Strukturelle Mindestanforderungen

für die Prävention und Bekämpfung von healthcare-assoziierten Infektionen (HAI) in Schweizer Akutspitälern

Prof. Andreas Widmer, MD,MS,FIDSA,FSHEA

Präsident Swissnoso

Strategie NOSO

Breite Unterstützung für die strukturellen Mindestanforderungen

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Eidgenössisches Departement des Innern EDI
Bundesamt für Gesundheit BAG

C GDK S
Konferenz der kantonalen Gesundheitsdirektorinnen und -direktoren
Conférence des directrices et directeurs cantonaux de la santé
Conferenza delle direttrici e dei direttori cantonali della sanità

H+
DIE SPITÄLER DER SCHWEIZ
LES HÔPITAUX DE SUISSE
GLI OSPEDALI SVIZZERI

VKS / AMCS
Vereinigung der Kantonsärztinnen und Kantonsärzte der Schweiz
Association des médecins cantonaux de Suisse
Associazione dei medici cantonali della Svizzera
Associazium dals medis cantunals de la Svizra
Swiss Association of Cantonal Officers of Health

Schweizerische Gesellschaft für Infektiologie
Swiss Society for Infectious Diseases
Société Suisse d'Infectiologie

Swiss Society for Hospital Hygiene

fibs
Fachexperten/-innen für Infektionsprävention & Berater/-innen für Spitalhygiene

SIPI
SPÉCIALISTES INFIRMIERS PRÉVENTION DE L'INFECTION

PIGS
Pediatric Infectious Disease Group of Switzerland

swissnoso
Nationales Zentrum für Infektionsprävention
Centre national de prévention des infections
Centro nazionale per la prevenzione delle infezioni
National Center for Infection Control

FMH

patientensicherheit schweiz
sécurité des patients suisse
sicurezza dei pazienti svizzera

Mindestanforderungen
19. Mai 2022

Minimum Standards: Vorbilder Aviatik

Strategie NOSO

Safety Rating Criteria for commercial airlines: The safety rating 3 star

- **Has the airline experienced a (preventable) fatal crash (>1 death) in the last 10 years?**
  - **If yes, no star**

- **Has the airline suffered numerous serious pilot related incidents? (no: 2 stars)**
  - If no, two stars are awarded and if yes one or no stars are awarded. AirlineRatings.com has analysed over 11,000 serious incidents over the past five years and looked at trends such as runway overruns to arrive at our ratings.

- **Has the airline and its country of origin passed all the major audits?**
  - We look at the IOSA audit, ICAO country audit, EU and FAA bans. If the airline or its country of origin passes all these audits then **one-star is awarded.**
  - If there are any failures the star is removed. The exception is IOSA, and if any airline has not done the audit but has not had a fatal crash in 20-years, a star is awarded. (See details of audits below)

https://www.airlineratings.com/safety-rating-criteria/

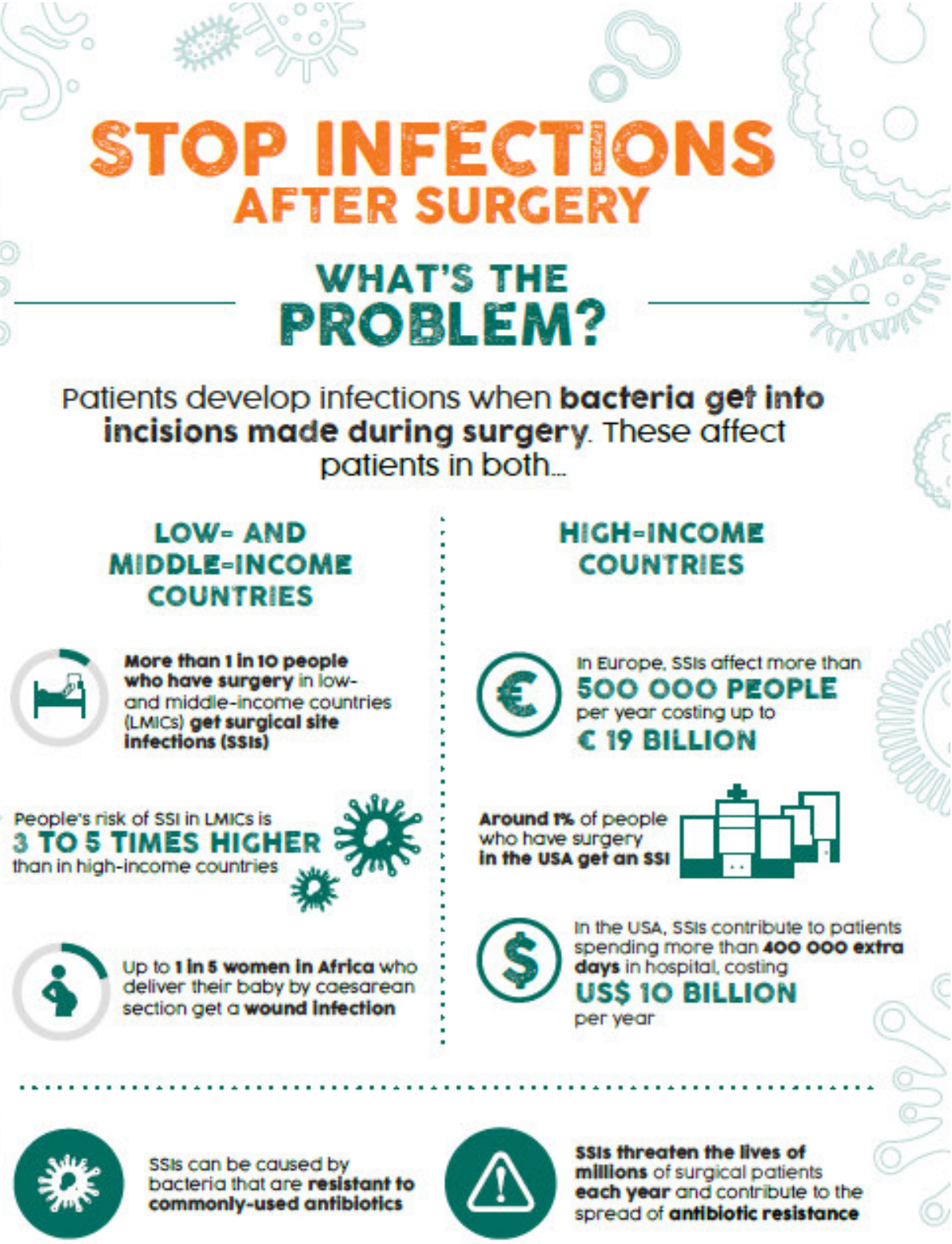
NewScientist

Strategie NOSO

One in 20 European patients catch an infection while in hospital

HEALTH 18 October 2016

Sam Edwards/Caiaimage/Getty



Strategie NOSO

Postoperative Wundinfektionen

(SSI surveillance By Swissnoso)

WHO 2022

https://openwho.org/courses/IPC-SSI-EN/items/3neyunY4P3HxKIAyHh0AMK
^

COVID-19 hat die Bedeutung von hohen Standards für die Prävention und Bekämpfung von HAI verdeutlicht

Mehrere Faktoren können der Prävention und Bekämpfung von HAI entgegenwirken und zu einem Anstieg der Infektionen führen, wie etwa die COVID-19-Pandemie (Daten CDC, Atlanta, USA)

	2020 Q1	2020 Q2	2020 Q3	2020 Q4
CLABSI	–11.8%	27.9%	46.4%	47.0%
CAUTI	–21.3%	No Change[1]	12.7%	18.8%
VAE	11.3%	33.7%	29.0%	44.8%
SSI: Colon surgery	–9.1%	No Change[1]	–6.9%	–8.3%
SSI: Abdominal hysterectomy	–16.0%	No Change[1]	No Change[1]	–13.1%
Laboratory-identified MRSA bacteremia	–7.2%	12.2%	22.5%	33.8%
Laboratory-identified CDI	–17.5%	–10.3%	–8.8%	–5.5%

deutliche Zunahme von Venenkatheter-assoziierten Blutstrom-infektionen

Centers for Disease Controil & Prevention (CDC) Weiner-Lastinger, 2021

PREVALENCE AND RISK FACTORS FOR NOSOCOMIAL INFECTIONS IN FOUR UNIVERSITY HOSPITALS IN SWITZERLAND

Didier Pittet, MD, MS; Stephan Harbarth, MD; Christian Ruef, MD; Patrick Francioli, MD; Philippe Sudre, MD, MS; Christiane Pétignat, MD; Andrej Trampuz, MD; Andreas Widmer, MD, MS

Die erste nationale Prävalenzstudie aus der Schweiz
4/5 Universitätsspital !!!!

ABSTRACT

OBJECTIVE: To determine the prevalence and risk factors for nosocomial infections (NIs) in four Swiss university hospitals.

DESIGN AND SETTING: A 1-week period-prevalence survey conducted in May 1996 in medical, surgical, and intensive-care wards of four Swiss university hospitals (900-1,500 beds). Centers for Disease Control and Prevention definitions were used, except that asymptomatic bacteriuria was not categorized as NI. Study variables included patient demographics, primary diagnosis, comorbidities, exposure to medical and surgical risk factors, and use of antimicrobials. Risk factors for NIs were determined using logistic regression with adjustment for length of hospital stay, study center, device use, and patients' comorbidities.

RESULTS: 176 NI were recorded in 156 of 1,349 screened patients (11.6%; interhospital range, 9.8%-13.5%). The most frequent NI was surgical-site infection (53; 30%), followed by urinary tract infection (39; 22%), lower respiratory tract infection (27; 15%), and bloodstream infection (23; 13%). Prevalence of NI was higher in critical-care units (25%) than in medical (9%) and surgical wards (12%). Overall, 65% of NIs were culture-proven; the leading pathogens were *Enterobacteriaceae* (44; 28%), *Staphylococcus aureus* (20; 13%), *Pseudomonas aeruginosa* (17; 11%), and *Candida* species (16; 10%). Independent risk factors for NI were central venous catheter (CVC) use (odds ratio [OR], 3.35; 95% confidence interval [CI_{95}], 2.91-3.80), admission to intensive care (OR, 1.75; CI_{95}, 1.30-2.21), emergency admission (OR, 1.57; CI_{95}, 1.15-2.00), impaired functional status (Karnofsky index 1-4: OR, 2.56; CI_{95}, 1.95-3.17), and McCabe classification of ultimately fatal (OR, 2.50; CI_{95}, 2.04-2.96) or rapidly fatal (OR, 2.25; CI_{95}, 1.52-2.98) underlying condition.

CONCLUSIONS: According to the results of this survey, NIs are frequent in Swiss university hospitals. This investigation confirms the importance of CVCs as a major risk factor for NI. Patient comorbidities must be taken into account to adjust for case mix in any study comparing interhospital or intrahospital infection rates (*Infect Control Hosp Epidemiol* 1999;20:37-42).

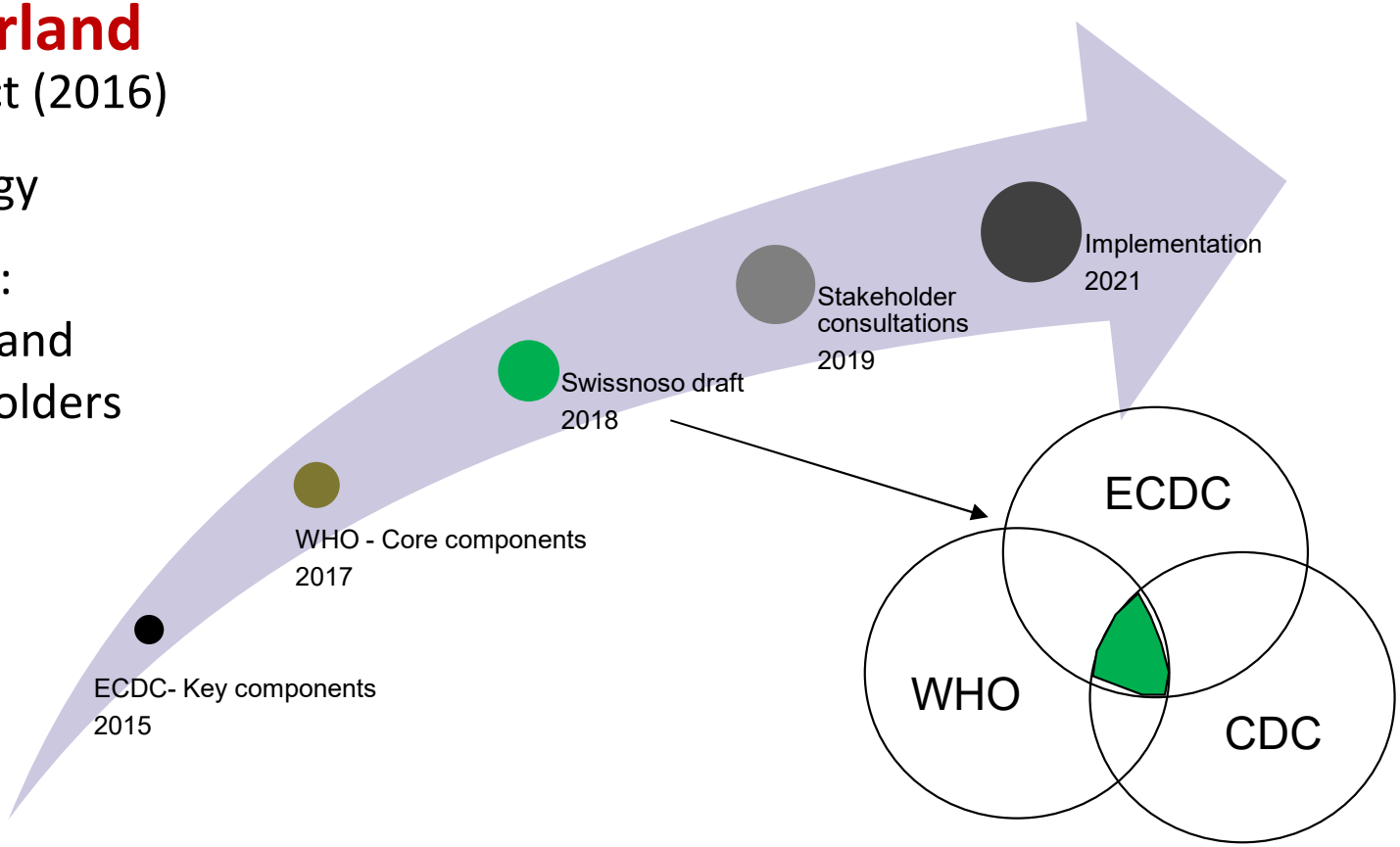
Towards structural minimum standards

in Switzerland

Epidemics Act (2016)

NOSO Strategy

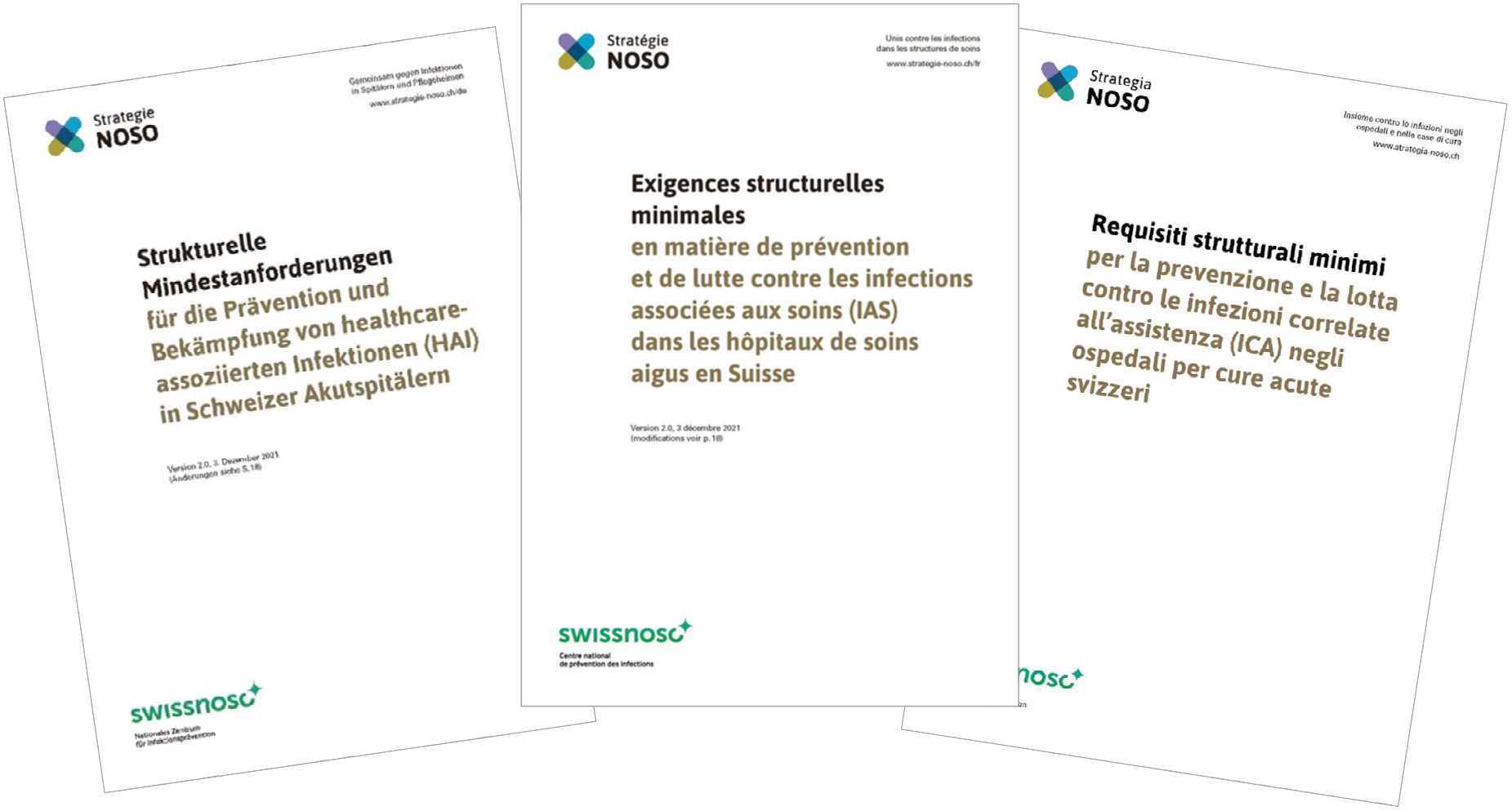
Expert group:
Swissnoso and
key stakeholders



Slide: courtesy from W.Zingg

Roth J & Widmer AF

Ein Meilenstein für die Schweiz!

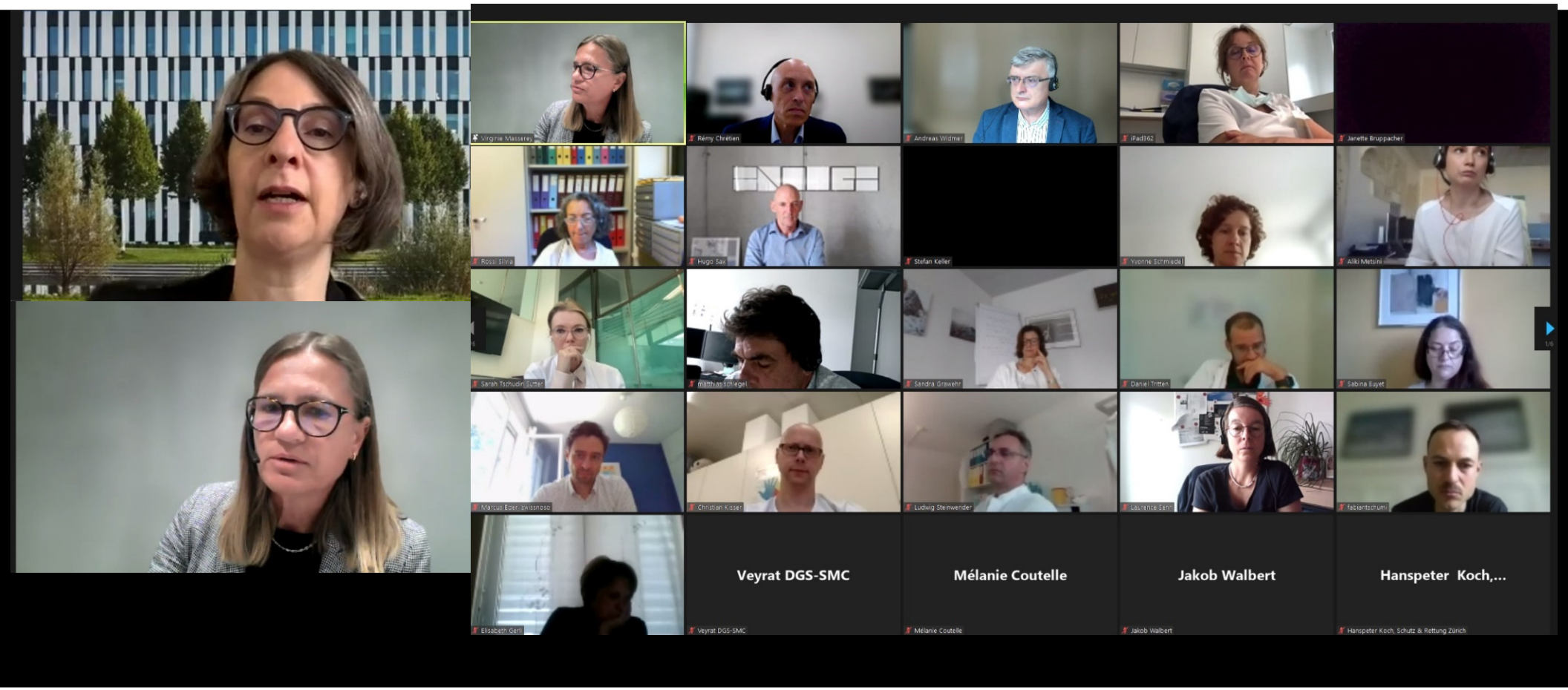


Mindestanforderungen
19. Mai 2022

Strategie NOSO

1. Symposium Minimal Standards 27.8.2021

Anne Levy, Direktorin BAG



Mindestanforderungen
19. Mai 2022

Strategie NOSO

Minimum Structural Requirements for Successful Prevention and Control of Healthcare-Associated Infections

HEALTH AND ECONOMIC BURDEN OF HEALTHCARE-ASSOCIATED INFECTIONS AND ANTIMICROBIAL RESISTANCE IN THE EUROPEAN REGION

Alessandro Cassini, Antimicrobial resistance Control & Response Strategies Unit
World Health Organization

World Health Organization

27 August 2021

Mindestanforderungen
19. Mai 2022

Current activities

EUCIC EUROPEAN COMMITTEE ON INFECTION CONTROL

European Society of Clinical Microbiology and Infectious Diseases

Chair: Prof. Evelina Tacconelli

“Andreas!
Please send me
Your minimum standards
This is unique”

“In Europe, there are few, if any Standards required by law in written form”

24.4.2022

Mindestanforderungen
19. Mai 2022

Strategie NOSO

Progress report – 1 -

Ab Oktober 2021
Bearbeitung der Zielgruppen in den drei Gruppen

- GDK-Kantone
- H+-Spitalmanagement
- Swissnoso-IPC Teams

Januar 2022
Workshop für IPC Teams

Mai 2022 GDK und H+
Verbindlichkeit der Minimum Standards evaluieren

Progress report – 2 -

- Powerpoint generic Slides
  - In drei Landessprachen ab Juni 2022 Webseite Swissnoso;
  - D/F schon jetzt verfügbar
- MDRO Guidelines –Swissnoso Website; wichtig für die CHOP Kodierung – bessere Vergütung
- HAI Punktprävalenz-Erhebung 2022 (HAI-PPS-2022): IPCAF Tool von WHO Teil der Erhebung: Resultate ab 2023
- Für Schweiz angepasstes Selbstevaluations-Tool: verfügbar bis Ende 2022 (voraussichtlich)
- 26.8. Austausch für IPC Teams per Zoom: alle Interessenten aus Spitälern herzlich eingeladen (Einladung folgt)

Core component 1: Infection Prevention and Control (IPC) programme

Question	Answer	Score
1. Do you have an IPC programme?[3] Choose one answer	☐ No	0
	☐ Yes, without clearly defined objectives	5
	☐ Yes, with clearly defined objectives and annual activity plan	10
2. Is the IPC programme supported by an IPC team comprising of IPC professionals?[4] Choose one answer	☐ No	0
	☐ Not a team, *only* an IPC focal person	5
	☐ Yes	10
3. Does the IPC team have at least one full-time IPC professional or equivalent (nurse or doctor working 100% in IPC) available? Choose one answer	☐ No IPC professional available	0
	☐ No, *only* a part-time IPC professional available	2.5
	☐ Yes, one per > 250 beds	5
	☐ Yes, one per ≤ 250 beds	10
4. Does the IPC team or focal person have dedicated time for IPC activities?	☐ No	0
	☐ Yes	10
5. Does the IPC team include both doctors and nurses?	☐ No	0
	☐ Yes	10
6. Do you have an IPC committee[5] **actively supporting the IPC team?**	☐ No	0
	☐ Yes	10
7. Are any of the following professional groups represented/included in the IPC committee?		
Senior facility leadership (for example, administrative director, chief executive officer [CEO], medical director)	☐ No	0
	☐ Yes	5
Senior clinical staff (for example, physician, nurse)	☐ No	0
	☐ Yes	2.5
Facility management (for example, biosafety, waste, and those tasked with addressing water, sanitation, and hygiene [WASH])	☐ No	0
	☐ Yes	2.5
8. Do you have clearly defined IPC objectives (that is, in specific critical areas)? Choose one answer	☐ No	0
	☐ Yes, IPC objectives *only*	2.5
	☐ Yes, IPC objectives and measurable outcome indicators (that is, adequate measures for improvement)	5
	☐ Yes, IPC objectives, measurable outcome indicators and set future targets	10
9. Does the senior facility leadership show clear commitment and support for the IPC programme:		
By an allocated budget specifically for the IPC programme (that is, covering IPC activities, including salaries)?	☐ No	0
	☐ Yes	5
By demonstrable support for IPC objectives and indicators within the facility (for example, at executive level meetings, executive rounds, participation in morbidity and mortality meetings)?	☐ No	0
	☐ Yes	5
10. Does your facility have microbiological laboratory support (either present on or off site) for routine day-to-day use? Choose one answer	☐ No	0
	☐ Yes, but not delivering results reliably (timely and of sufficient quality)	5
	☐ Yes, and delivering results reliably (timely and of sufficient quality)	10
Subtotal score		**/100**

3 IPC programmes should have clearly defined *objectives* based on local epidemiology and priorities according to risk assessment, and defined *functions and activites* that align with and contribute towards the prevention of health care-associated infections and antimicrobial resistance in health care. They should also include dedicated, trained IPC professionals. See the *WHO Guidelines on core components of IPC programmes at the national and acute health care facility level* for more information (http://www.who.int/infection-prevention/publications/core-components/en/, accessed 13 April 2018).

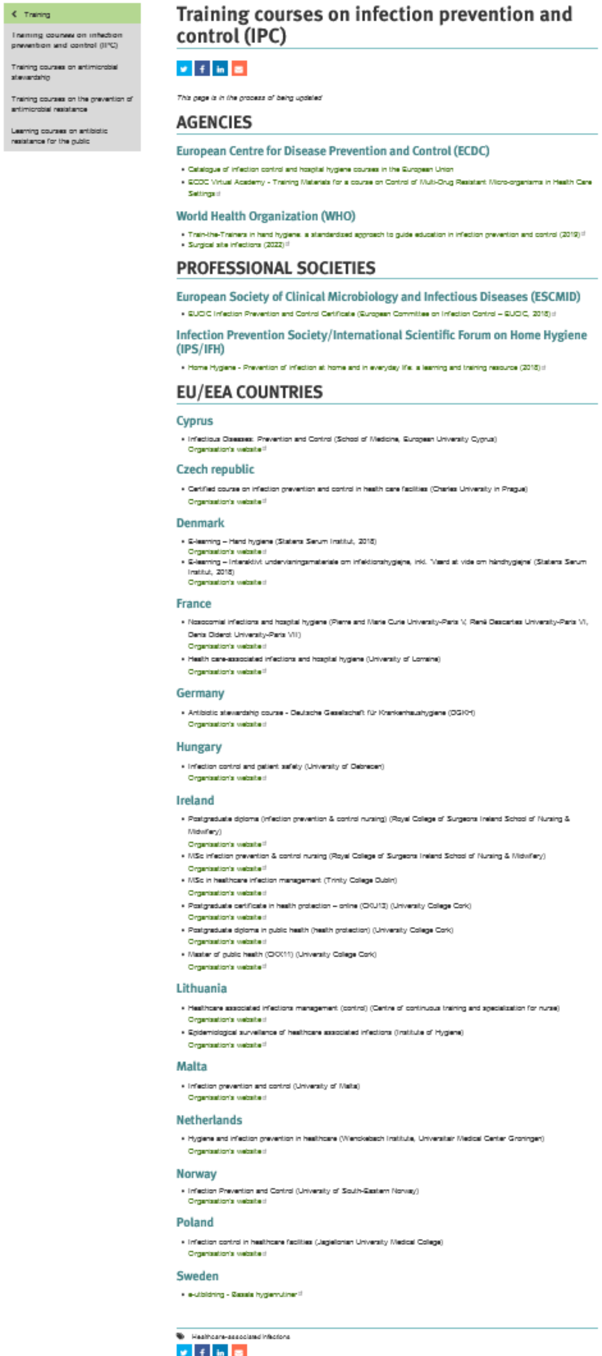
4 IPC professional: medical or nursing staff trained in a certified IPC course.

5 An IPC committee is a multidisciplinary group with interested stakeholders across the facility, which interacts with and advises the IPC team. An IPC team includes dedicated IPC professionals who are responsible for the IPC programme.

Strategie NOSO

Evaluationstool der WHO

https://www.who.int/publications/i/item/WHO-HIS-SDS-2018.9



Training

Training courses on infection prevention and control (IPC)

Training courses on antimicrobial stewardship

Training courses on the prevention of antimicrobial resistance

Learning courses on antibiotic resistance for the public

Training courses on infection prevention and control (IPC)

This page is in the process of being updated

AGENCIES

European Centre for Disease Prevention and Control (ECDC)

- Catalogue of infection control and hospital hygiene courses in the European Union
- ECDC Virtual Academy - Training Materials for a course on Control of Multi-Drug Resistant Micro-organisms in Health Care Settings

World Health Organization (WHO)

- Train-the-Trainers in hand hygiene: a standardized approach to guide education in infection prevention and control (2019)
- Surgical site infections (2022)

PROFESSIONAL SOCIETIES

European Society of Clinical Microbiology and Infectious Diseases (ESCMID)

- EUCIC Infection Prevention and Control Certificate (European Committee on Infection Control – EUCIC, 2018)

Infection Prevention Society/International Scientific Forum on Home Hygiene (IPS/IFH)

- Home Hygiene - Prevention of infection at home and in everyday life: a learning and training resource (2018)

EU/EEA COUNTRIES

Cyprus

- Infectious Diseases: Prevention and Control (School of Medicine, European University Cyprus)
  Organisation's website

Czech republic

- Certified course on infection prevention and control in health care facilities (Charles University in Prague)
  Organisation's website

Denmark

- E-learning – Hand hygiene (Statens Serum Institut, 2018)
  Organisation's website
- E-learning – Interaktivt undervisningsmateriale om infektionshygiejne, inkl. 'Værd at vide om håndhygiejne' (Statens Serum Institut, 2018)
  Organisation's website

France

- Nosocomial infections and hospital hygiene (Pierre and Marie Curie University-Paris V, René Descartes University-Paris VI, Denis Diderot University-Paris VII)
  Organisation's website
- Health care-associated infections and hospital hygiene (University of Lorraine)
  Organisation's website

Germany

- Antibiotic stewardship course - Deutsche Gesellschaft für Krankenhaushygiene (DGKH)
  Organisation's website

Hungary

- Infection control and patient safety (University of Debrecen)
  Organisation's website

Ireland

- Postgraduate diploma (infection prevention & control nursing) (Royal College of Surgeons Ireland School of Nursing & Midwifery)
  Organisation's website
- MSc infection prevention & control nursing (Royal College of Surgeons Ireland School of Nursing & Midwifery)
  Organisation's website
- MSc in healthcare infection management (Trinity College Dublin)
  Organisation's website
- Postgraduate certificate in health protection – online (CKU13) (University College Cork)
  Organisation's website
- Postgraduate diploma in public health (health protection) (University College Cork)
  Organisation's website
- Master of public health (CKX11) (University College Cork)
  Organisation's website

Lithuania

- Healthcare associated infections management (control) (Centre of continuous training and specialization for nurse)
  Organisation's website
- Epidemiological surveillance of healthcare associated infections (Institute of Hygiene)
  Organisation's website

Malta

- Infection prevention and control (University of Malta)
  Organisation's website

Netherlands

- Hygiene and infection prevention in healthcare (Wenckebach Institute, Universitair Medical Center Groningen)
  Organisation's website

Norway

- Infection Prevention and Control (University of South-Eastern Norway)
  Organisation's website

Poland

- Infection control in healthcare facilities (Jagiellonian University Medical College)
  Organisation's website

Sweden

- e-utbildning - Basala hygienrutiner

Healthcare-associated infections

European CDC
Stockholm

Ausbildung Infektprävention

Sweden

- e-utbildning - Basala hygienrutiner

Healthcare-associated infections

Switzerland ???

Strategie NOSO

7 Schlüsselkomponenten

1. Richtlinien und Weisungen
2. Material und Ausrüstung
3. Organisation der Spitalhygiene und Personalausstattung
4. Aufgabenorientierte Schulung
5. Audits und Monitoring
6. Surveillance und Ausbrüche
7. Interventionen

Strukturelle Mindestanforderungen – was können sie bewirken?

Strategie NOSO

Wirksame Überwachung, Vorbeugung und Bekämpfung von healthcare-assoziierten Infektionen

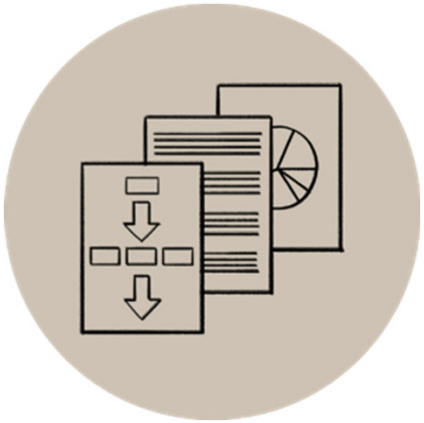
- Wissenschafts- und evidenzbasiert (CDC, ECDC, WHO)
- Vom BAG und den Interessengruppen mitgetragen
- Starke Unterstützung des Strategierahmens von NOSO

Strategie NOSO

1. Richtlinien und Weisungen

- Evidenzbasierte Leitlinien
- Unterstützung durch die Spitalleitung

Spitalhygiene-
Richtlinien sollten
leicht zugänglich sein



Strategie NOSO

2. Material und Ausrüstung

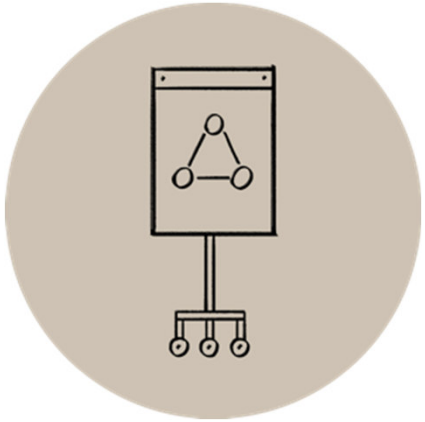
- Verwendung und Promotion von Alkohol-basierten Händedesinfektionsmitteln
- Persönliche Schutzausrüstung (PSA)
- (Flächen) Desinfektion und Sterilisation
- Abfallmanagement

Leichter Zugang zu PSA fördert gute Hygienepraktiken

Strategie NOSO

3. Organisation der Spitalhygiene und Personalausstattung

- Multidisziplinäre Hygienekommission
- Spitalhygiene-Team: Seit 2022 mit standardisierten, geschützten Titel nach erfolgreicher bestandenen Prüfung
  - Pflege: seit > 10 Jahren
  - Ärzte: 2022
- Angemessene Personalausstattung



ausreichende Unterstützung durch die Spitalhygiene erhöht die Patientensicherheit

Fachexpertin/Fachexperte Infektionsprävention

Modul 1	Modul 2	Modul 3	Modul 4	Modul 5
Prävention und Überwachung von nosokomialen Infektionen	Interventionen bei Infektionskrankheiten in Institutionen des Gesundheitswesens	Konzepte zur Infektionsprävention erstellen und weiter entwickeln	Schulung, Kommunikation und Beratung	Projekte und Veränderungsprozesse
1.1: Daten erfassen, analysieren und auswerten	**2.1 Interventionen bei übertragbaren Infektionskrankheiten**	**3.1: Das Infektionsverhütungsprogramm entwickeln**	**4.1 Schulung des Personals (Gruppen und/ oder Einzelpersonen)**	5.1 Expertinnen- / Expertentätigkeit in Projekten
1.2: Erfassen der Ursachen von Normabweichungen	**2.2 Intervention bei Exposition des Personals.**		4.2 Informationsverarbeitung, Öffentlichkeitsarbeit	**5.2 Projekte leiten**
			4.3: Einzel- und Gruppenberatung	

Fachausbildung Ärzt*innen: in Kraft 1.1.2022
Facharzt Infektiologie mit Schwerpunkt Infektionsprävention

Strategie NOSO

Lack of standardized education for hospital epidemiologists (HE) in Europe: Creation of federally regulated HE in Switzerland in 2019

Andreas F. Widmer, University Hospital Basel

#P2575 University Hospital Basel

INTRODUCTION

Effective HAI prevention and control in healthcare organisations relies on specialised infection control staff incharge of elaborating, implementing and monitoring local preventive measures such as hand hygiene and patientisolation. Training in infection control and the epidemiology of healthcare-associated infections was also the topic of one ofthe work packages of the Improving Patient Safety in Europe project (IPSE),
Education of Infection Control nurses or Practitioners (ICP) is commonly well organized and regulated, and in some countries federally regulated with number of credit hours and final exam.
In Switzerland, ICPs training is federally regulated since 2009, and all ICPs must pass a final national exam. In contrast, there is no formal training for hospital epidemiologist.

I therefore provided the background to create a concept for training to receive a diploma/title "ho… epidemiologist"

For the Swiss Society for Infectious diseases (president: Nicola Mueller)

METHODS

Post-doc training for physician is organized by Schweizeris… (SIWF)

(https://www.fmh.ch/siwf/siwf/ueber-das-siwf/portraet.c… …sociation of the Swiss hospital epidemiologist who have earned a board certifi… …ine as well as infectious diseases, and are mainly working as head of hospital epidemiolog… …pitals. However, there is a need for mid-size hospital as well as smaller hospitals to have an in-house … associated physician with specific training in HE.Therefore, I have created a proposal for SIWF) for hospital epidemiology, that requires a training in Infectious disease and at least one year specific training in hospital epidemiology at a university hospital.

Academic Training for Infection prevention (MDs, Nurses and Pharmacists and others)

University/ Institution	Program/Training	Target population	Duration	Year	Exam	Certificate
EUCIC (ESMID)	**EUCIC Infection Prevention and Control Certificate**	medical doctors and pharmacists, nurses or other healthcare professionals with a MSc or PhD	2 years	2018	-	ESCMID
Complutense University of Madrid (Spain)	Online Master based on Clinical Cases	MDs or other graduates healthcare	2 years	2018	Yes	MSc
University of West London (UK)	MSc Infection Prevention and Control (IPC)	Students with a degree or equivalent and be working in an infection prevention role	3 years	2018	-	MSc
Griffith University (Australia)	Online Graduate Certificate in Infection Prevention and Control	Related Bachelor degree or higher, work experience	6 months full time 1 year part time	2019	-	Professional recognition
Association for Professionals in Infection Control and Epidemiology (APIC) (America)	Online learning- Full Course Catalog	-	12 months	2019	-	-

Facharzt Infektiologie akzeptiert durch SWIFT 30. 6.19

RESULTS

In most European and non-European countries including the USA, there is no formal training requirements for hospital epidemiologist. In Northern European countries, HEs are mainly trained as clinical microbiologist, in the USA as Infectioius disease specialists.(Table 2)

In 2018, The Swiss association for training of physicians (SWIF) accepted the training program for HE, as …ciality of Infectious Diseases. In includes 3 years of internal medicine, 3 years for infectious diseases …least 18 clinical services, 2 peer-reviewed papers, and one year of hospital epidemiology at a university …s with specific division of hospital epidemiology.

…derally regulated and structured Training for in Infection Control in Europe (Physicians only)

Country	Institution	Residency Program	Year	Duration
Switzerland	Swiss Medical Association (FMH) Schweizerische Institut für ärztliche Weiter- und Fortbildung (SIWF)	Subspecialty in Infection Prevention and Control Requiremen 3 years Internal Medicine 3 years Infectious diseases (board exam for ID) 1 year infection control (final exam for accreditation "infection control")	2019	7 years 10 years (with internal med board
Sweden	Swedish Medical Association (SLF)	Specialty in Infection Prevention and Control of Healthcare-associated infections (HAIs)	2019	6 years
Germany	Federal Medical Association	Additional advanced training hospital hygiene	-	6 years

- Most countries including the USA lack a federally regulated training program for physicians for hospital epidemiology (HE)
- 2 of 3 European countries just recently accepted a formal title with defined requirements for HE
- In contrast to physicians, training for infection control nurses and practitioners is much more developed and advanced compared to similar training for physician

REFERENCES

1. FMH Swiss Medical Association (www.fmh.ch)
2. SLF Swedish Medical Association (www.slf.se)
3. German Medical Association (www.bundesaerztekammer.de)
4. MSc Infection Prevention and Control. University of West London. Infection Prevention Society (IPS) (www.ips.uk.net/education-events/courses)
5. Master online based on Clinical Cases. Complutense University of Madrid. (www.iras.es)
6. Graduate Certificate in Infection Prevention and Control. Griffith University. (www.griffith.edu.au)
7. APIC. Online Learning. (www.apic.org)
8. European Centre for Disease Prevention and Control ecdc (www.ecdc.europa.eu)

Acknowledgements
I thank the society for infectious diseases and their board for their help.
Additional input from
- Petra Gastmeier, Germany
- Nicco Mutters, Germany
- Stephan Erb, Switzerland

Mindestanforderungen
19. Mai 2022

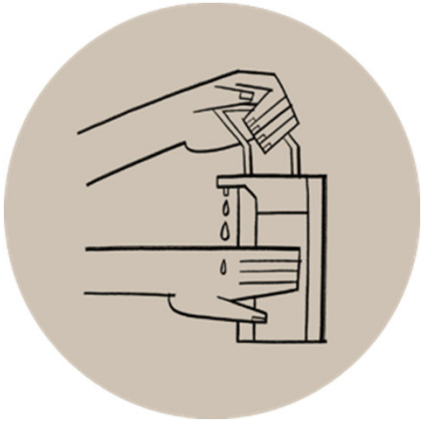
4. Aufgabenorientierte Schulung

- Schulung zu Standard-Hygienemassnahmen für das gesamte Personal

Regelmässige Schulungen verbessern das Spitalhygiene-bewusstsein

5. Audits und Monitoring

- Spitalhygiene-Ziele, Audits und Berichterstattung
- Händehygiene-Monitoring



Händehygiene beim Gesundheitspersonal … nach wie vor verbesserungsfähig?

6. Surveillance und Ausbrüche

- Spitalhygiene-Monitoring und Berichterstattung (zum Beispiel, Module “SSI Surveillance”, “HAI Punktprävalenz-Erhebung”)
- Ausbruchsbekämpfung
- Screening auf multiresistente und weitere relevante Keime

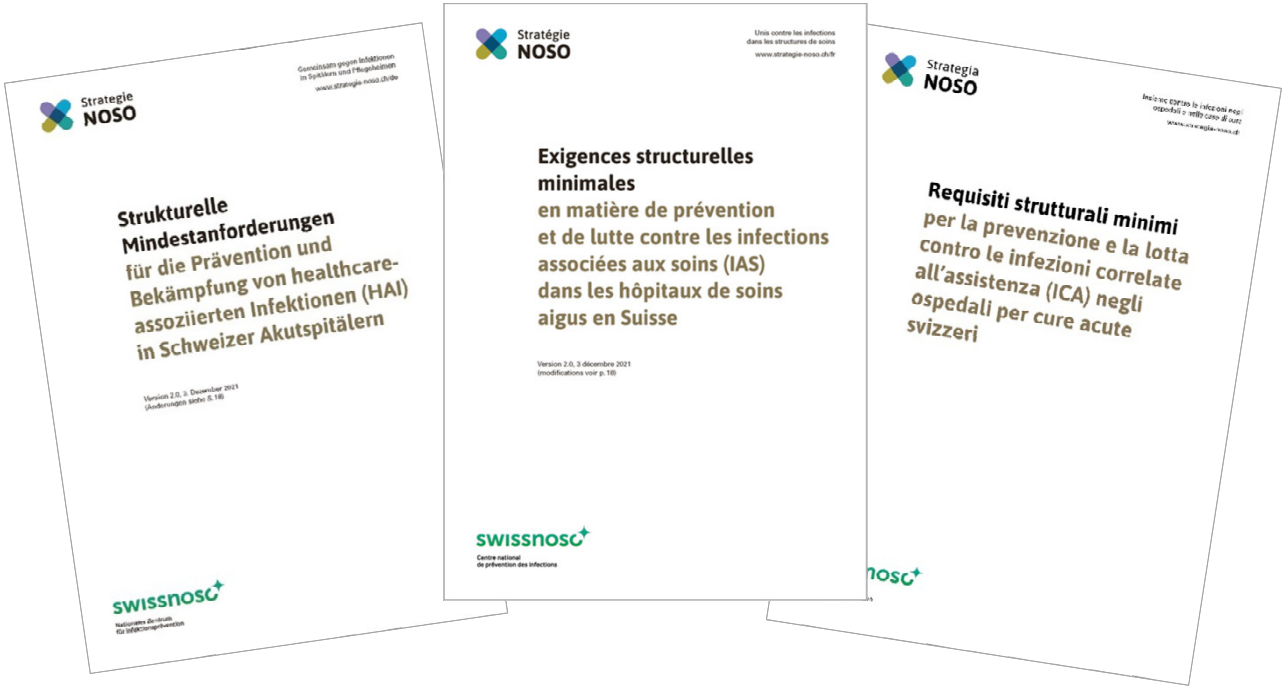
Gute Berichterstattung und Kommunikation schaffen Vertrauen

7. Interventionen

- Umsetzung von Interventionsmodulen zur Prävention von HAI

das SSI Interventionsmodul kann die Rate von postoperativen Wundinfektionen siginfikant senken

Strategie NOSO



→ **Effektive Spitalhygiene**

→ **Verbesserte Entscheidungsfindung**

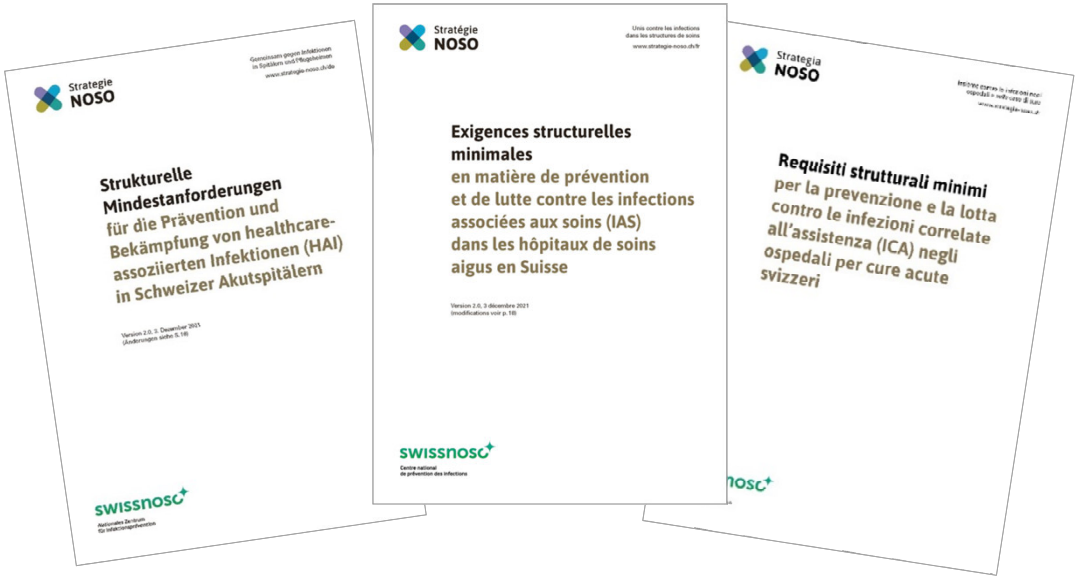
→ **Bessere Versorgungsqualität**

Strategie NOSO

Erfolgsfaktoren

- Unterstützung und Prioritätensetzung durch die oberste Führungsebene
- Organisation:
  - Hygienekommission (CEO, ärztlicher Direktor*in, Pflegedirektor*in)
  - Klare Struktur und Verantwortlichkeiten
  - Prozesse mit Zeitvorgaben/Fristen
- Eigenverantwortung und Führung
- Interprofessionelle Zusammenarbeit
- Evaluierung und Feedback-Kultur

Strategie NOSO



Wenn alle gemeinsam vorankommen,
dann stellt sich der Erfolg von selbst ein.

Henry Ford

WHO report “vermeidbare Pandemie” im Vergleich zu vermeidbare nosokomiale Infektionen

Strategie NOSO

- Bis 2019 Warnungen der WHO über bevorstehende Epidemie
- 12/2019 Kliniken: rasche Erkennung über unübliche Anzahl von Resp. Infektionen. Massnahmen keine.
- 30.1.2020 WHO Public Health Emergency of International Concern (PHEIC)
- ‘wait and see’ approach durch viele Länder
- Länder mit später Reaktion auf Pandemie waren auch solche mit fehlender Struktur, Koordination, Personal
- Vorsorgepläne nicht ausreichend finanziert, / verzögerte Reaktion

Fachpersonal: Nosokomiale Infektion sind ein zunehmendes Problem

Prävalanzresultate liegen vor
Problemkreise erkannt
Konkrete Massnahmen

HAI Mindestanforderungen publiziert Jan. 2021

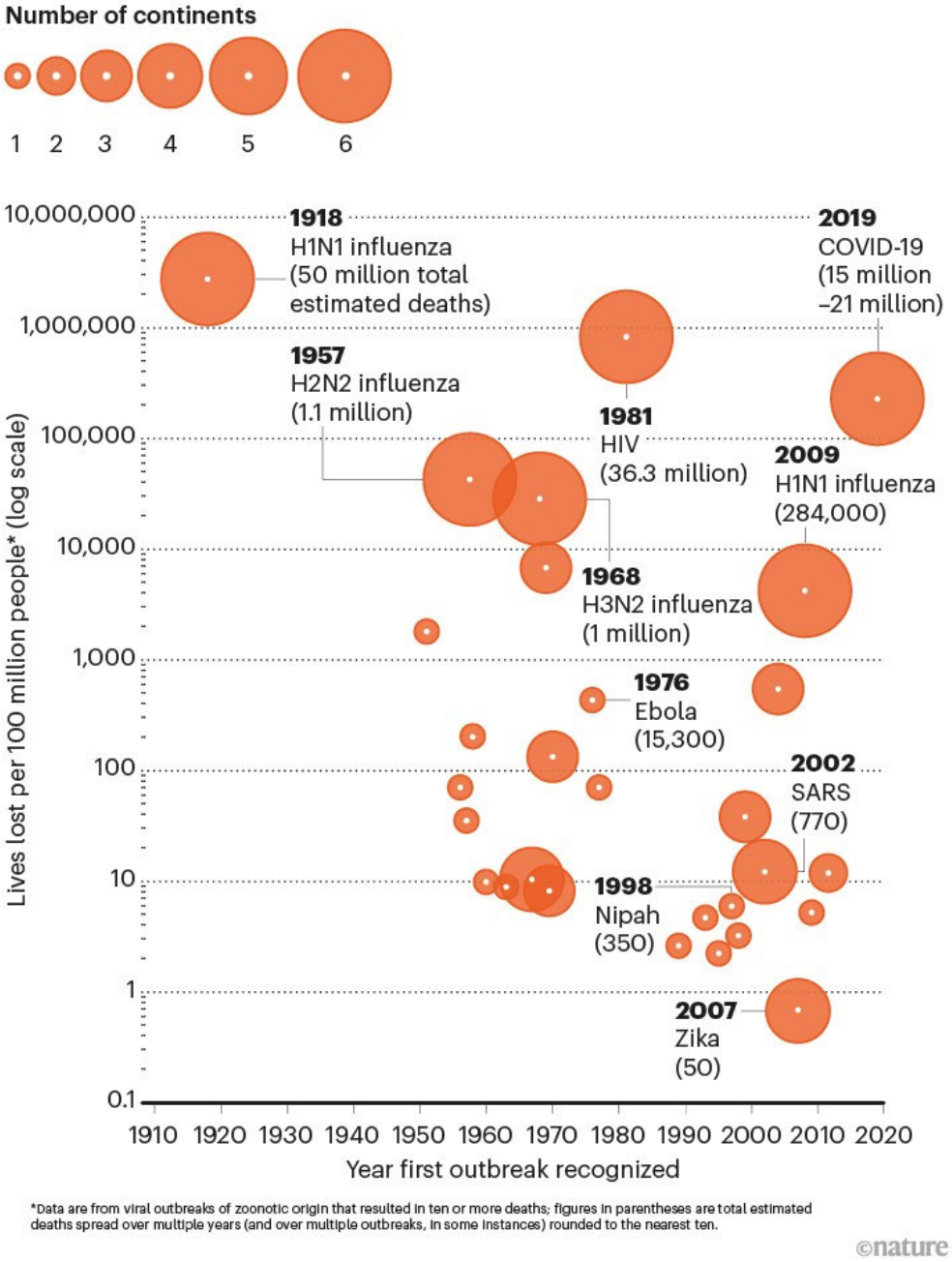
Wait and see approach ?

Ausreichend ausgebildetes Personal in Infektionsprävention

Finanzierung der Infektionsprävention

SPILLOVERS: A GROWING THREAT

Deforestation and other changes have increased the likelihood of animal viruses jumping into people, with globalization and a higher density of human populations having increased the chance that such spillover events will be catastrophic. The annual economic loss from viral zoonoses since 1918 is US$212 billion.



*Data are from viral outbreaks of zoonotic origin that resulted in ten or more deaths; figures in parentheses are total estimated deaths spread over multiple years (and over multiple outbreaks, in some instances) rounded to the nearest ten.

©nature

Strategie NOSO

Prävention von übertragbaren Erkrankungen zahlt sich nicht nur in Gesundheitseinreichtungen / Spitäler aus

Ausbildung auch in der Ambulanz

Nature **605**, 419-422 (2022)
doi: https://doi.org/10.1038/d41586-022-01312-y

Strategie NOSO

Mehr auf der Swissnoso-Webseite

https://www.swissnoso.ch/forschung-entwicklung/strukturelle-mindestanfoderungen-hai

Basel Walk of Fame

Hands of Chief of Departments Surgery & Medicine

D.Pittet

A.Widmer

Danke für Ihre Aufmerksamkeit