

Clean Hospitals Day 2023 marks the global launch of a self-assessment tool

Dr Pierre Parneix

Vice-President, Clean Hospitals

Alexandra Peters, PhD

Scientific lead, Clean Hospitals

Prof Didier Pittet, MD, MS, CBE

President, Clean Hospitals

Hosted by Martin Kiernan

martin@webbertraining.com

www.webbertraining.com

October 20, 2023



The Menu:



- Why Healthcare Environmental Hygiene (HEH) ?
 - Hand Hygiene and HEH: the two wings of the same bird
 - What is Clean Hospitals ?
 - Clean Hospitals main activities
 - 2023 Clean Hospitals symposium
 - Clean Hospitals academic projects
 - Development of the Healthcare Environmental Hygiene Self- Assessment Framework (HEHSAF)
 - The Transposable Model for HEH
 - The HEH Lexicon project
 - The Clean Hospitals Day : 20 October 2023
-

The Menu:

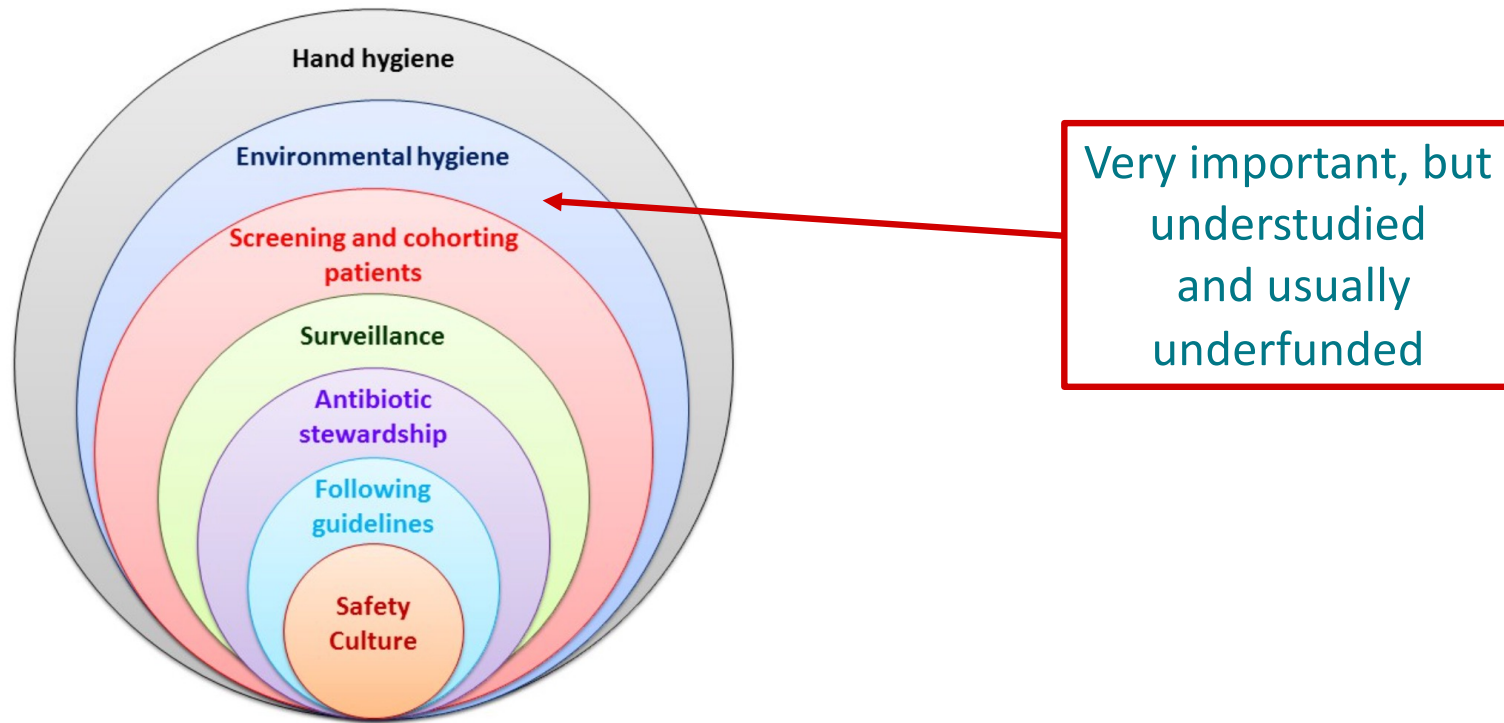


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Why Environmental hygiene?



Strategies for reducing HAI



<https://infectionsinsurgery.org/7-strategies-to-prevent-healthcare-associated-infections-2/>

Healthcare Environmental Hygiene (HEH) is made up of...

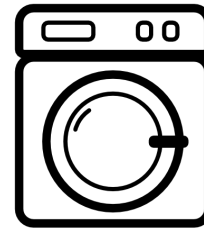
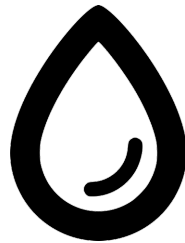


HEH technical components



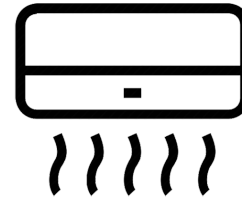
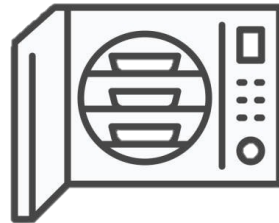
Water control

Surface cleaning
& disinfection



Laundry

Sterilization
& device
reprocessing



Air control

Waste management

HEH human components



Career development



Workflow



Cost and value



Training



Management



Monitoring

Workforce



How is hygiene in a hospital (or any healthcare facility) different than in a hotel?



Why are healthcare facilities different?

- The vulnerability of the population
- The level of contamination from sick patients
- Pathogen transmission patterns, host affinities, microbiological characteristics, at risk procedures and treatments
- Pathogens in hospitals can differ from those in the community



Why are healthcare facilities different? (cont.)

- Difference in needed level of cleanliness (depending on zones)
- Range of specific environments
- Sharing of space, air, water, and resources
- Healthcare personnel is in contact with these different populations and with each other



The burden of healthcare-associated infections

- A silent pandemic
- 500,000 patients each day
- 16 million deaths every year
- NO healthcare system in the world has solved this problem
- Most of these infections are caused by contaminated hands and environment, though infections can of course, be endogenous as well

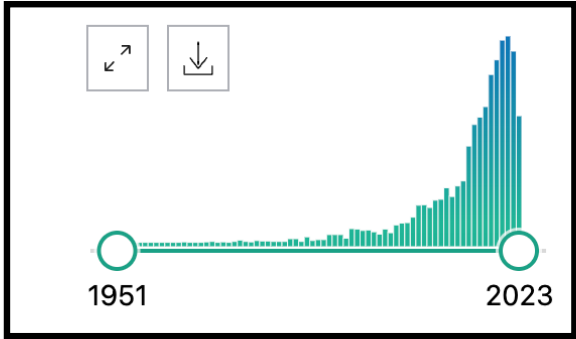


“The patient in the next bed is highly infectious. Thank God for these curtains.”

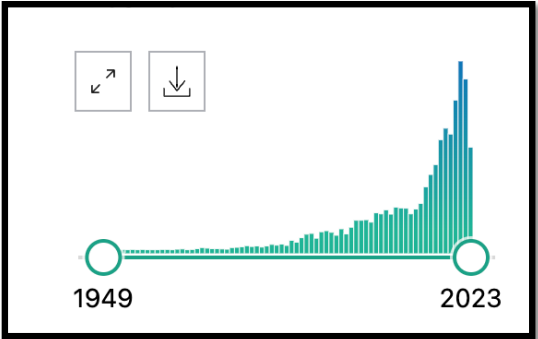
A (very) rough estimate of HEH in the literature



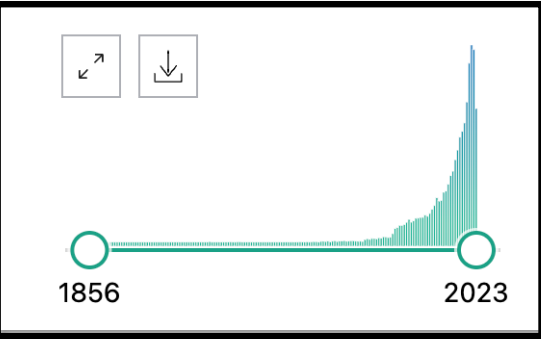
“Healthcare environmental hygiene”
(4,374 results)



“Review environmental hygiene”
(6,679 results)



“Hospital cleaning”
(15,888 results)



Some possible drivers

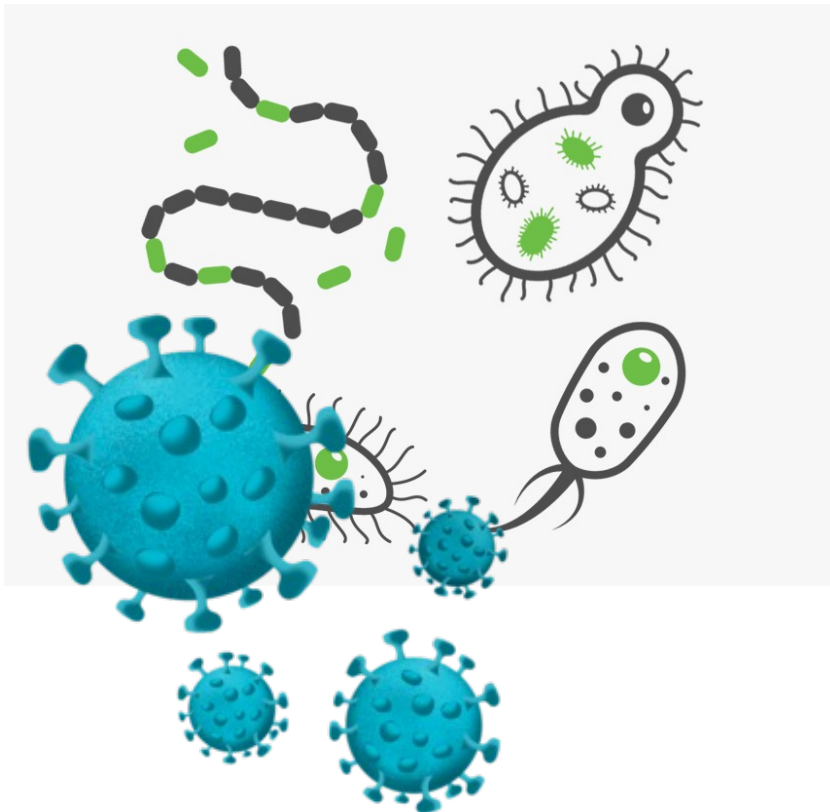
- The “COVID effect”- sensitized the world to contact transmission
- Shift towards more outbreaks of gram-negative pathogens over the last 20 years¹⁻³
- These include pathogens that are often found in the healthcare environment such as *E. coli*, Enterobacteriaceae, *K.pneumoniae*, *Legionella*, *P. aeruginosa*)
- Advances in outbreak investigations, esp. whole genome sequencing can demonstrate clear transmission

¹Gagliotti C et al. Euro Surveill. 2011 Mar 17;16(11):19819.

²de Kraker ME, et al. Clin Microbiol Infect. 2013 Sep;19(9):860-8.

³de Carvalho et al. J Hosp Infect. 2022 Feb;120:43-47.

Healthcare-associated infections in Europe



- Currently, 1 out of every 15 patients will get an HAI during their hospital stay
- If we are able to reduce 20% through improved HEH and HH that means 1/19 will get an HAI
- If we are able to reduce 40% through improved HEH and HH that means 1/25 patients will get an HAI

The role of HH and HEH in disease transmission

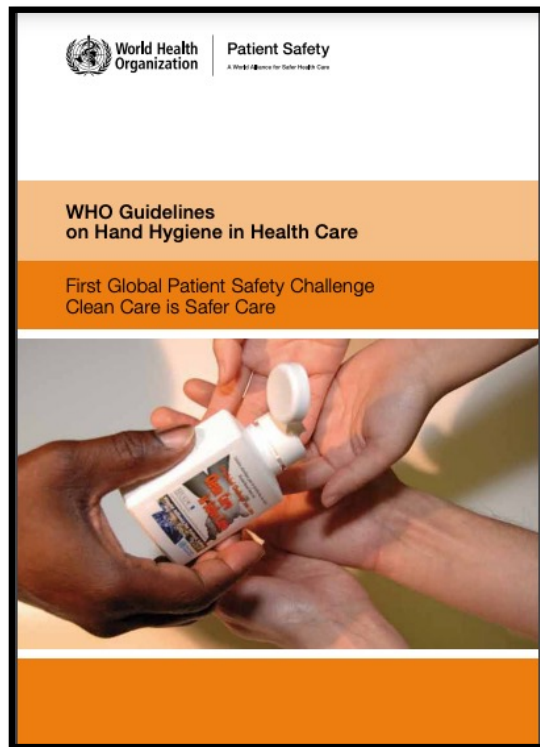
- Depends on the setting, and estimates vary
- An estimated 40-70% of HAI are caused by contaminated hands
- An estimated 20-40% of HAI are spread through the healthcare environment
- Evidence-based IPC interventions have been shown to be effective in preventing at least 50% of HAIs*



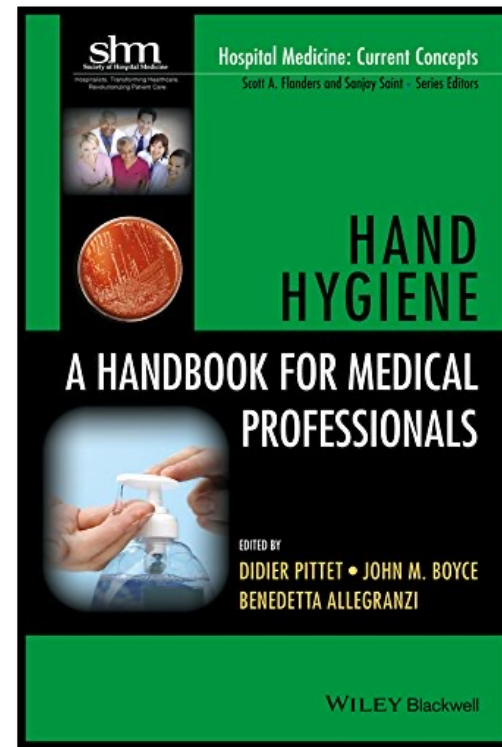
*Umscheid et al. Infect Control Hosp Epidemiol. 2011; 32: 101-114

Hand Hygiene Guidelines

WHO Guidelines on Hand Hygiene in Health Care (2009)- global standard



Hand Hygiene: A Handbook for Medical Professionals (2017)



Recent national HEH guidelines

- US
 - Best Practices: Environmental Cleaning in Global Healthcare Facilities with Limited Resources, Version 2, 2019 (*Also available in French, Spanish, and Portuguese*)
 - <https://www.cdc.gov/hai/prevent/resource-limited/index.html>
- Germany
 - DIN 13063 Hospital cleaning - Requirements for cleaning and disinfection cleaning in hospitals and other health care facilities, 2021
 - <https://www.din.de/en/getting-involved/standards-committees/nagesutech/publications/wdc-beuth:din21:342791036>
- Canada
 - Public Health Ontario: Best Practices for Environmental Cleaning for Prevention and Control of Infections in All Health Care Settings, 3rd Edition, 2018
 - https://www.publichealthontario.ca/-/media/Documents/B/2018/bp-environmental-cleaning.pdf?rev=4b78a8dee04a439384bf4e95697f5ab2&sc_lang=en
- UK
 - National Standards of Healthcare Cleanliness 2021
 - <https://www.england.nhs.uk/wp-content/uploads/2021/04/B0271-national-standards-of-healthcare-cleanliness-2021.pdf>



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HH& HEH: two wings of the same bird



- We need a holistic approach to HH and HEH
- Hands are technically surfaces, but just very high touch ones that move around and act as vectors
- We have a history of global improvement with hand hygiene around the world and a drastic reduction in rate of HAIs
- Need many more studies in HEH interventions and implementation
- We have less history in environmental hygiene



HH& HEH: two wings of the same bird (cont.)

Healthcare workers

- Mainly concerned with hand hygiene as they are most often touching the patient
- Also concerned with environmental hygiene in patient zone or in specific situations

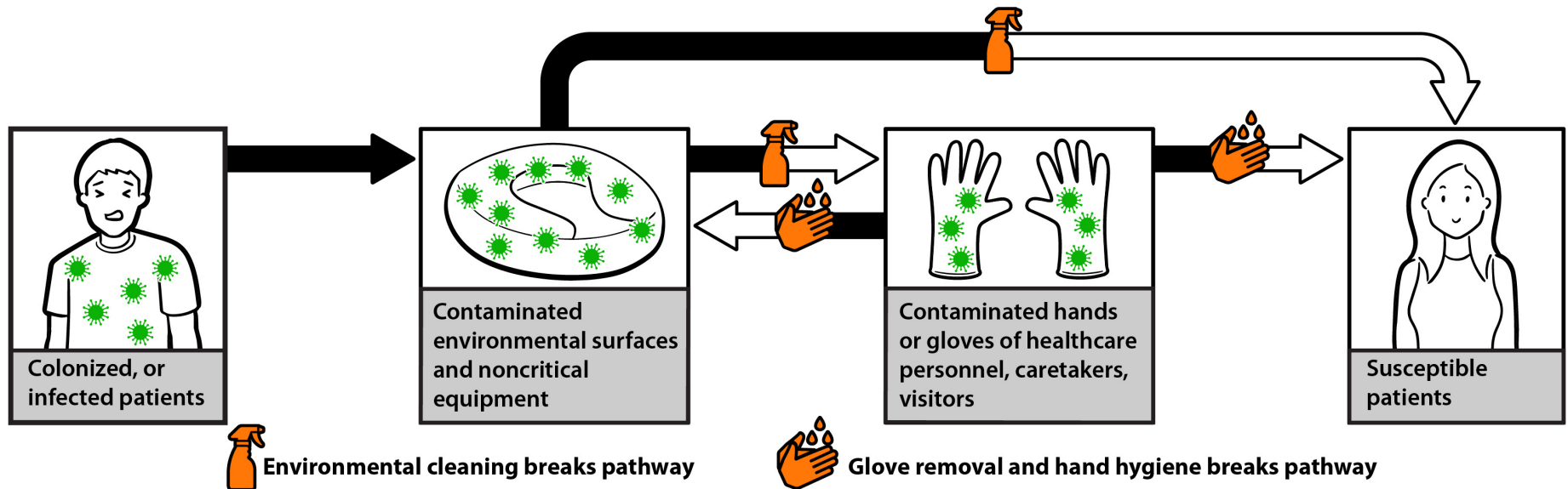


Environmental Service workers

- Mainly concerned with environmental hygiene as they are most often touching the patient
- Also concerned with hand hygiene between patient rooms or in specific situations



Chain of transmission through contaminated hands and the environment



The bad news

HEH is still VERY understudied and underfunded in most settings

This means that:

- HEH is quite low among the priorities of most healthcare facilities
- The environmental services (EVS) workforce is often underpaid and not trained adequately
- There is often very little internal oversight of HEH programs
- There is often little understanding of the return of investment for improving HEH
- There is little information about how HEH is actually performed worldwide
- It is difficult to estimate the average burden of the healthcare environment on healthcare-associated infections

These issues make it difficult to improve HEH on a global scale; we simply don't know enough yet

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What is Clean Hospitals?

A coalition of international stakeholders who work explicitly to promote and support healthcare environmental hygiene

- research
- publications
- participation in conferences and events
- education and training
- specialized working groups



What do we aim to do?

Bring together academia and industry to:

- Champion best practices and evidence-based solutions
- Drive and support academic research
- Create a network where project members can exchange and collaborate
- Create a platform from which to bring healthcare environmental hygiene into the spotlight



Who are we?

Academic colleagues: International Expert panel

Industry partners

Representative members of key societies

Representatives of CDC, WHO, ...



The Clean Hospitals Expert Panel



Ojan Assadian



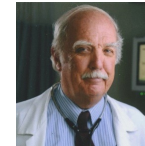
Mahmood Bhutta



John Boyce



David Calfee



Philip Carling



Alessandro Cassini



Vincent Cheng



Nizam Damani



Rose Gallagher



Georgia Gon



Darla Goeres



Loreen Herwaldt



Martin Kiernan



Axel Kramer



Jean Yves Maillard



Brett Mitchell



Daniela Pires



Tom Riley



Sara Romano-Bertrand



William Rutala



Sayed Sattar



Mark Sobsey



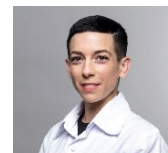
David Weber



Andreas Widmer



Jennie Wilson



Marie-Céline Zanella



Shuk Ching Wong



Our mission

By breaking the silos between the public and private spheres we hope to be able to help:

- Improve patient safety
- Increase access to safe care
- Encourage environmental sustainability
- Reduce antimicrobial resistance
- Encourage best practices
- Support innovation



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Clean Hospitals main internal activities

Academic
research

Stakeholder
meetings

Live
Workshops

Clean
Hospitals
Events

Journal Clubs

Think Tanks
&
Scientific
Sessions

Working
Groups



2022 Publications

- Peters A., Parneix P., Kiernan M., Severin J., Gaucci, T. Pittet, D. New Frontiers in Healthcare Environmental Hygiene: Thoughts from the 2022 Healthcare Cleaning Forum" *Antimicrob Resist Infect Control* (In Press)
- Calcagni N, Venier AG, Nasso R, Boudin G, Jarrige B, Parneix P, Quintard B. Respiratory infection prevention: perceptions, barriers and facilitators after SARS-CoV-2. *Infect Dis Health*. 2022 Aug 29:S2468-0451(22)00049-9.
- Peters A., Pittet, D. Investment in Environmental Services Saves Money and Lives, Boosts Morale: An Example From Geneva. *Infection Control Today*. September, 2022.
- Vaux S, Fonteneau L, Venier AG, Gautier A, Soing Altrach S, Parneix P, Lévy-Bruhl D. Influenza vaccination coverage of professionals working in nursing homes in France and related determinants, 2018-2019 season: a cross-sectional survey. *BMC Public Health*. 2022 May 25;22(1)
- Peters A, Schmid MN, Kraker MEA, Parneix P, Pittet D. Results of an international pilot survey on healthcare environmental hygiene at the facility level. *Am J Infect Control*. 2022 Mar 6:S0196-6553(22)00133-X.
- Peters, A., Schmid, M., Parneix, P. et al. Impact of environmental hygiene interventions on healthcare-associated infections and patient colonization: a systematic review. *Antimicrob Resist Infect Control* 11:38 (2022).
- Peters, A., Carry, J., Cave, C. et al. Acceptability of an alcohol-based handrub gel with superfatting agents among healthcare workers: a randomized crossover controlled study. *Antimicrob Resist Infect Control* 11, 97 (2022).
- Peters, A., Cave, C., Carry, J. et al. Tolerability and acceptability of three alcohol-based handrub gel formulations: a randomized crossover study. *J Hosp Infect*. 2022 Feb 3:S0195-6701(22)00034-2.

INTERCLEAN AMSTERDAM

Overview



4198

unique people with an interest in healthcare cleaning (25% of visitors)



15%
from NL



12%
from Germany



33%

distributors



23%

cleaning contractors



14%

manufacturers



11%

healthcare institutions
(NL, Belgium, Germany)
> 448 unique persons



15

presentations at the Healthcare Lab theater



20

demonstrations at the Healthcare Cleaning Lab-Demo area



Intercleanshow.com/amsterdam

Programme Healthcare Cleaning Forum 2022

Afternoon breakout-sessions

Choose your favourite tracks from the range listed below. There are 3 tracks to choose from which are held simultaneously between 13:30 – 14:30 hrs and 3 tracks between 15:00 – 16:00 hrs.

13:30 - 14:30

Track 1: Cleaning and infection prevention - the importance of partnership
Location: Room E102
Speaker: Yvonne Taylor - CEnvCln, MBICSc | Global Head of Cleaning OCS Group
Christian Fischer - Infection Prevention Nurse | Hygiene Advisor Essity / Tork

- Good cleaning is active infection prevention
- Importance of cleaning standards in healthcare
- Putting the standards into practice
- Successful collaboration between cleaning and IP

Track 2: Cleaning without detergents, is it safe?
Location: Room E103
Speakers: Paul Harleman - Application Engineer, Vileda.
Kristel Rietveld - Infection prevention controller, Groene Hart Hospital, The Netherlands.

- Cleaning with only microfiber and water in healthcare environments is very well accepted in the Netherlands but less common in other countries
- Review of the safety and appropriate use of cleaning without detergents
- An overview of some of the advantages that cleaning without detergents has

Track 3: Guided tours at Interclean Amsterdam
Location: Starting from the meeting point in the foyer
Tours by: Chuchu Yu, Manager Scientific & Regulatory affairs at NVZ
Marten Kops, Technical Director at NVZ

The Healthcare Cleaning Forum is located within Interclean; the world's leading tradeshow for cleaning and hygiene professionals. On the show floor a special 'Healthcare Cleaning' segment offers innovative products and solutions by exhibitors, demonstrations on healthcare cleaning in a hospital setting and presentations and debates on 'cleaning for health'.

The guided tours offer themed overviews of innovations in Healthcare Cleaning technologies. The tours are organised and guided by expert professionals of NVZ, the Dutch association for Disinfection and Machines, Detergents and Maintenance Products.

14:30 - 15:00

Break

15:00 - 16:00

Track 4: Lecture and round table with international IPC experts
Chair: Professor Didier Pittet
Location: Room E102

Introductory lecture
The three main challenges to prepare for the future of healthcare environmental hygiene.

Speaker: Professor Andreas Widmer, Board certified hospital epidemiologist, President of Swissnoso, (Swiss National Center for Infection Control), Switzerland

Panelists: International IPC experts including: Prof. Didier Pittet, Prof. Andreas Widmer, Dr. Pierre Parneix, Martin Keirnan, Juliette Severin, Tracey Gauci, Dr. Karin Ellen Veldkamp, and Wim van Vianen

Panelists will discuss:
• Key healthcare environmental hygiene issues that they think need more attention
• How industry can help address current challenges
• The discussion will include a live Q&A session

Track 5: Biofilm, the next challenge in Infection Prevention
Location: Room E103
Speakers: Claire Khosravi, EU Infection Prevention Manager Diversey
Dr Ian K Hosein, Consultant Medical Microbiologist, Kings College Hospital, London

Bacterial biofilms persistent on dry environmental surfaces in healthcare facilities play an important role in the occurrence of healthcare associated infections. Differences between wet surface biofilms, planktonic bacteria and dry surface biofilms (DSB) and differences for disinfection need for an official method for developing DSB for in vitro disinfectant efficacy testing.

Review of literature on bactericidal efficacy modelling the effect of drying times and temperatures on DSB development.

Track 6: Guided tours at Interclean Amsterdam
Location: Starting from the meeting point in the foyer
Tours by: Chuchu Yu, Manager Scientific & Regulatory affairs at NVZ
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ICPIC2023

INTERNATIONAL CONFERENCE ON
PREVENTION & INFECTION CONTROL

Geneva 

12-15 September 2023

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ICPIC by the numbers

- Most important IPC conference in Europe
- Most global IPC conference worldwide
- Over 1000 participants
- 89 countries represented
- 670 abstracts submitted
- Major focus on healthcare environmental hygiene



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ICPIC2023

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Clean Hospitals Symposium

SESSION TITLE	The Clean Hospitals Symposium	
Proposal submitted by	Clean Hospitals Project (A. Peters / D. Pittet)	
Session 90 minutes	TALK TITLE	SPEAKER
SLOT 1 (20 min. <u>excl</u> Q&A)	The Healthcare Environmental Hygiene Self-Assessment Framework (HEHSAF): a new tool for improving your facility performance	Alexandra Peters
SLOT 2 (20 min. <u>excl</u> Q&A)	How to improve cleaning of high-touch surfaces ?	David Calfee
SLOT 3 (20 min. <u>excl</u> Q&A)	How to talk about environmental hygiene in your facility ?	Jon Otter
SLOT 4 (20 min. <u>excl</u> Q&A)	Throw it away: how infection control practice destroys planetary health and fuels labour abuse	Mahmood Bhutta
10 mins discussion at the end Moderated by Prof. Didier Pittet and Dr. Pierre Parneix		

ICPIC 2023 Clean Hospitals Symposium (short video)



Access the video at:

www.tinyURL.com/CleanHospitalsICPIC23Symposium

Some other recent conferences and teleclasses

- Journée d'hygiène at CHUV, March
- Healthcare Cleaning Forum at Interclean Amsterdam May
- Semmelweis Talk, May
- CLEAN Expert meeting with the London School of Hygiene and Tropical Medicine, Jun
- Infection Control Africa Network (ICAN) Conference Aug
- Clean Hospitals Webber Teleclass Oct.
- Infection Control Day at Ghent University Hospital Dec
- ICPIC Clean Hospitals Symposium Sept
- IPS in Liverpool Oct
- Clean Hospitals Day at Interclean China

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Clean Hospitals: Healthcare Environmental Hygiene and Patient Safety

Guest Editors:

Prof. Dr. Didier Pittet: Professor of medicine (hon), Faculty of Medicine, University of Geneva, Switzerland; Chair, Clean Hospitals

Dr. Alexandra Peters: Scientific Lead for Clean Hospitals; University of Geneva, Switzerland

Submission Status: Open | Submission Deadline: Ongoing



Antimicrobial Resistance & Infection Control is calling for submissions to our Collection on 'Clean Hospitals: Healthcare Environmental Hygiene and Patient Safety.'

Healthcare-associated infections are a struggle for every healthcare facility in the world and are responsible for killing more people each year than malaria, AIDS, and tuberculosis combined.

[Submit to Collection](#)



Antimicrobial Resistance & Infection Control

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Review | [Open Access](#) | [Published: 19 February 2022](#)

Impact of environmental hygiene interventions on healthcare-associated infections and patient colonization: a systematic review

[Alexandra Peters](#), [Marie N. Schmid](#), [Pierre Parneix](#), [Dan Lebowitz](#), [Marlieke de Kraker](#), [Julien Sauser](#), [Walter Zingg](#) & [Didier Pittet](#) 

Antimicrobial Resistance & Infection Control **11**, Article number: 38 (2022) | [Cite this article](#)

4397 Accesses | **3** Citations | **28** Altmetric | [Metrics](#)



Overall results

Primary outcome:

Most interventions showed a reduction in colonization/HAI

- 88% (23/26) of studies showed a decrease in colonization or HAI for at least one of the organisms tested
- 58% of the total studies showed a significant decrease in colonization or HAI for all microorganisms tested

42% were of good quality according to scoring

81% of study interventions were recommended by the authors.

Studies often were not powered adequately to measure significant reductions.

Secondary outcome: all studies that analyzed bioburden showed a reduction in bioburden



Microorganisms

The success of the interventions partly depended on the microbes studied and how successfully specific microorganisms are spread through the environment

Most commonly studied microorganisms:



Out of 26 studies:

- 13 observed the impact of an intervention on MRSA and/or *S. aureus*
- 17 observed the impact of an intervention on *C. difficile*
- 12 observed the impact of a HEH intervention on VRE

Main Conclusions

- The healthcare environment is important for patient safety
- There are numerous HEH interventions that can reduce HAI
- We need more and better studies designed to measure colonization/HAI



International HEH evaluation

According to decision makers, how do hospitals implement HEH programs?

- Based on quantitative email surveys
- Aim is to understand how HEH works around the world and in different resource and cultural contexts
- Goals were to find universal themes and categories to support and improve, and develop the HEHSAF





ELSEVIER

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

American Journal of Infection Control

journal homepage: www.ajicjournal.org

AJIC
American Journal of
Infection Control

Major Article

Results of an international pilot survey on health care environmental hygiene at the facility level

Alexandra Peters MA^{a,b}, Marie N. Schmid BS^b, Marlieke E.A. de Kraker PhD^a, Pierre Parneix MD^c,
Didier Pittet MD, MS, CBE^{a,*}

^a Infection Control Programme and WHO Collaborating Center on Patient Safety, University of Geneva Hospitals and Faculty of Medicine, Geneva, Switzerland

^b University of Geneva, Geneva, Switzerland

^c Nouvelle Aquitaine Health Care-Associated Infection Control Centre, Bordeaux University Hospital, Bordeaux, France



Participating countries in the HEH pilot survey:

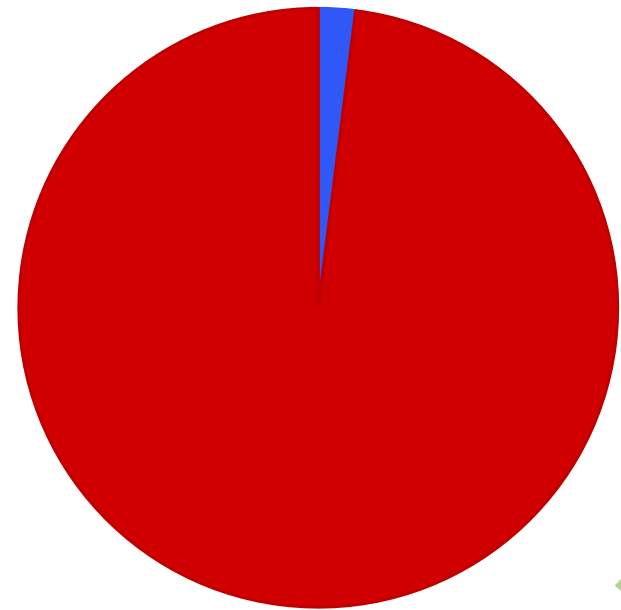
51 facilities from 35 countries

- **37%** (13/35) high-income economies
- **26%** (9/35) upper-middle income economies
- **14%** (5/35) lower-middle income economies
- **23%** (8/35) low-income economies



Pilot survey results: HEH programs insufficient across all resource levels

98% (50/51) of HCFs were majorly lacking in at least one of the five major components of HEH!



Why we need to focus on HEH: Key results of the pilot study

- Mops and buckets for cleaning floors were still used in most HCFs; only 4% (2/50) reported exclusively using bucket-less mopping systems
- 12% (6/50) of HCFs did not separate normal waste from medical / hazardous waste
- 22% (11/50) of HCFs reported having an open dump site nearby
- Only 30% (7/23) of HCFs in higher-income countries and 7% (1/14) in lower-income countries indicated that EVS staff received comprehensive formal training

Peters et al. AJIC. Vol 50, Issue 12, 2022, 1302-1310



Why we need to focus on HEH: Key results of the pilot study (cont.)

- 49% (23/47) of HCFs had EVS managers on-site less than once per week or not at all
- 18% (9/49) did not use any workplace reminders, including the minimum required safety posters or instructions
- Concerning communication on the work floor, 16% (8/50) of respondents reported that EVS staff and nursing staff did not speak the same language
- Upward communication with direct superiors was possible in only 25% (12/48) of HCFs

Peters et al. AJIC. Vol 50, Issue 12, 2022, 1302-1310

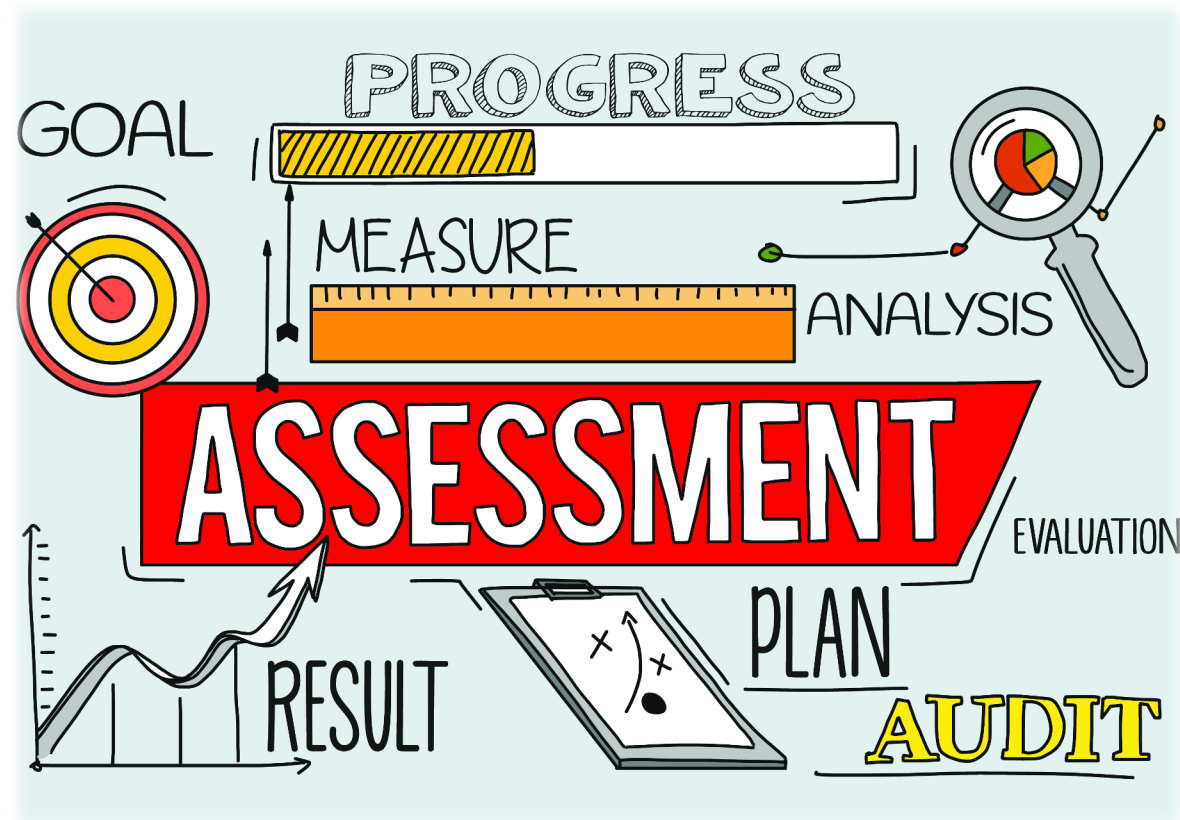


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Development of the Healthcare Environmental Hygiene Self- Assessment Framework (HEHSAF)



What is the HEHSAF?

- A secure online tool for healthcare facilities (HCFs) to analyze and assess their healthcare environmental hygiene (HEH) programs
- Can be used as a benchmark for improvement over time
- The first time a global snapshot for HEH is being attempted



Theoretical Framework: Multimodal Hand Hygiene Improvement Strategy

1. System change
2. Training & Education
3. Monitoring & Feedback
4. Workplace Reminders
5. Institutional Safety Climate

Developed in Geneva from 1994

In use for Hand Hygiene promotion worldwide since 2009

The basis of three WHO global surveys since, with thousands of hospitals involved worldwide



The Multimodal Strategy for Healthcare Environmental Hygiene

- **System change**- access to necessary products and supplies
- **Training and education**- of EVS staff, managers, and raising awareness for other healthcare staff and administration
- **Monitoring and feedback**- of performance “how clean is clean”, and optimizing feedback for improving performance
- **Workplace reminders**- safety posters, events, etc
- **Institutional safety climate**- career advancement, ability to communicate with nursing staff and up the hierarchy



HEHSAF: tool overview

- 8 sections with 96 questions total
 - GENERAL INFORMATION
 - SYSTEM CHANGE: Institutional capacity and practices
 - SYSTEM CHANGE: Surfaces
 - SYSTEM CHANGE: Specific Environments
 - TRAINING & EDUCATION OF EVS STAFF
 - MONITORING AND FEEDBACK OF EVS STAFF
 - REMINDERS IN THE WORKPLACE
 - INSTITUTIONAL SAFETY CLIMATE

- Developed in English
- Currently being translated and validated in French, Spanish, Croatian, Turkish, Portuguese and Chinese
- A way for our industry partners to have meaningful conversations about HEH with healthcare facility decision makers



Interactive map



Your score _____

Sponsored by:



To keep in mind:



- The multimodal strategy is not only for evaluation but also for implementation
- An increasing number of interventions and studies in HEH are multimodal in nature
- Many studies bundle some of the 5 components of the multimodal improvement strategy into a single complex intervention

How can you use the HEHSAF?

- It will help IPC and HEH managers have meaningful conversations about HEH with healthcare facility decision makers
- Help industry to accompany their clients through the process of identifying areas for improvement
- It will give you a vision of the topography of each facility's HEH program, allowing you to better position your possible solutions
- Before the official launch we have 22 completed HEHSAFs (many completed during validation)
- Current participating countries include Belgium, Croatia, Ireland, Malaysia, Romania, Singapore, Spain, Switzerland, Turkey

How can institutional changes be implemented?

1. Self-assessment of needs
2. Hierarchy of institutional priorities
3. Feasibility/resource assessment
4. Implementation
5. Monitoring and assessment of implementation
6. Add improvements where needed
7. Monitor again
8. Allocate continued support to initiative when and where it's needed



The role of self-assessment tools

**Hand Hygiene
(HHSAF)**

**IPC Core
Components
(IPCAF)**

**Environmental
Hygiene
(HEHSAF)**

Three WHO Global surveys for HH

THE LANCET Infectious Diseases

2011, 2015, 2019

ARTICLES | [VOLUME 22, ISSUE 6, P835-844, JUNE 2022](#)

Implementation of hand hygiene in health-care facilities: results from the WHO Hand Hygiene Self-Assessment Framework global survey 2019

[Marlieke E A de Kraker, PhD](#)   • [Ermira Tartari, PhD](#)  • [Sara Tomczyk, PhD](#) • [Anthony Twyman, BSc](#) •

[Laurent C Francioli, PhD](#) • [Alessandro Cassini, MD](#) • [Benedetta Allegranzi, MD](#) • [Prof Didier Pittet, MD](#) • [Show less](#) •

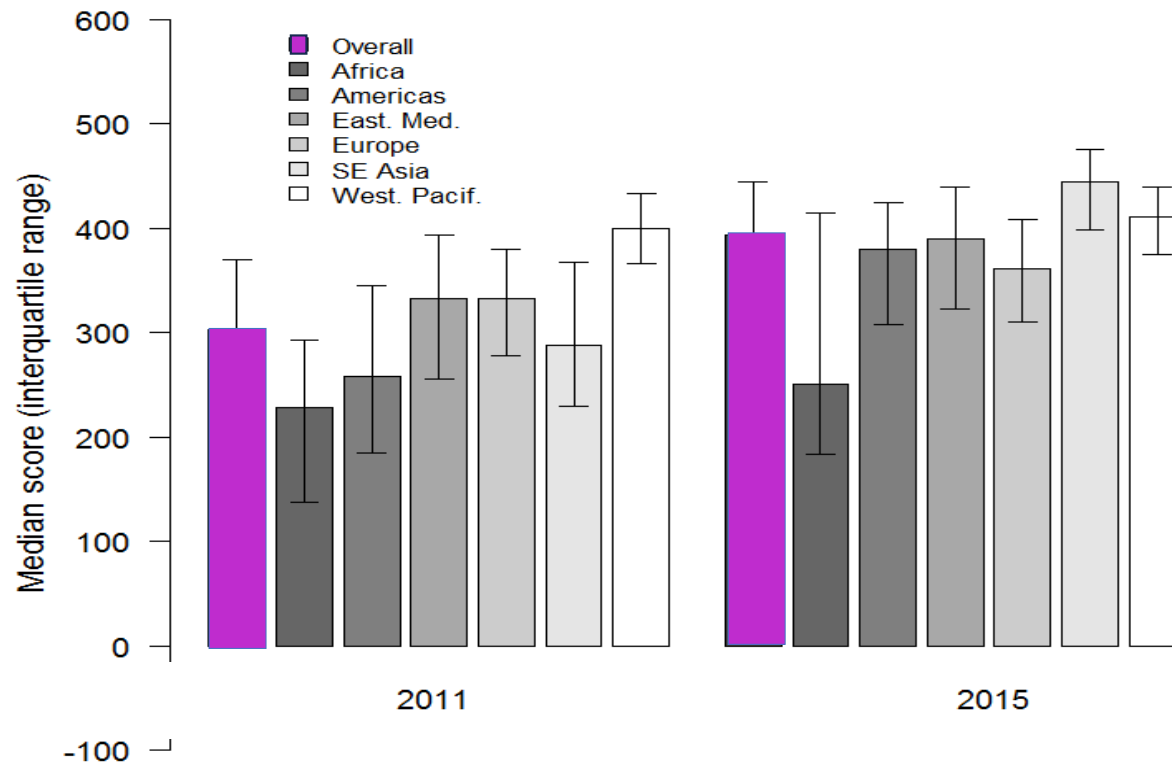
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Open Access • Published: February 21, 2022 • DOI: [https://doi.org/10.1016/S1473-3099\(21\)00618-6](https://doi.org/10.1016/S1473-3099(21)00618-6) •



Tracking improvement

WHO Hand Hygiene Self-Assessment; Total score in hospitals* in 2011 & 2015



*Kilpatrick et al. J Hosp Infect 2018 *only in hospitals participating in both surveys in 2011 & 2015*

What are we really assessing?

1. System change
2. Training & Education
3. Monitoring & Feedback
4. Workplace Reminders
5. Institutional Safety Climate

Human factors!!

HEH human components



Career development



Workflow



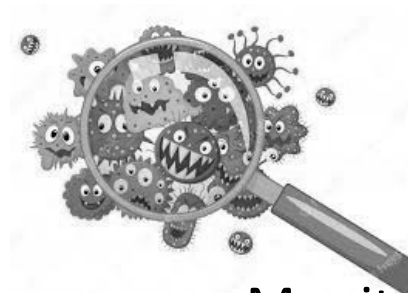
Cost and value



Training



Management



Monitoring

Workforce



All of these elements are...



Career development



Workflow



Cost and value



Training



Management



Workforce



Monitoring



RELATIONSHIPS

Relationship between...

- Environmental services (EVS) staff themselves
- EVS and nursing staff
- EVS staff and EVS management
- EVS management and the hospital administration
- Hospital administration and EVS departments
- EVS and IPC departments
- Hospitals, training institutions, and regional/national governing bodies



The Menu:



- Why Healthcare Environmental Hygiene (HEH) ?
 - Hand Hygiene and HEH: the two wings of the same bird
 - What is Clean Hospitals ?
 - Clean Hospitals main activities
 - 2023 Clean Hospitals symposium
 - Clean Hospitals academic projects
 - Development of the Healthcare Environmental Hygiene Self- Assessment Framework (HEHSAF)
 - **The Transposable Model for HEH**
 - The HEH Lexicon project
 - The Clean Hospitals Day : 20 October 2023
-

The Transposable Model for HEH

- The Clean Hospitals working group is beginning to map a flexible system for implementation and HEH program improvement using the information gathered from:
 - Our hospital (HUG)
 - Other reference hospitals
 - Hospital visits around the world
 - The pilot study
 - Future results of the HEHSAF
 - Advices and experience of our international group of experts



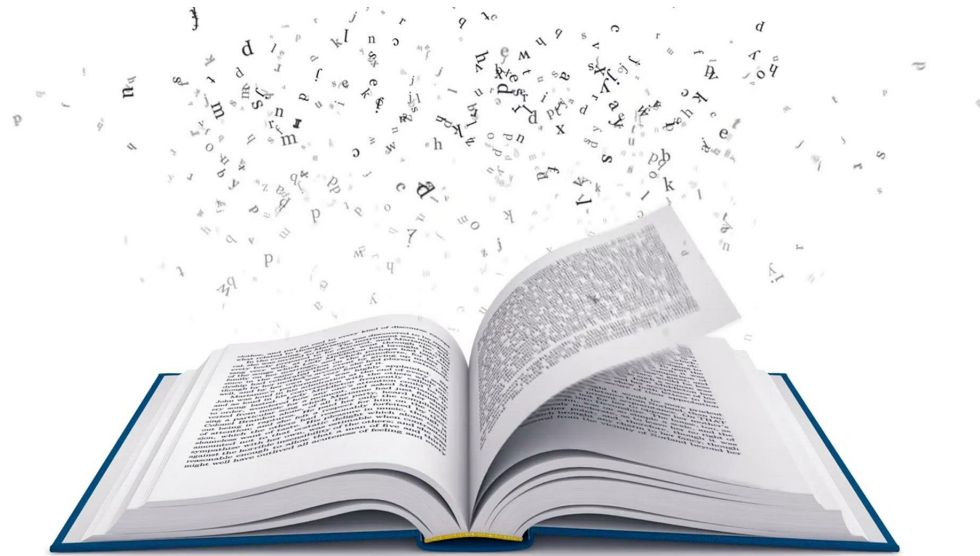
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HEH Lexicon Project

- To create a database of HEH glossaries
- Decide on definitions with working group
- Publish a paper and on web
- We have identified currently as many as 30 glossaries and over 1400 definitions



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-

Clean Hospitals Day: October 20th

- 2020 was specifically focused on COVID-19
- 2021 focused on cleaners
- 2022 was the first year of the CH Day conference
- 2023 is the launch of the HEHSAF tool

Teleclasses and webinars, company and association or MoH involvement, social media campaign



Clean Hospitals Day 2022 International Conference



clean hospitals

Better Patient Safety Through Improved
Healthcare Environmental Hygiene

Scan The QR Code Below To Apply To Join Our Network
And Take Your Innovation To The Next Level



Our Stakeholders:

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sani**SWISS**
Pharmatech SA
essity
SARAYA
gama
MetalSkin
natéosanté
COLAB



20 October 2022

3rd clean hospitals[®] Day

Clean Hospitals Day International Conference

Crowne Plaza Hotel 08:00-20:30 20 October, 2022
Av. Louis-Casaï 75/77, 1216 Genève, Switzerland

2022

- 08:00 Welcome Coffee & Visit of the Exhibition
- 08:45 **Session 1: Environmental Control**
- 10:35 Coffee & Visit of the Exhibition
- 11:05 **Session 2: Healthcare Environmental Hygiene Self-Assessment Framework (HEHSAF)**
- 12:25 – 13:40 Lunch & Visit of the Exhibition
- 12:30 – 13:30 Company Symposium 1,2 & 3
- 13:40 **Session 3: Medical Devices Reprocessing**
- 15:30 Coffee & Visit of the Exhibition
- 16:00 **Session 4: Air and Water Control**
- 17:20 Closing remarks
- 17:45 Clean Hospitals Day Apéro
- 19:30 **Clean Hospitals Day Webinar Teleclass**

VENUE:

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Scan The QR Code To Learn More About The 3rd Clean Hospitals Day 2022 International Conference



clean hospitals Contact us at
info@cleanhospitals.com
www.cleanhospitals.com




More information on <https://cleanhospitals.com/2022-conference/>

Clean Hospitals Day 2023: October 20th

The official international launch of HEHSAF!

Access the tool here:

<https://cleanhospitals.com/hehsaf/>



Posters



#EnvironmentalHygiene #CleanHospitalsDay #RateYourHEH



Scan the code to get started



#EnvironmentalHygiene #CleanHospitalsDay #RateYourHEH



Don't Wait, Rate your HEH!
Fill out the HEHSF today

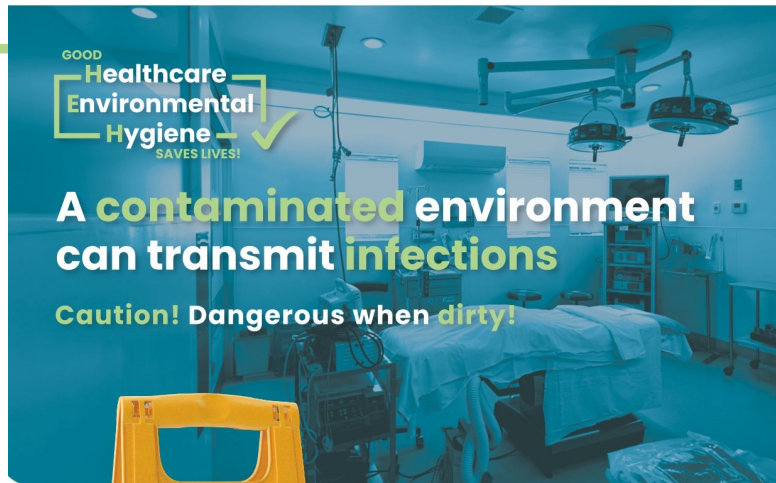
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Posters



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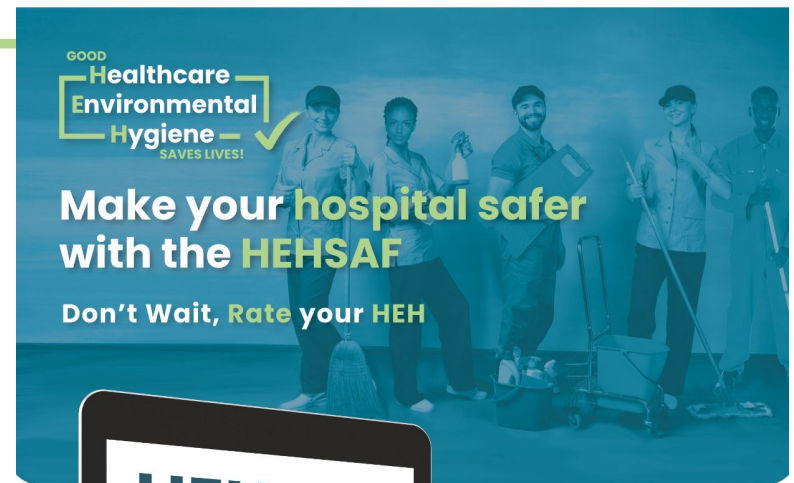


Don't Wait, Rate your HEH!
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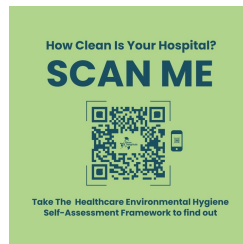
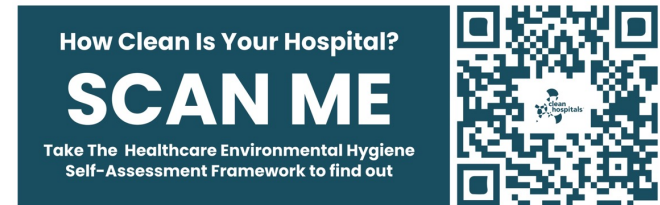
#EnvironmentalHygiene #CleanHospitalsDay #RateYourHEH



Fill out the
HEHSF today

- 1 **Scan**
Scan the QR code
- 2 **Rate**
Your healthcare facility
- 3 **Improve**
Get suggestions to
improve the cleanliness

Stickers



Selfie board



GOOD Healthcare Environmental Hygiene
SAVES LIVES!

Scan the code to rate yours



I rated my HEH
Have you rated yours yet?

Sign here

Don't Wait, Rate your HEH! Fill out the HEHSF today



#EnvironmentalHygiene #CleanHospitalsDay #RateYourHEH



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Scan the code to
rate yours



I rated my HEH

Have you rated yours yet?

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Don't Wait, Rate your HEH! Fill out the HEHSF today



#EnvironmentalHygiene #CleanHospitalsDay #RateYourHEH



Selfie board example



- Download your selfie board at: www.CleanHospitals.com/promotional-toolkit-2023/

- Sign it and Take a picture
- Post-it on SoMe using the hashtags:

#EnvironmentalHygiene

#CleanHospitalsDay

#RateYourHEH

Clean Hospitals Day, 20 October 2023 (video)



PROF. DIDIER PITTET
President
Clean Hospitals

How to participate

Information on how your facility can participate:

<https://cleanhospitals.com/chday/>

Promotional toolkit:

<https://cleanhospitals.com/promotional-toolkit-2023/>



Strategies for keeping post pandemic momentum

The pandemic increased interest in HEH and the literature exponentially, but how do we keep this up?...

- Institutional buy-in is key
- Healthcare facilities should focus on education and empowerment
- Need to continue to invest in high-quality scientific studies to generate new information
- Healthcare facilities can use this information to increase performance and knowledge



Spreading the word on social media

Let's all spread the word



Follow us on Twitter [@Clean_Hospitals](https://twitter.com/Clean_Hospitals)

#CleanHospitalsDay

#CleanHospitals



improving environmental hygiene practices

Clean Hospitals Partners



www.webbertraining.com/schedulep1.php

October 26, 2023

[PULLING THE PLUG ON THE SINK DRAIN](#)

Speaker: **Prof. Jean-Yves Maillard**, Cardiff University

(European Teleclass)

November 7, 2023

[AUDIT TOOLS FOR INFECTION PREVENTION AND CONTROL TEAMS](#)

Speaker: **Dr. Eva Elisa Alvarez**, Canary Health Service, Government of the Autonomous Community of the Canary Islands

(South Pacific Teleclass)

November 8, 2023

[DEVELOPMENT OF A CORE OUTCOME SET FOR STUDIES AIMED AT ANTIMICROBIAL STEWARDSHIP IN CARE HOMES](#)

Speaker: **Prof. Nguyễn Quốc Hòa**, University of Medicine and Pharmacy at Ho Chi Minh City, Vietnam

(FREE European Teleclass)

November 9, 2023

[SANITATION INTELLIGENCE AND PUBLIC HEALTH](#)

Speaker: **Toilet Board Coalition**, Switzerland

[QUATERNARY AMMONIUM-BASED DISINFECTANTS: ADVANTAGES,](#)

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