# The war in Ukraine exacerbates the problem of late HIV detection

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# **Background:**

The HIV epidemic in Ukraine is estimated to be the second largest in Eastern Europe and Central Asia. Among all HIV-infected people in the European Region, 14% are registered Ukraine. Poltava region has consistently had a lower incidence HIV rate than Eastern regions of Ukraine. However, since the start of the war, 168,000 people from the Eastern regions of Ukraine (Kharkiv, Donetsk, Lugansk) have been officially displaced to Poltava region. Massive displacement of people, separation of families, constant anxiety and fear lead to the destruction of social contacts and late seeking medical care.

#### Purpose:

to analyse the impact of the war in Ukraine to the effectiveness of HIV detection.

## Method:

We analysed the statistical data of the Poltava Regional HIV/AIDS center and medical records of 1090 new HIV-infected patients registered in Poltava region from January 2018 to December 2023. Nadir CD4 count <350 cells/mL and/or AIDS-defining illness were defined as late presenters.

#### **Results:**

In Ukraine since the beginning of the COVID-19 pandemic, and then after start of the war, the detection of new HIV cases declined significantly with the largest drop to 11658 cases in 2023 (fig. 1). Predominant way of HIV transmission since 2007 remain stable as heterosexual.

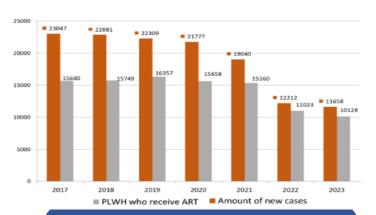


Figure 1. Newly diagnosed HIV cases in Ukraine

In 2023 – 74,5% of patients were infected by sex and 25% through injected drugs.

Due to the difficulty of identifying homosexual transmission, it is likely that the official registration of such cases in Ukraine is significantly underreported and "hidden" in the statistics of cases with heterosexual transmission. Only 2.4% of new HIV cases were identified among MSM.

Majority of new HIV identified people were men - 66%, with predominat age group 25-49 years old—82%. The proportion of people aged 50 and over is growing, reaching almost 15%. In 2023 61.5% newly diagnosed HIV patients

had CD4 count less than 350, and 38,4% less than 200 (fig. 2).



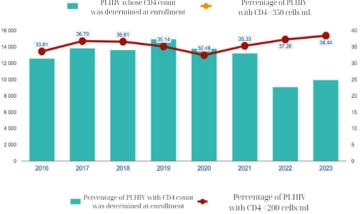


Figure 2. Late presentation of HIV infections in Ukraine

The total number of people tested in Poltava region in 2023 compared to 2022 increased from 46,710 to 65,887 people, which almost corresponds to the level of 2018.

The number of positive HIV tests in Poltava Region in 2018 was 499, in 2022 - 343, in 2023 - 348. Thus, despite a 30% increase in the total number of people tested in 2023, the part of positive results decreased from 0.73% in 2022 to 0.53% in 2023.

The proportion of late HIV presenters were growing significantly in Poltava region, from 48% in 2019 to 70,5% in 2023 (fig. 3). As a result, many serious opportunistic infections have been registered.

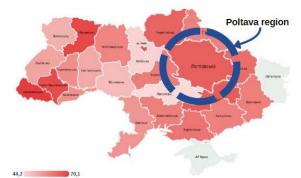


Figure 3. Map of the proportion of late presenters in Ukraine in 2023

The number of tuberculosis cases increased rapidly in Ukraine in 2023 (intensity rate 48.4 per 100,000 persons). Drug resistant TB represents 27,9% new TB patients and 43,6% of previously treated patients and treatment success of multidrug resistant TB – is 50%.

### **Conclusions:**

The war in Ukraine is leading to a drop in the detection of HIV-infected patients, which may contribute to the spread of the epidemic.