Why is hygiene important?

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What is a healthcare associated infection (HAI)?

- All infections associated with diagnostics, treatment, care and rehabilitation
- All types of infections
- Hospitals, outpatient clinics, nursing homes & EMS
- Size of problem:
  - Up to 10% of pts
  - Triples length of stay
  - 100,000 pts/yr
  - 3,000 deaths/yr
  - 150 mill €/yr

\[ \text{in DK} \quad \times 100 \text{ in EU} \]
An ethic issue:

HAIs violate the first dictate of health care professionals:

“First, to do no harm”
Types of HAI in the EU 2011-12

ECDC 2013

- LRTI: 26%
- UTI: 21%
- SSI: 16%
- BSI: 11%
- Gastrointestinal: 7%
- Systemic: 7%
- Bloodstream: 4%
- Urinary tract: 8%
- Pneumonia/LRT: 4%
Factors determining health care associated infections

Microorganisms:
- Multi-drug resistance
- Virulence factors

Host factors:
- Old age
- Debilitation
- Immunosuppression

Procedures:
- Diagnostics
- Therapy
- Care
- Rehabilitation

Hospital setting:
- Space
- Ventilation
- Cleanliness
More instrumentation and indwelling devices –
more need for hygiene

Biofilm from catheter
The threat from drug-resistant organisms: MRSA in Europe 2014

ECDC 2015

DANMAP 2016
Two sets of hygiene measures

1. General precautions
   – applied to all patients

2. Specific precautions
   – only implemented after identifying a problem, e.g.
     • Highly contagious patient
     • Multi-drug resistant organism
General precautions

1. Hand hygiene
2. Cleaning of contact surfaces
3. Uniforms

• Targeted use of gloves, aprons & face protection
• Spot disinfection of spills
• Decontamination of utensils & equipment
General precautions are the basis of infection control in healthcare settings.

Many silent carriers

MRSA  ESBL  CPO  C dif  VRE

The Nordic House, Tórshavn, the Faroe Islands
Hand hygiene issues:
Remember to do it – and do it right

WHO: My 5 moments for hand hygiene
Cleaning issues

The two basic questions:
1. Are surfaces clean after cleaning?
2. Are surfaces cleaned often enough?

Unsolved issues:
• Standards for hygienic cleanliness
• Monitoring methods
• Cleaning methods for daily use targeted to hygienic cleanliness
• Staff education
So why is hygiene important?

- **Essential to control HAIs**
  - which endanger patients’ health and lives,
  - disrupt health care routines,
  - and cost a lot of money
- **Contributes to control of drug resistant organisms**
- **The major general precautions are**
  - Hand hygiene
  - Clean uniforms
  - Cleaning of hand touch sites and environment