

UNESCO “Global Water Pathogen Project”

“Now & Reboot 2.0”

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[#]*Interuniversity Cooperation Centre for Water and Health*

Kurzer Hintergrund:

GWPP – Idee (2014): „**Feacham**” (1983)

→ Neukonzeption & Auflage

→ Finanzierung durch GF

→ Schirmherrschaft UNESCO + WHO-Kooperation/Abstimmung

→ Planung von Abwasserentsorgungssystemen

→ **Reduktion** von **Krankheitserregern**

→ 2019 „**Sanitation and Disease in the 21st Century**”

→ Globale Wissensdatenbank

→ Frei verfügbar: *Open Access Online- Informationsplattform*)

→ Qualitätsgesichert: *Editoren + Peer-Review*

→ 2026/27 UNESCO – Buchausgabe

→ Englisch, Französisch, Spanisch





Sauberes Wasser und Sanitärversorgung

Verfügbarkeit und nachhaltige Bewirtschaftung von Wasser und Sanitärversorgung für alle gewährleisten

6.1 Bis 2030 den allgemeinen und gerechten Zugang zu einwandfreiem und bezahlbarem Trinkwasser für alle erreichen

6.2 Bis 2030 den Zugang zu einer angemessenen und gerechten Sanitärversorgung und Hygiene für alle erreichen und der Notdurftverrichtung im Freien ein Ende setzen, unter besonderer Beachtung der Bedürfnisse von Frauen und Mädchen und von Menschen in prekären Situationen

6.3 Bis 2030 die Wasserqualität durch Verringerung der Verschmutzung, Beendigung des Einbringens und Minimierung der Freisetzung gefährlicher Chemikalien und Stoffe, Halbierung des Anteils unbehandelten Abwassers und eine beträchtliche Steigerung der Wiederaufbereitung und gefahrlosen Wiederverwendung weltweit verbessern

Artikel zum Thema

#PLANET: Elektromobilität und globale Gerechtigkeit

10. Mai 2023



Wie die Reduktion von Treibhausgasen gelingen kann

4. August 2022



Nachlese: Global Week to #ACT4SDGs 2020 – 5 Jahre Agenda 2030

WASH - assoziierte Gesundheitsbelastungen

SDG 6: Sauberes Wasser und Sanitäreinrichtungen

3,4

Milliarden Menschen haben keinen Zugang zu einer angemessenen Sanitärversorgung.

2,2

Milliarden Menschen haben keinen sicheren Zugang zu sauberem Trinkwasser

Quellen: Ziele für nachhaltige Entwicklung | Bericht 2022, SDG-Fortschrittsbericht 2023

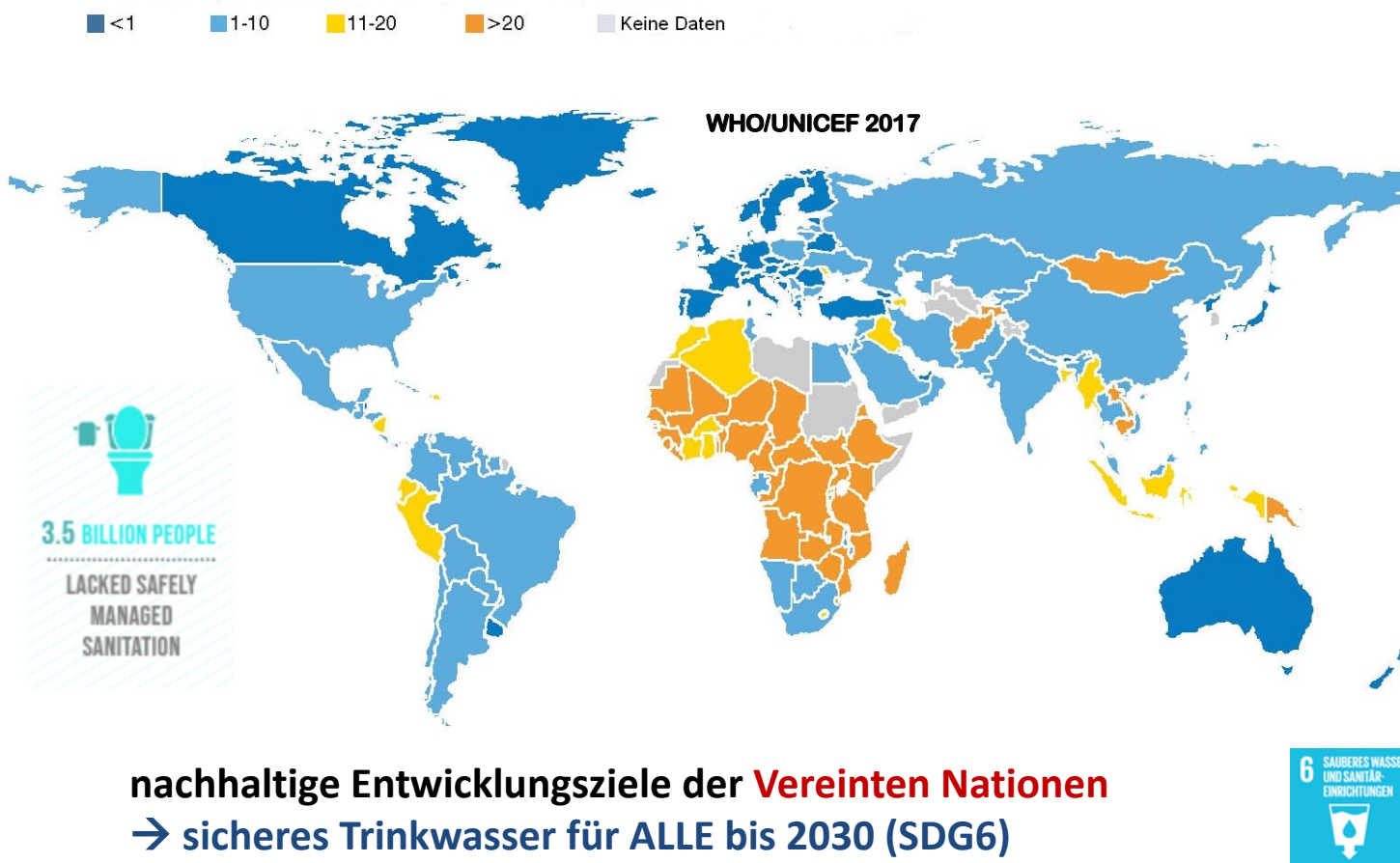
WASH:
Water,
Sanitation &
Hygiene

Table 1. WASH-attributable disease burden by health outcome, 2019

Health outcome	Population-attributable fraction	Deaths (thousands)	DALYs (thousands)
Diarrhoea	69%	1035	54 590
Acute respiratory infections	14%	356	16 578
Undernutrition	10%	8	825
Soil-transmitted helminthiasis	100%	2	1942
Total	NA	1401	73 935

WHO - 2019 update - Burden of disease attributable to unsafe drinking-water, sanitation and hygiene. World Health Organisation, 2023, 79 pages, Geneva, ISBN 978-92-4-007562-7

Wasserqualität & Gesundheit – Internationale Herausforderungen



*...verschmutztes
Wasser oder
fehlende
Abwasserentsorgung:*

**in Top 10 der
Gesundheitsrisiken**



UN-
WHO-
EU-
Aktivitäten



GWPP
Global Water Pathogen Project

The on-line data & knowledge-hub

The Global Water Pathogens Project (GWPP) is a knowledge resource on pathogens supporting sanitation and safe water and promoting quantitative information via monitoring of sewage, fecal sludges and freshwaters to inform public health measures.

[Read more...](#)

BOOK

TOOLS

COVID19



Sanitation and Disease in the 21st Century:

Health and Microbiological Aspects of Excreta and Wastewater Management

[Learn more](#)

[Table of contents](#)

The GWPP on-line Knowledge Hub
<http://www.waterpathogens.org/>

Online Visits (2020-2025)
→ > 500.000 Zugriffe

Return Rate (2020-2025)
→ > 10%

The Global Water Pathogens Project (GWPP) is a project focused on pathogens supporting sanitation and safe water. It provides quantitative information via monitoring of sewage in rivers and freshwaters to inform public health measures.

[Read more...](#)

- In 2018, Bill and Melinda Gates Foundation funded a program to develop the [Treatment Plant Sketcher Tool](#) and the [Pathogen Flow & Mapping Tool](#).



K2P Tools

Tools that provide access to pathogen data on viruses, protozoa and bacteria to support sanitation safety planning.

BOOK

TOOLS

COVID19



Sanitation and Disease in the 21st Century:

Health and Microbiological Aspects of Human Excreta and Wastewater Management

[Learn more](#)

[Table of contents](#)

- In 2021, a new global data center for SARS-CoV-2 [W-SPHERE](#) was launched to provide a repository and information to advance environmental surveillance of sewage.



W-SPHERE

A global data center that provides access to databases (geospatial and tabular) for organizations and individuals testing for SARS-CoV-2 in wastewater and other waterways.



The Global Water P
on pathogens supp
quantitative inform
freshwaters to infor
[Read more...](#)

BOOK

Datasets (with # of sites)

Category

-  Data Dashboards included in W-SPHERE (standardized)
-  Data Dashboard included in W-SPHERE (not standardized)
-  Future Data Dashboards to be included



GLOBAL MAP

DATA

USE CASES

ABOUT

CONTRIBUTE

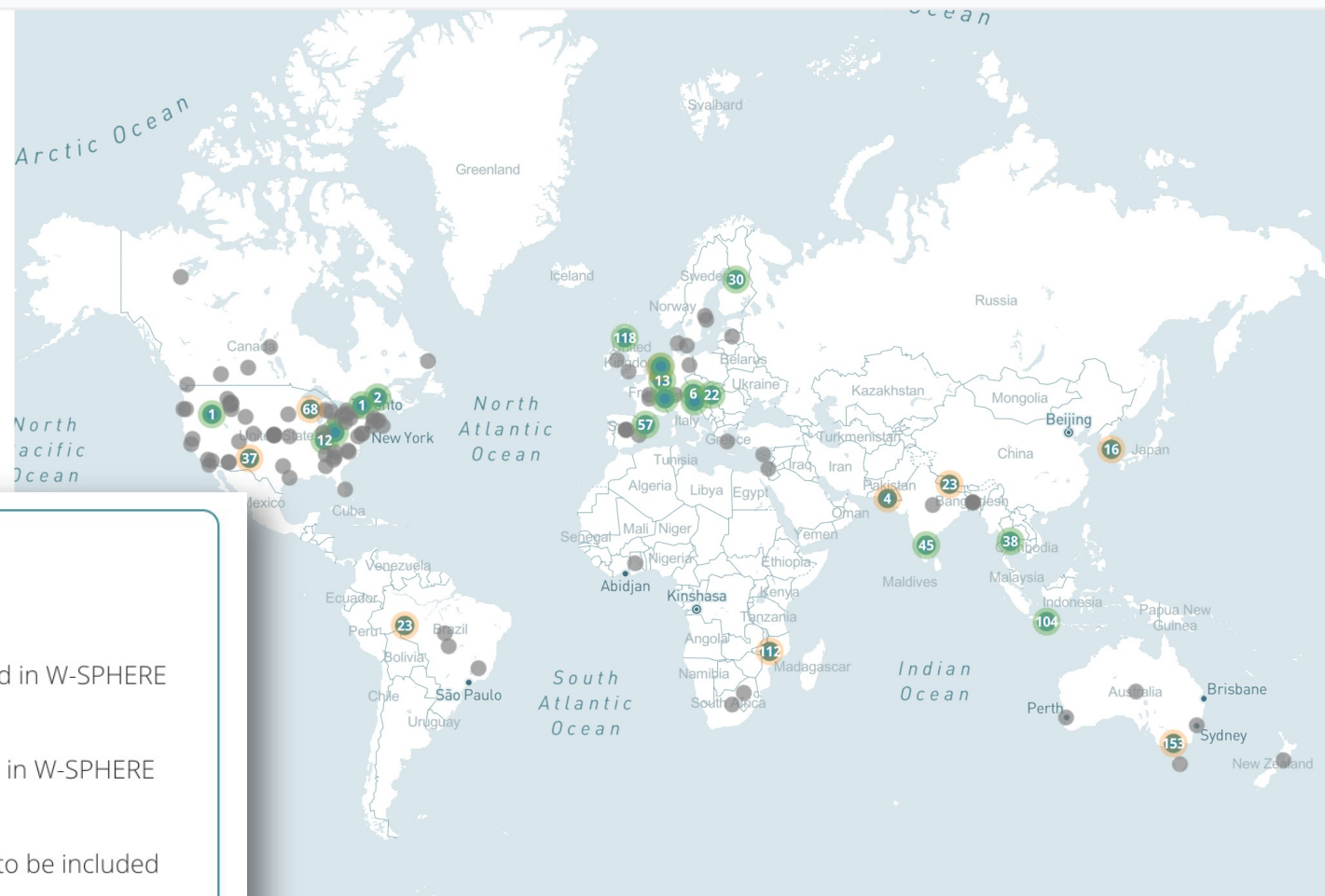


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➤ Expand All

 view as PDF

➤ PART ONE. THE HEALTH HAZARDS OF EXCRETA: THEORY AND CONTROL

➤ PART TWO. INDICATORS AND MICROBIAL SOURCE TRACKING MARKERS

➤ PART THREE. SPECIFIC EXCRETED PATHOGENS: ENVIRONMENTAL AND EPIDEMIOLOGY ASPECTS

➤ PART FOUR. MANAGEMENT OF RISK FROM EXCRETA AND WASTEWATER

➤ PART FIVE. CASE STUDIES



112

Book Chapters



344

Contributors



58

Countries



531

Data tables



The GWPP on-line Knowledge Hub <http://www.waterpathogens.org/>

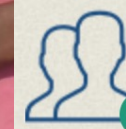
The Global Water Pathogen Project (GWPP) is a knowledge hub for information on pathogens supporting quantitative information via monitoring of sewage, excreta and wastewater in freshwaters to inform public health measures.
[Read more...](#)



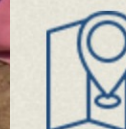
...along the human excreta and waste water pathway



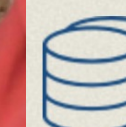
Book Chapters



Contributors



Countries



Data tables



11 viral pathogens

12 bacterial pathogens

8 protozon pathogens

14 helminth parasites

II

**45 ENTERIC
WATERBORNE
PATHOGENS**

VIRUSES

BACTERIA

PROTISTS

HELMINTHS

All WHO top 10 drinking-water and sanitation related pathogens (2025 update) are covered

11 viral pathogens

12 bacterial pathogens

8 protozon pathogens

14 helminth parasites

II

**45 ENTERIC
WATERBORNE
PATHOGENS**

VIRUSES

BACTERIA

PROTISTS

HELMINTHS

The Global Water
on pathogens su
quantitative info
freshwaters to in
[Read more...](#)

- Kapitel: 20-50 Seiten
- Epidemiologie (+GBD)
- Übertragung
- Taxonomie
- Qualitätskontrolle
- Detektion → **Bezug mit den Daten**
- Vorkommen → **quantitative Daten** (wenn möglich)
 - Exkrementen, Abwasser, Boden, Waser...
- **Abwasserreinigung & Desinfektion**
- Literatur

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II

**45 ENTERIC
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PATHOGENS**



GWPP
Global Water Pathogen Project

Teil 2

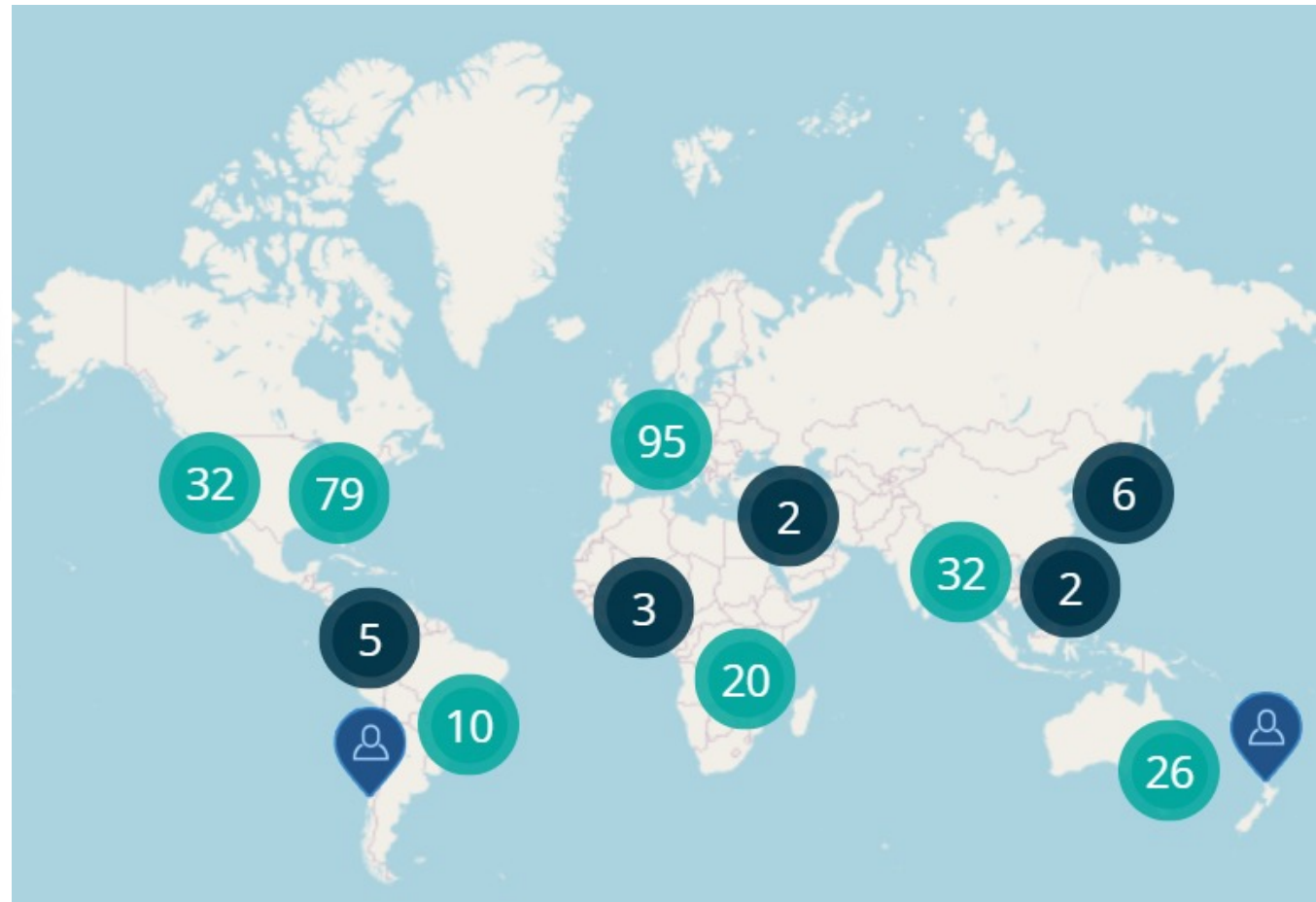
GWPP 2.0 Reboot

2.0 Reboot:

...die nächsten Schritte...?

- The **GWPP Board** has been newly **established** and is meeting regularly.
- Nomination of **Section Editors** and Invitation of **Authors** in **2027+**

current GWPP contributors



GWPP 2.0 – “Rethinking & Envisioning”

WHO-Workshop (+IWA Water Micro 2025 + WWCE Glasgow 2026)

- **AI-assisted TOOLS** → extract quantitative data
- **SDGs 2030** only 5 years away → **complement** the **updated goals**
- Extended **pathogen & indicator** list
- **NEW TOOLS** (evolving trends) - *new molecular diagnostics, automatization, reuse & resource recovery, waste water/environmental surveillance, global/climate change, modelling* (+QMRA), *integrated management* (**ONE WATER**).
- **Online Data base + Book series** (IWA – online) + **Complements**

Das UNESCO Herzlichen Dank für Ihre Aufmerksamkeit! "Net 2.0" "Open Project"

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