Emergo Train System®

Welcome to the ETS meeting! WADEM congress 2025 Tokyo, Japan

ETS会議へようこそ！
WADEM学会 2025年
日本・東京

Agenda

- Welcome, presentation
- News from ETS Competence center
- Group discussions
- ETS faculty Japan

ETS Competence center

- Jenny Pettersson, ETS Director
- Johan Hornwall, ETS Operational Manager
- Linda Bolin, ETS Development Manager
- Peter Berggren, ETS Scientific Manager

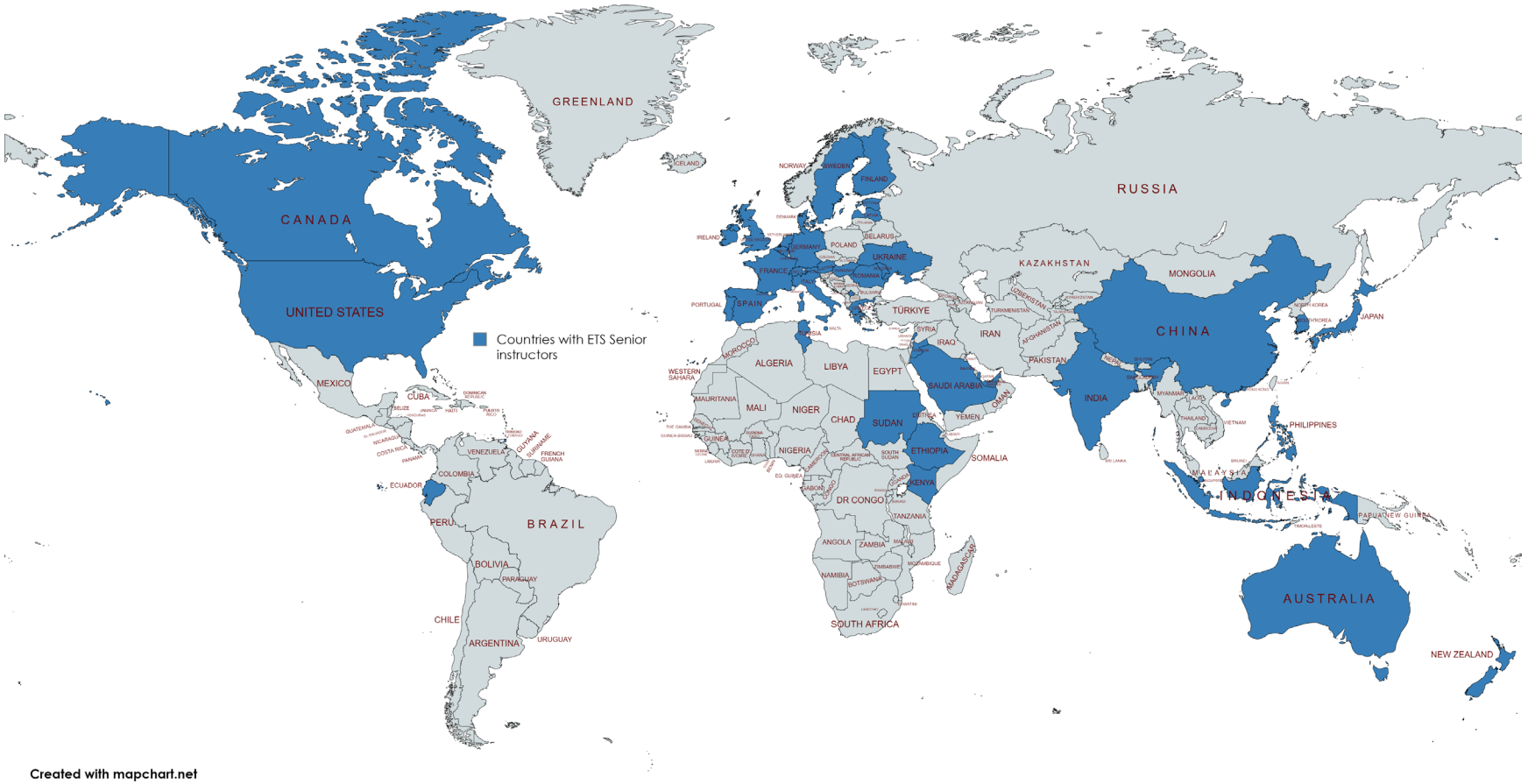
KMC – Center for Disaster Medicine and Traumatology

Presentation of participants

- Your name and country you are from
- How you use ETS
- Describe short your last exercise

ETS Educator faculties

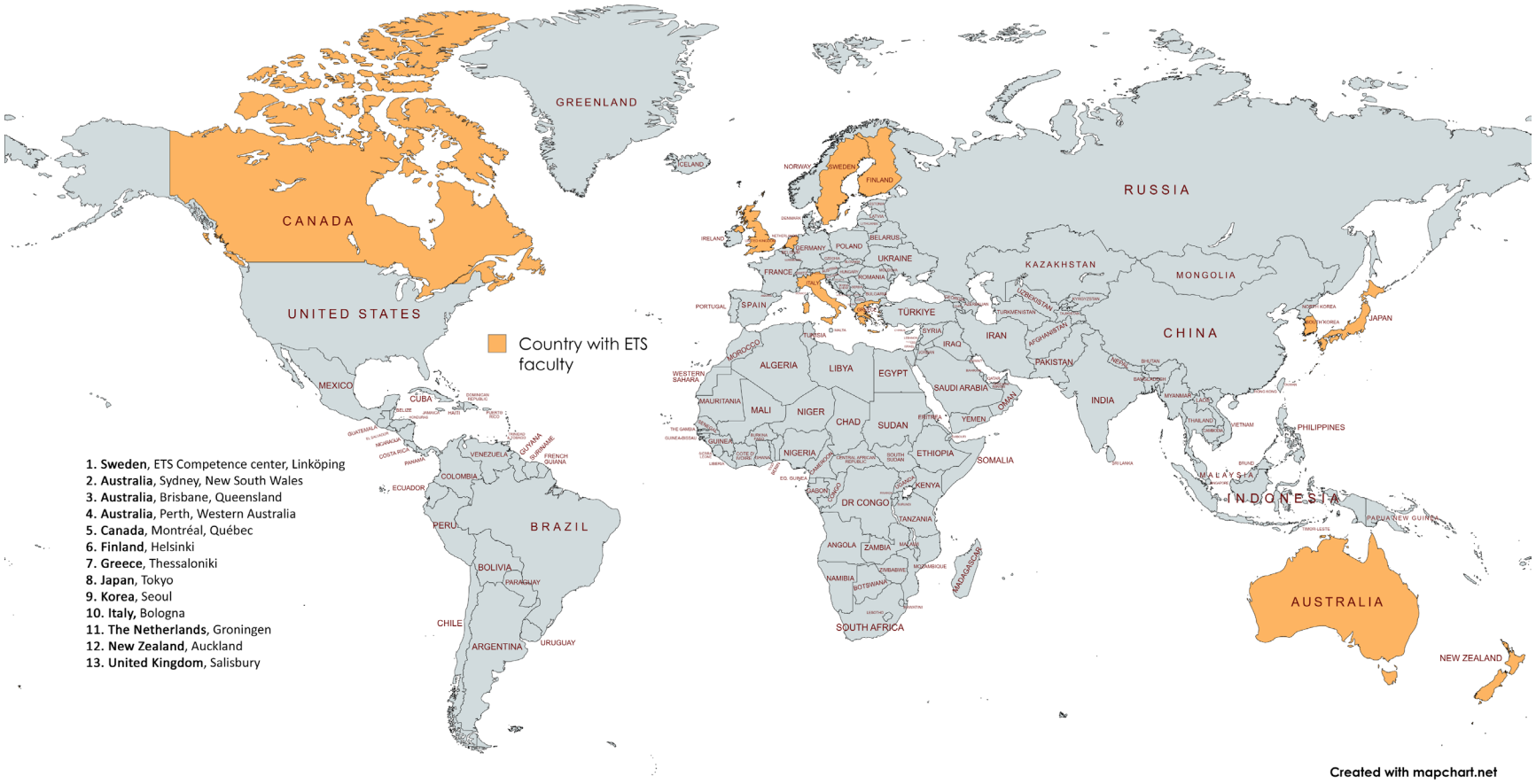
Total number of certifed ETS Senior instructors are 3 140* from 49 nationalities



* Numbers of May 2025

ETS Educator faculties

Total number of certifed ETS Educators are 147* in 13 Educator faculties



* Numbers of May 2025

New ETS developments

ETS Humanitarian set – International Committee of the Red Cross ICRC

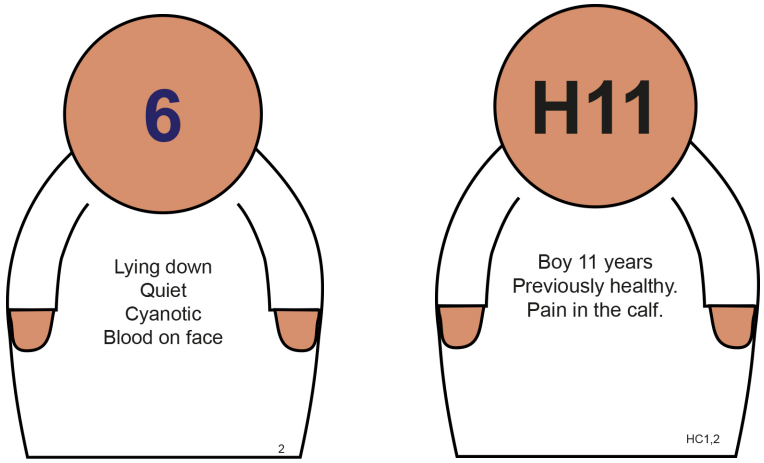
- 31 ETS Senior instructors
- Use ETS in trainings and exercises, for ex Mass Casualty Incident Trainings, testing mass casualty plans, triage, communication etc.
- Use ETS in ICRC projects in for ex. Lebanon, Syria, Ukraine, Nigeria, Yemen, Somalia, Iraq, Venezuela, Pakistan

ETS Humanitarian set

- Developed together with ICRC an ETS Humanitarian set to improve preparedness, capacity and health care personel safety in mass casualty events in humanitarian crisis
- Designed for humanitarian context and low/middle income countries
- Easy to bring/transport
- Customized for low/middle income countries
- Tested with health care personel in conflict areas
- Patients from the already existing ETS ver 4 victim banks

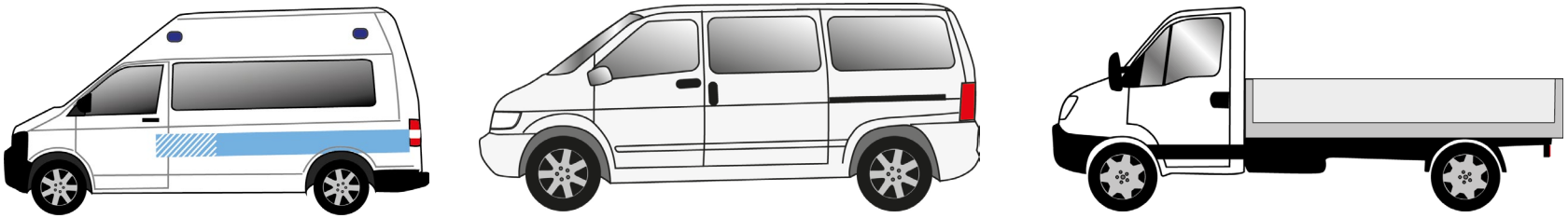
ETS Humanitarian set

- A mix of patients from the already existing ETS ver 4 trauma victim banks – penetrating trauma, burn, pediatric trauma, bomb/blast and in-hospital patient sets



ETS Humanitarian set

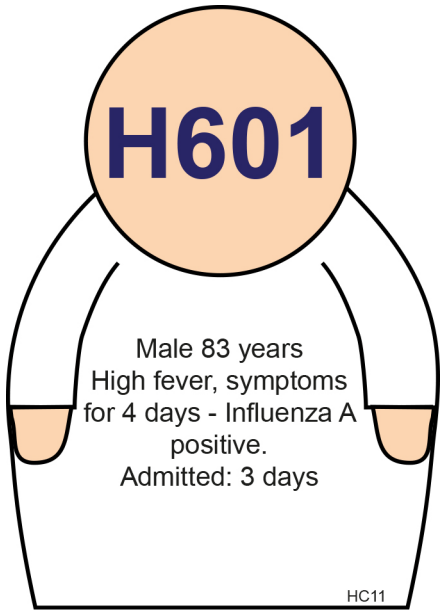
- Customized recourses, staff and signs

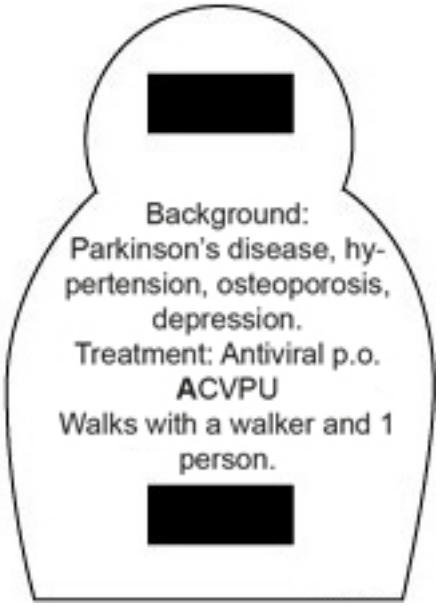


ETS Hospital wards

- 100 patients in total
- 50 medicine patients
- 25 orthopedic patients
- 25 surgery patients

Patient H600-H700

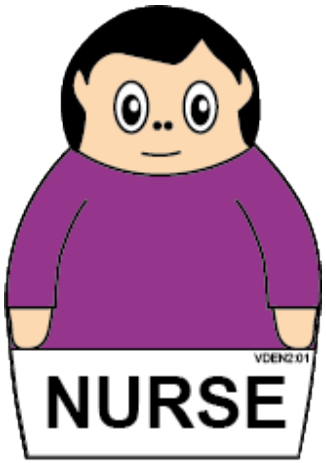


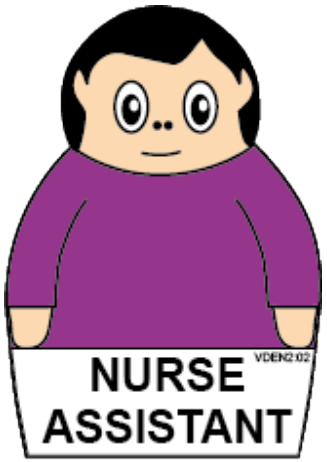


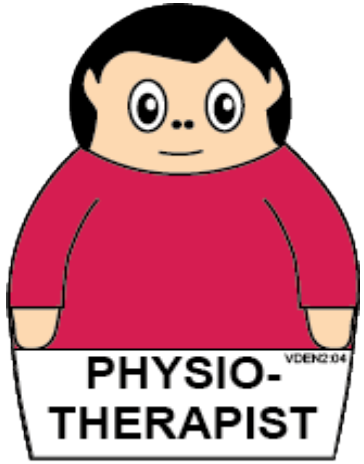
Questions & answers

Patient and Background	Cat	Latest NEWS	Test results	Activities
H601 High fever, influenza A positive, symptoms for 4 days. Admitted: 3 days	HC11 	RR: 18 SpO_2: 98 % Supplemental oxygen: 0 Systolic blood pressure: 140 Pulse rate: 80 bpm Level of consciousness: Alert Temperature; 37,6 Points: 0	Initial CRP; 120 mg/L, CRP day: 3; 45 mg/L	Walks with a walker and 1 person Restrictions for Transfer: Isolated

New resourses

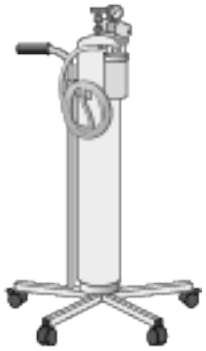




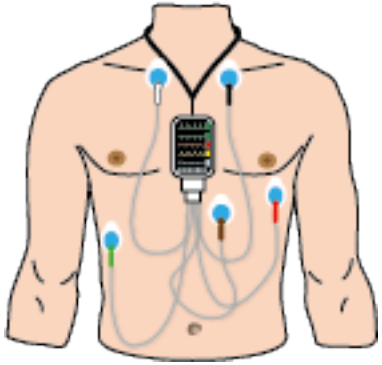


Symbols

OXYGEN



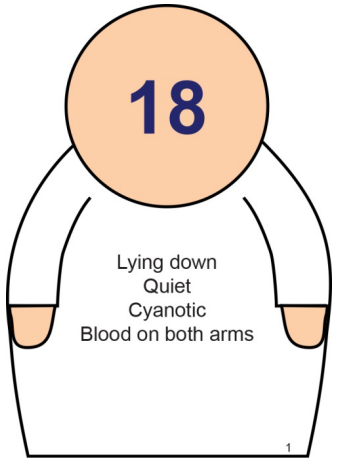
TELEMETRY MONITORING

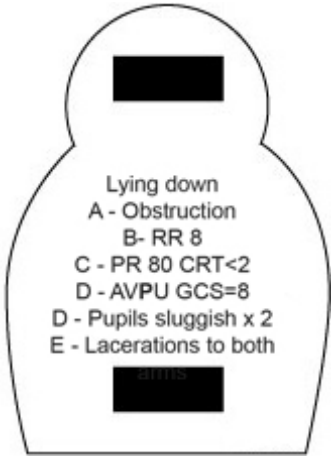


BILEVEL

TRAUMABANK

Trauma victim bank



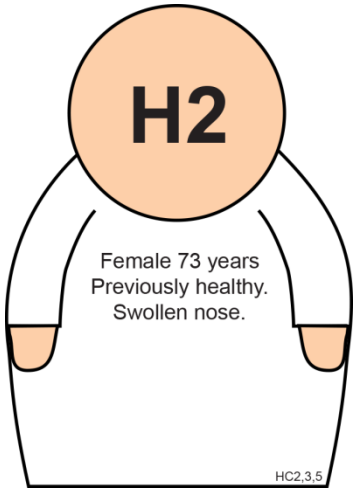


18	EMERGENCY DEPARTMENT
Female ca 20 years unidentified Unkown.	
Finding / Intervention	
Airway: Obstruction / Intubation **Breathing:** RR 8 Breath sounds normal SpO2 92% / Intubation **Circulation:** HR 80 BP 90/55 Temp 35,5 CRT<2 Lacerations to both arms. Heart sounds normal / **Disability:** GCS=9 PERL sluggish x 2/size normal Not moving extremities x 4 **Exposure:** Lacerations both arms / Cleaning, sterile dressing **CT/X-ray:** CT Frontal contusions /	
ED: 40 min	**CT/X-ray: 20 min**

7	SURGERY DEPARTMENT
External fixation + wound excision.	
	Time: 2 hours
POST OP	**ICU**
Observation, analgesia.	
Time: 3 hours	**Time:**

In-hospital patientbank Emergency department

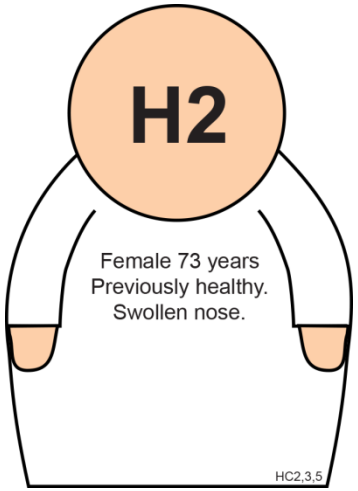
ED BANK



QUESTIONS AND ANSWERS IN-HOSPITAL PATIENTS H1-H50 EMERGENCY DEPARTMENT									
Patient	**CT/X-ray finding**	**CT/X-ray intervention**	**CT/X-ray time**	**Surgery**	**Surgery time**	**Post-op**	**Post-op time**	**ICU**	**ICU time**
H1	Not applicable.								
H2	CT Nose fracture	To surgery	20 min	Reposition, general anesthesia.	30 min	Observation, analgesia	4 hours		
H3	CT Tumor metasthasis is compressing lumbar spine	Second opinion neurosuregeon: to surgery	20 min	Decompressing lumbar spine, general anesthesia.	4 hours	Observation, analgesia	18 hours		
H4	X-ray No finding	Elastic support bandage to physiotherapist.	10 min						
H5	CT No pathological finding		20 min						
H6	X-ray No finding	Elastic support bandage to physiotherapist.	10 min						
H7								Cardiac ICU	1 week
H8	Not applicable.								
H9	CT Pelvospondylit	To reumatological ward	20 min						
H10	CT No pathological finding		20 min						
H11	X-ray Normal.	Elastic support bandage, home	10 min						
H12	Not applicable.								
H13	Not applicable.								
H14	X-ray Non-displaced radius fracture	Cast, home.	10 min						

In-hospital patientbank
Emergency department

E D B A N K

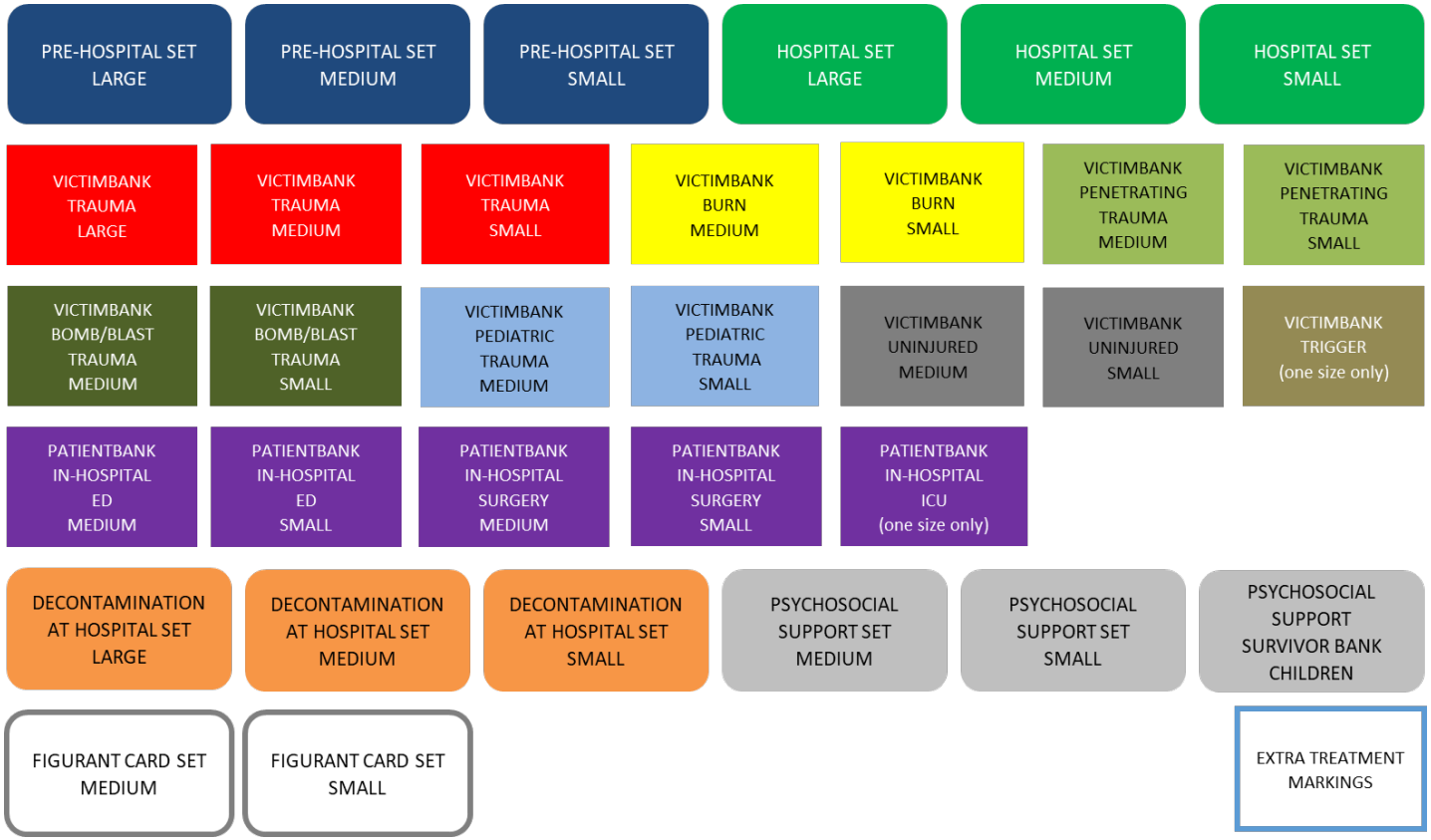


Emergo Train System

EVALUATION
IN-HOSPITAL PATIENTS
H1-H100 EMERGENCY DEPARTMENT

Patient	Home (HC1)	Home, return to ED in 8 hours (HC2)	Admitted to ward (HC3)	Admitted to ICU/Postop/ Cardias ICU (HC4)	Remains on ED (HC5)
H1	OK	OK	Overutilised	Overutilised	Overutilised
H2	Health risk	OK	OK	Overutilised	OK
H3	Health risk	OK	OK	Overutilised	Overutilised
H4	Health risk	OK	Overutilised	Overutilised	Overutilised
H5	Health risk	OK	OK	Overutilised	OK
H6	Health risk	OK	Overutilised	Overutilised	Overutilised
H7	Health risk	Health risk	OK	OK	Overutilised
H8	Health risk	Health risk	OK	Overutilised	Overutilised
H9	Health risk	Health risk	OK	Overutilised	OK
H10	Health risk	OK	Overutilised	Overutilised	Overutilised

ETS training material version 4



Contact us for further information!

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www.emergotrain.com

Research

The effects of learning during Swedish naval training: a quantitative study of simulation-based exercises—a case study

1. Hindorf, M., Liif, E., Berggren, P., Jonson, C.-O., Lundberg, L., & Jonsson, A. (2024). The effects of learning during Swedish naval training: a quantitative study of simulation-based exercises. *Journal of Defense Modeling and Simulation*. https://doi.org/10.1177/15485129241288241

Decision-making during training of a Swedish navy command and control team: a quantitative study of workload effects

2. Hindorf, M., Bäckström, D., Jonson, C.-O., Jonsson, A., & Berggren, P. (2024). Decision-making during training of a Swedish navy command and control team: a quantitative study of workload effects. Cognitive Processing. https://doi.org/10.1007/s10339-024-01242-9

Main findings article 1

- Low-Fidelity Training Can Be as Effective as High-Fidelity Training in Perceived Learning
- Subjective Measures Are Useful in Evaluating Complex Team-Based Learning
- Simulation-Based Training Reinforces Real-World Procedures and Builds Operational Confidence

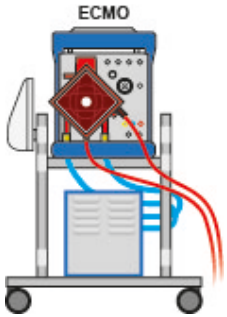
Main findings article 2

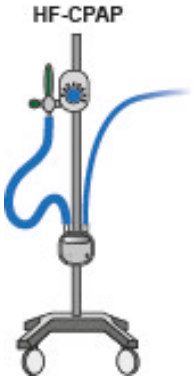
- Comparable Overall Workload in Low- and High-Fidelity Simulations
- Higher Combat Readiness Perceived in High-Fidelity Settings
- Low-Fidelity Settings Induced Higher Mental Demand (and stress) compared to High-Fidelity Settings

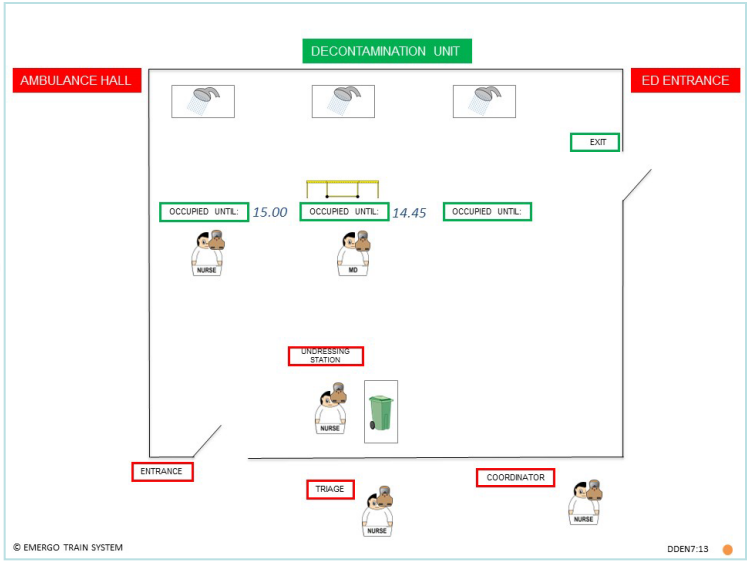
News from ETS Competence center

Decontamination at hospital set ver 4

- Victim bank with patients contaminated with
  - irritant gases (ammonia)
  - cyanide
  - nerve agents (Sarin)







News from ETS Competence center

New interventions

Revised and updated patient outcome

Emergo Train System®

Activities in the decontamination zone (Time is based on experienced staff under optimal conditions)			
Measure	**Sticker**	**Staff needed**	**Time/staff**
Put on hazmat suite		2	15 min
Check hazmat suite		1	1 min
Instructions to patients associated with showering, belongings and valuables + bagging and tagging		1	5 min
Undressing, patient walking		1	5 min
Undressing, patient lying down		2	5 min
Decontamination, patient walking		1	10 min
Decontamination, patient lying down		2-3	15 min
Decontamination and removal of hazmat suite	-	2	15 min

Treatment in the decontamination zone (Time is based on experienced staff under optimal conditions)		
Measure	**Sticker**	**Time**
Endotracheal intubation: Conscious		**7**
Endotracheal intubation: Unconscious		**3**
Inhaler		**2**
Nebulizer		**2**
Antidote		**2**

Instructions group discussion

- Discuss in groups
- Each group will present their conclusion

Group discussion

- Are you confident to hold exercises with ETS after you participated in the ETS Senior instructor course?

  If yes, what are the strengths?
  If no, what is missing?

Group discussion

- What characterizes a ”good” ETS Senior instructor?

Future developments training material

- Primary care set?
- Elderly trauma bank
- Elderly care bank (UK)
- Stabbing patients of school age (lots of stabbings at schools in the UK)
- Psychiatric in-hospital patients (UK)
- Multiple trauma victim bank
- More in-hospital wards patients (cardiac, oncology, dialysis, infection)

Thanks for your input!

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