

Enhancing laboratory capacity during the pandemic

EPW core priorities and flagships

Protecting against health emergencies

WHO collaboration

Technical guidance
Country mission

During the COVID-19 pandemic, Bosnia and Herzegovina faced a critical shortage of laboratory testing capacities for human pathogenic agents, including SARS-CoV-2. The laboratory space at the Institute of Public Health was not up to international standards for molecular diagnostics, significantly hindering the ability to detect and monitor SARS-CoV-2 and other pathogens. This posed a serious public health risk at a time when rapid and accurate diagnostics were crucial.

In response, the Regional Office stepped in to provide vital support. A comprehensive mission was organized, led by technical officers from the WHO Health Emergencies Balkan Hub. The mission focused on evaluating the laboratory space, optimizing the use of existing equipment and identifying additional resource requirements. The Regional Office also facilitated training for more than 10 staff members in molecular diagnostics according to WHO guidelines and provided essential equipment and reagents to enhance the laboratory's capabilities.

The impact

A new human molecular laboratory was established and officially opened in November 2022. The laboratory, equipped with state-of-the-art technology, now operates according to the latest WHO standards. This has enabled Bosnia and Herzegovina to boost its diagnostic capacity for COVID-19 as well as other respiratory pathogens such as influenza and respiratory syncytial virus.

Lessons learned

- Tailored technical support combined with hands-on training ensures that new capacities are sustainable over the long term.
- Adhering to global health standards while addressing local needs is crucial for the success of public health initiatives.
- International partnerships are key to rapidly overcoming health infrastructure challenges.

Donors and partners

Ministry of Health; United Nations Development Programme



European Region



Dr Maja Ostojic in the new laboratory at the Institute for Public Health, Sarajevo.
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“Building a robust laboratory system is not just about equipment, it’s about empowering people with the skills and knowledge to protect public health.”

Dr Maja Ostojic, Medical Doctor at the Institute for Public Health, Bosnia and Herzegovina

What's next?

The Institute for Public Health plans to further expand its diagnostic capabilities to include surveillance of mosquito-borne diseases and waterborne pathogens. There is also an ambition to acquire sequencing equipment to better monitor and compare pathogens with those found in other European countries.