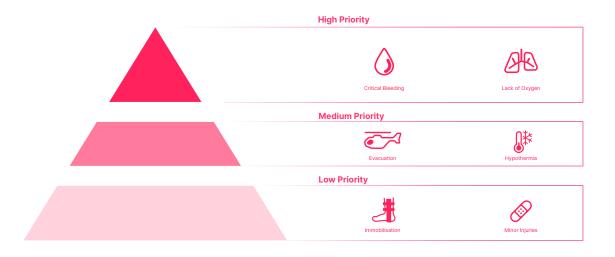
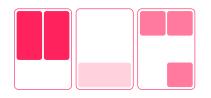


The willingness for self-help significantly decreased with the introduction of an improved emergency response system. However, in disaster scenarios, response times often reach their limits, as resources cannot be deployed quickly enough. Injuries and damages further strain the population and require effective crisis management. Traditional first aid kits lead to uncertainties and errors in application due to a lack of structure. This issue is addressed in the attached PDF briefing, which outlines the research, design, and development process, showcasing how these challenges were tackled and the improvements made.



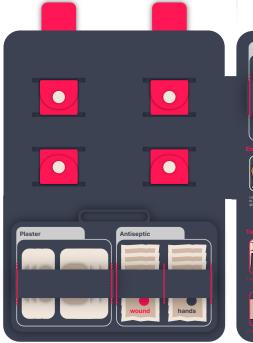
The emergency system is divided into three levels: first, critical bleeding, followed by hypothermia & evacuation, and finally, minor injuries & infections. This structure ensures that the most urgent actions are taken immediately. Clear visual indicators and an intuitive interface enable quick and safe assistance—without requiring medical expertise. This design prioritizes usability and efficiency, making it an ideal solution for emergency situations, even for those with no prior medical knowledge.





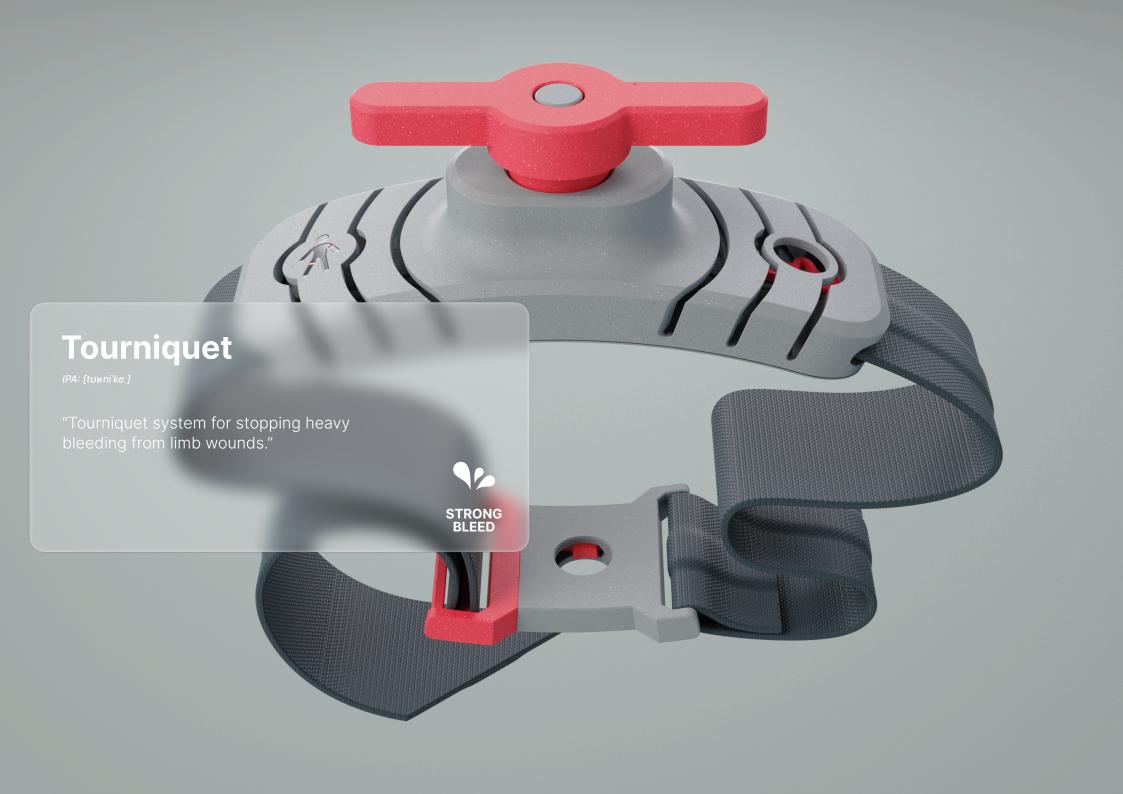
Medium Priority







Low Priority





1. Placement above the wound.

The tourniquet is applied above an arterial bleed. It is important to note that it should only be used on limbs.



2. Closure of the buckle.

Once the tourniquet is correctly positioned, it can be secured with the buckle. The buckle can only be opened with a special tool.



3. Tightening the strap.

The strap is tightened over the buckle. It is important to pull it tightly enough so that no finger can fit between the strap and the skin.



4. Turning the windlass.

Finally, the strap can be further tightened over the windlass. Once the indicator forms a full circle, the bleeding should be stopped.





The system uses multiple indicators to support the user at every stage of application. One indicator on the pouch shows the correct selection, another provides initial guidance when opening. Clear instructions for use are visible on the product itself, and the final indicator ensures it has been applied correctly. This design increases the likelihood of intuitive and safe use in any situation.









Blutungsart

Region

Spannung

Anlage





1. Placement on the wound.

After removing the paper, the wound dressing is placed directly, and the loop is used for one-handed fixation.



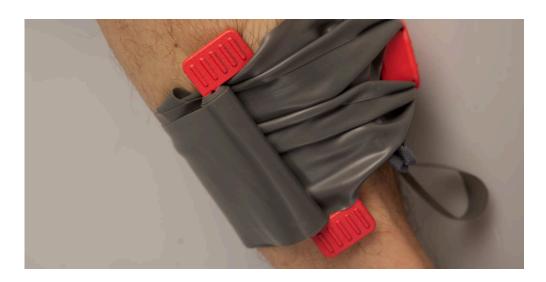
2. Tightening at the first hook.

The band is threaded through the first hook and tightened in the opposite direction. The pressure bracket tilts in that direction.



3. Tightening at the second hook.

After one complete round, the band is threaded through the second hook. In the starting position, the pressure bracket applies sufficient pressure.



4. Securing the clamp.

The clamp is used to tighten the end of the band and secure it to the bandage. For better hold, the bandage is fully unrolled. Clean Reuse

