotline.
- Bloggers on social media spread information about the possibilities of anti-HCV testing.



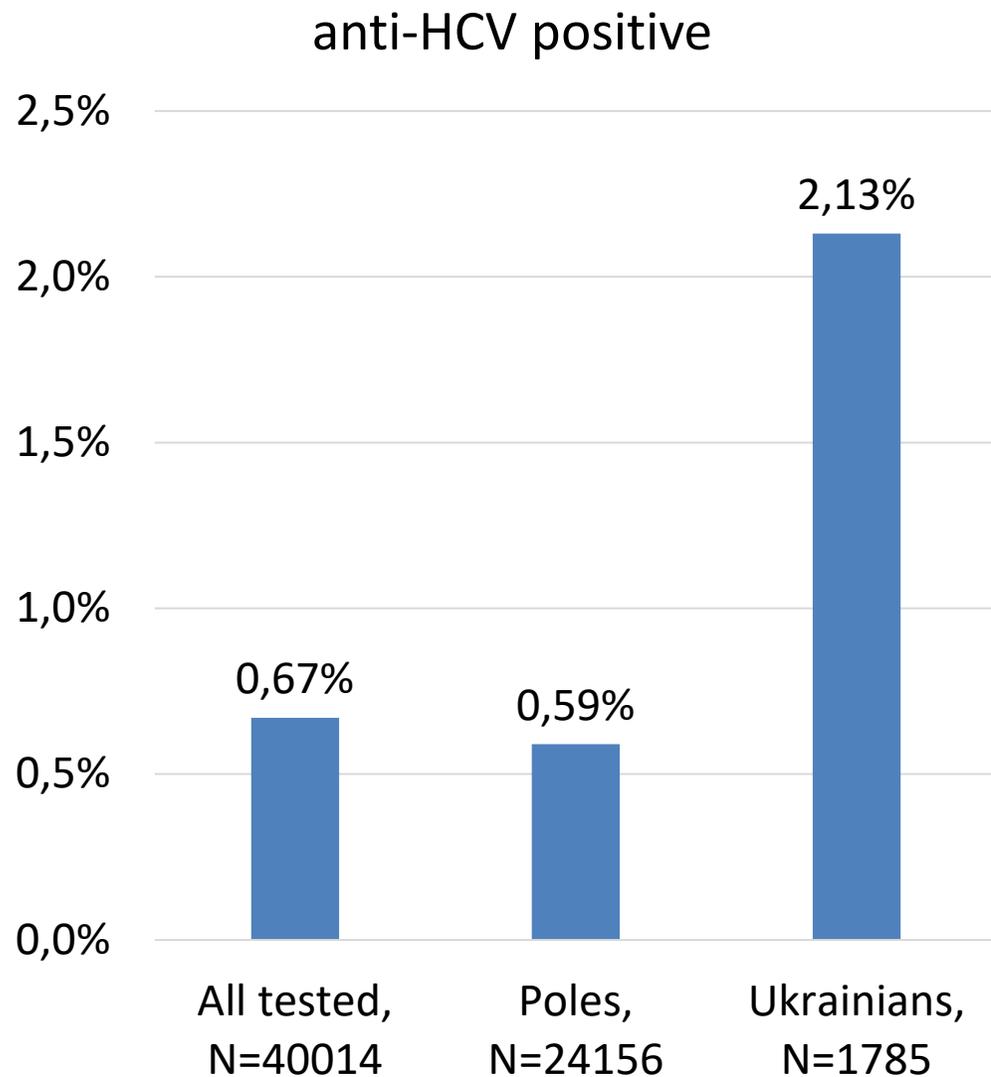
FUNDACJA
GWIAZDA
NADZIEI

Non-governmental organizations the example of Gwiazda Nadziei (Star of Hope) Foundation

The image displays three overlapping screenshots of the website ua.hcv.info.pl. The top-left screenshot shows the homepage with a search bar and navigation menu. The middle screenshot shows a page with text in Ukrainian and Polish, including a phone number and a button "Де лікуватися". The bottom-right screenshot shows a map of Poland with blue location markers and a search interface for "Wyszukaj placówkę".

Testing for anti-HCV at Consultation and Diagnostic Points

free of charge and anonymous

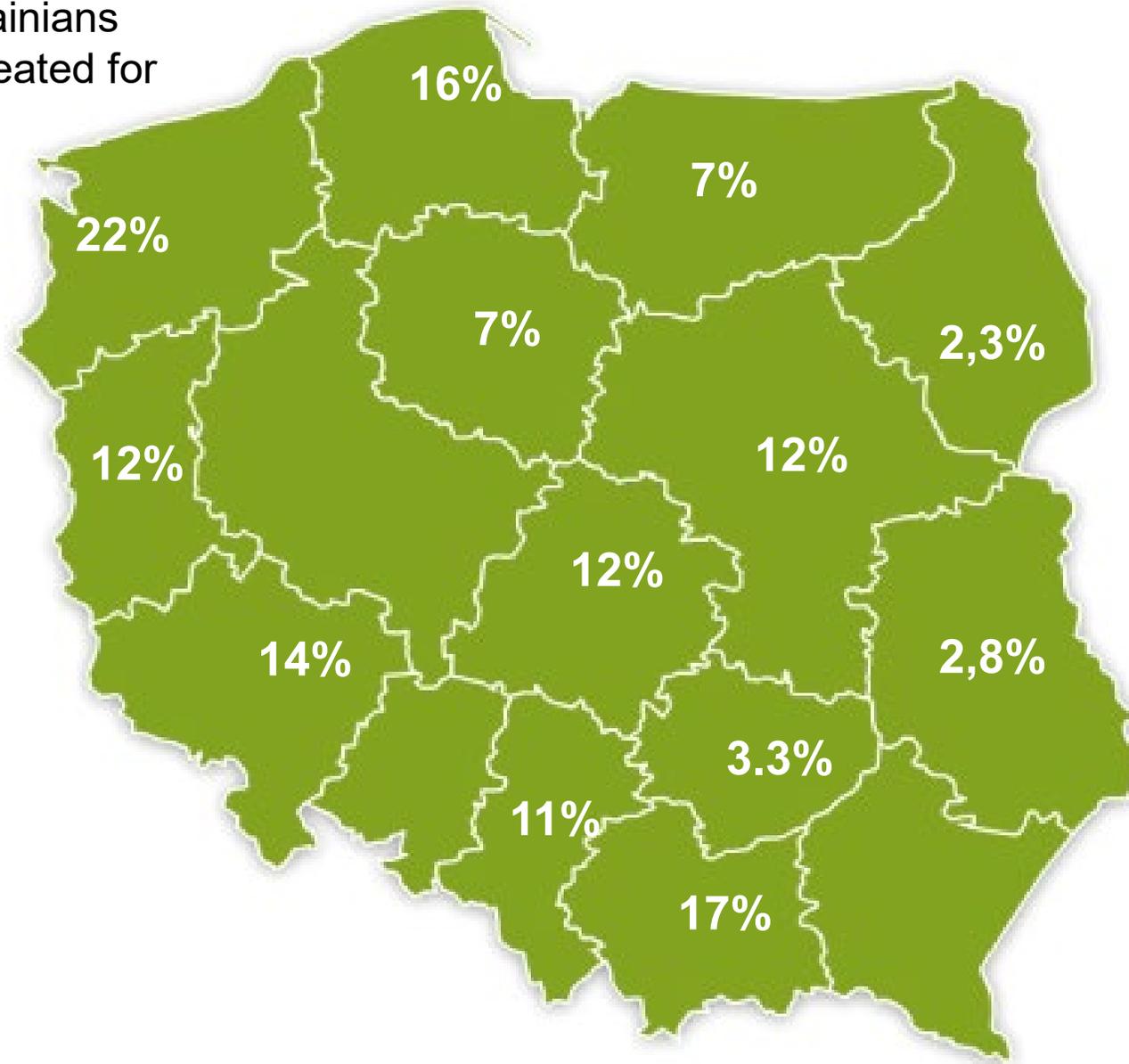


1. Since the beginning of testing for HCV in Consultation and Diagnostic Points, i.e. from mid-September 2022, a total of 40,014 tests for HCV have been performed, including 267 positive results of screening tests (0.67%).
2. Among 40,014 tests, 4,123 tests for hepatitis C were performed in foreigners (10.3%), 56 (1.36%) were positive.
3. Out of 1,785 people from Ukraine, 38 were positive (**2.13%**).
4. In 2023, among 24,156 clients of Polish nationality tested for HCV, there were 143 positive results (**0.59%**).

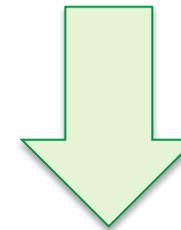
Ukrainians treated in 15 HCV treating centers in 2022-2023

part of the EpiTer-2 study

% of Ukrainians
among treated for
HCV



13 voivodeships
15 treating centers
386 Ukrainian patients
3606 all treated



10.7%
of all treated
in 2022-2023

Characteristics of Ukrainians treated in 15 HCV treating centers in 2022-2023

	n=386
Age, mean (\pm SD) [years]	45.9 \pm 10.7
Female/Male, n (%)	196/190 (50.8/49.2)
BMI, mean (\pm SD)	25.8 \pm 4.2
Treatment experienced, n (%)	10 (2.6)
Child-Pugh B or C, n (%)	4 (1.6)
MELD score \geq 15, n (%)	7 (2.0)
Decompensation history, n (%)	7 (2.0)
HCC history, n (%)	1 (0.3)
Liver transplantation history, n (%)	1 (0.3)
HIV coinfection, n (%)	41 (10.6)
HBV coinfection, n (%)	66 (17.1)
HCV RNA *10 ⁶ , mean (\pm SD) [IU/l]	2.8 \pm 4.6

- Low percentage of treatment experienced.
- Low proportion of patients with decompensation or history of HCC.
- High prevalence of HBV or HIV coinfection.

Characteristics of Ukrainians treated in 15 HCV treating centers in 2022-2023

	n=386
ALT, mean (\pm SD) [IU/l]	96.7 \pm 80.7
Cirrhosis (F4)	54 (22.0)
SVR from available data	202/209 (96.7)
Genotypes:	
1a	13 (3.9)
1b	193 (57.2)
2	15 (4.5)
3	110 (32.6)
4	6 (1.8)
Treatment	
GZR/EBR	4 (1.0)
LDV/SOF	2 (0.5)
GLE/PIB	217 (56.4)
VEL/SOF	159 (41.3)
VOX/VEL/SOF	3 (0.8)

- High frequency of cirrhotics.
- High prevalence of genotype 3.
- Treatment mostly with pangenotypic regimens.
- SVR = 96.7%

Conclusions

1. Legal regulations in Poland guarantee war refugees from Ukraine access to health care, including diagnosis and treatment of viral hepatitis on the terms applicable to Polish citizens.
2. The frequency of HCV infections among Ukrainians is almost four times higher than in the Polish population.
3. In 2022-2023, nearly 11% of people treated for HCV infection in Poland were people of Ukrainian origin.
4. These people have very rarely been previously treated, are relatively often co-infected with HIV or HBV, have developed cirrhosis and are infected with genotype 3 more often than in the Polish population.
5. The effectiveness of the therapy reaches 97% and is similar to that currently reported in the Polish population.

Acknowledgments

- **Prof. Dorota Zarębska-Michaluk**, Department of Infectious Diseases, Jan Kochanowski University, Kielce.
- **Dr Anna Marzec-Bogusławska**, National AIDS Center, Warsaw.
- **Mgr Barbara Pepke**, Gwiazda Nadziei Foundation, Katowice.
- **EpiTer-2** investigators.