

DESIGNING A SHELTER OPERATING ROOM AND EMERGENCY AREA FOR THE MATERNITY DNIPRO CITY HOSPITAL

With support of Swiss Center for Design and Health (SCDH) as a partner.

We will design a concept for new air-raid shelter next to Dnipro Maternity Hospital. The shelter will have a modern, technologically advanced operating room. The shelter will be connected to the existing facilities of the Hospital via a tunnel. Additionally, we will elaborate enhancements to the existing ground-floor emergency area of the Dnipro Hospital.

The Maternity Hospital №6 is situated in Dnipro, a major city in the south-eastern part of Ukraine, less than 100 km from the front line. Due to its significant industrial importance to the country, the city experiences frequent missile attacks.

Our Approach

We will draw on the expertise of our architect team members, the capabilities of the SCDH (Swiss Center for Design and Health) team, which includes evaluating floor plans and equipment arrangements through simulations. Additionally, we will analyze information obtained from the hospital, incorporating statistical data and insights gathered through interviews with experts and doctors on-site.



Our Aim

- Attract sponsors and international support for implementation of the proposed changes in the Dnipro hospital. This includes equipping the operation room with necessary medical equipment and ensuring functionality during the war.
- Demonstrate advantages of this approach and its potential for scalability to other hospitals across Ukraine.

Stakeholders:

- Hospitals patients and their families
- Hospital management
- Hospital staff
- City's authorities and community
- Donors
- Ukraine's recovery agency
- Regulatory authorities

Expected Outputs

• Optimal Air-Raid Shelter Configuration which is integrated to existing hospital structure:

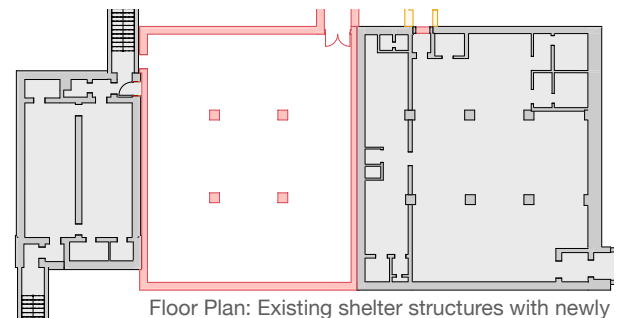
Determine the optimal layout for a minimum required air-raid shelter, capable of accommodating an operating room for uninterrupted medical care in war time conditions. Investigate the feasibility of connecting a new air-raid shelter to the existing hospital building, ensuring swift access from all floors during emergencies.

• Enhancement of Emergency Area:

Demonstrate potential changes to the hospital's emergency area, aimed at creating a more conducive environment for medical processes. This includes improvements for the well-being of both medical staff and patients, along with an assessment of the associated costs.

• Establishing strong connection to sponsors:

Explore funding opportunities for the project.



Floor Plan: Existing shelter structures with newly designed operating room highlighted in red



Project team:

Oliinyk Alla: alla.oliinyk@students.bfh.ch

Vovk Dmytro: dmytro.vovk@students.bfh.ch

Danyliuk Maksym: maksym.danyliuk@students.bfh.ch

Vynogradova Kateryna: kateryna.vynogradova@students.bfh.ch

Metsger Maryna: maryna.metsger@students.bfh.ch