

## efficiency

**PAUL®** filters more than 99,99% of bacteria, virus and other pathogens using a membrane filter with a nominal pore size of ca. 40 nm (0,04 µm), and a **10 years** lifetime. Thus, over years at least **1.200 Liter water per day** can be filtered – enough for **400 victims** to survive.



### What's more reasonable:

- ✓ carry along 1.2 tons of water **every day** to help 400 victims
- ✓ or transport just one **PAUL®**, 20 kg, **just once?**

If you, on one day, transport **60 PAUL®** (= 1.2 tons) instead of water, you enable **24.000+ Victims** to filter their water by themselves!



## contact

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video (6 min):



facebook:



## how can you help?

Donate and help creating even more **PAUL®** units for first aid in disasters like earthquakes, flooding etc..

donate to: World University Service

**reason:** **Paul**

bank: Bank für Sozialwirtschaft

IBAN: DE95 3702 0500 0007 2321 00

BIC: BFSWDE33XXX

include postal address for donation certificate

# water supply during **disasters:** the **WaterBackpack** **PAUL®**

gefördert durch



Deutsche  
Bundesstiftung Umwelt

[www.dbu.de](http://www.dbu.de)

Deutschland  
Land der Ideen



Ausgewählter Ort 2011

**Bundessieger Gesellschaft**

GreenTec  
Awards

WINNER  
2016

Water & Sewage

AQUA AWARD 2017

AQUANET  
BERLIN BRANDENBURG

developed at

U N I K A S S E L  
V E R S I T Ä T



## why?

After disasters like earthquakes, flooding etc., one of the most urgent problems is to provide the affected population with enough quantity of **potable water**. Wells and rivers are contaminated with bacteria, virus and other pathogens. People suffer from **diarrhea, cholera and other diseases**, and many, especially children, die.

## what is the problem?

In case of disasters, mobile high-tech waterworks are deployed which need skilled operation personnel, energy and consumables. They serve several ten thousand capita but can only be used where infrastructure is operational. This is essential and must continue!

**But:** with infrastructure destroyed, victims in **remote areas** are cut off this water source. Here, **PAUL®** is needed and brings **immediate help**

## solution: **PAUL®** (Portable Aqua Unit for Lifesaving)

Decentralized water supply in disaster+emergency

**PAUL®** was developed at the University of Kassel:

- ✓ no energy, no chemicals, no skilled operator
- ✓ no maintenance
- ✓ no moving parts
- ✓ carry as **backpack** hands free
- ✓ 4 pictograms allow self help even for **illiterates**
- ✓ for permanent supply over many years see „**PAUL® Station**“-leaflet

**4 218 PAUL**  
in 91 countries (February 2023)

