Sealed Air
Diversey Care

My Day as a Housekeeper Observations and Suggestions

PICNet 2016
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Objectives

Share my experience as a front-line housekeeper

Propose ideas for discussion on cleaning concepts for Environmental Services (EVS)

Who Am I?

Diploma in Medical Laboratory Technology

- 1980 Mohawk College of Applied Arts and Technology

Microbiology Technologist

- 1980 – 1997

Laboratory Manager

- 1997-1999

Jim and Infection Control

Secretary of the Kootenay Lake District Hospital Infection Control Committee (Nelson BC)

Basic Infection Control 1988 (McMaster U => 28 years ago!)

Certification in Infection Control (CIC®) 1990

Community and Hospital Infection Control Association – Canada (CHICA-Canada) Board Member 1992-94 (Technologist Representative)

Jim and Full Time Infection Control

Kingston General Hospital (KGH)

- 1999 – 2003
  - Tertiary care (ICU, NCCU, Paeds, Cancer clinic, EVS, Education)

Providence Care

- 2003 – 2015
- Palliative, Rehabilitative, Geriatric Assessment, Complex Continuing Care, Mental Health

Sealed Air, Diversey Care

- 2015 -

Jim’s Training

Met with one of the two supervisors at Mental Health Services (MHS)

Fran and Ian

- They train ALL new housekeepers
- One Week!

Jim’s Training

Review of WHMIS

- All products used
- MSDS

Sign off sheets

Jim’s Training

Reviewed the ‘Routines’

- Daily clean
- Weekly Clean
- Terminal Clean
- Washrooms

Not too many isolation cleans in this facility


GOLDEN
OPPORTUNITIES
CAUTION


CAUTION
CAUTION


CAUTION


GOLDEN
OPPORTUNITIES
Soaring to
New Heights!
CHICA VANCOUVER 2010

Housekeeping Quotes

Jim Jeroy, Director Environmental Services, KGH

- “Our departments should be one!”

Eric Rose

- One good housekeeper can prevent more diseases than a dozen doctors can cure

My Comments

- If housekeeping is doing their job, I look great!
- You can be the difference between life and death!

Routine Practices

The system of infection prevention and control practices recommended by the Public Health Agency of Canada to be used with all clients/patients/residents during all care to prevent and control transmission of microorganisms in all health care settings

Housekeeping Routine Practices

The system of infection prevention and control practices recommended by Jim to be used with all client/patient/resident room cleaning to prevent and control transmission of microorganisms in all health care settings

The system of infection prevention and control practices recommended by the Public Health Agency of Canada to be used with all clients/patients/residents during all care to prevent and control transmission of microorganisms in all health care settings

Once Upon A Time

Enteric Precautions

Drainage/Secretion Precautions

Blood and Body Fluid Precautions

TB Precautions

Strict Precautions

Respiratory Precautions

Contact Precautions

Routine Practices

Patients are not labelled for bloodborne pathogens

Respect “wet, icky, sticky”

We do label for ARO (MRSA, VRE, CPO, ESBL, etc.)

- Contact Precautions

We do label for CDI

- Contact Precautions
- Modified Contact Precautions
- CDI Contact Precautions

Routine Practices

We do label to protect staff

- Droplet
- Airborne

Routine Practices

My new sign for every patient room:

WARNING!!

This patient has:

- Skin!
- Mucous Membranes!
- Feces!

PERFORM HAND HYGIENE AFTER CONTACT WITH THIS PATIENT OR THEIR ENVIRONMENT!

What Are We Made Up Of?

Skin has 10^{12} organisms on it

1 mL saliva = 1x 10^{10} bacteria

- 10,000,000,000

Colon has 10^{14} bacterial cells

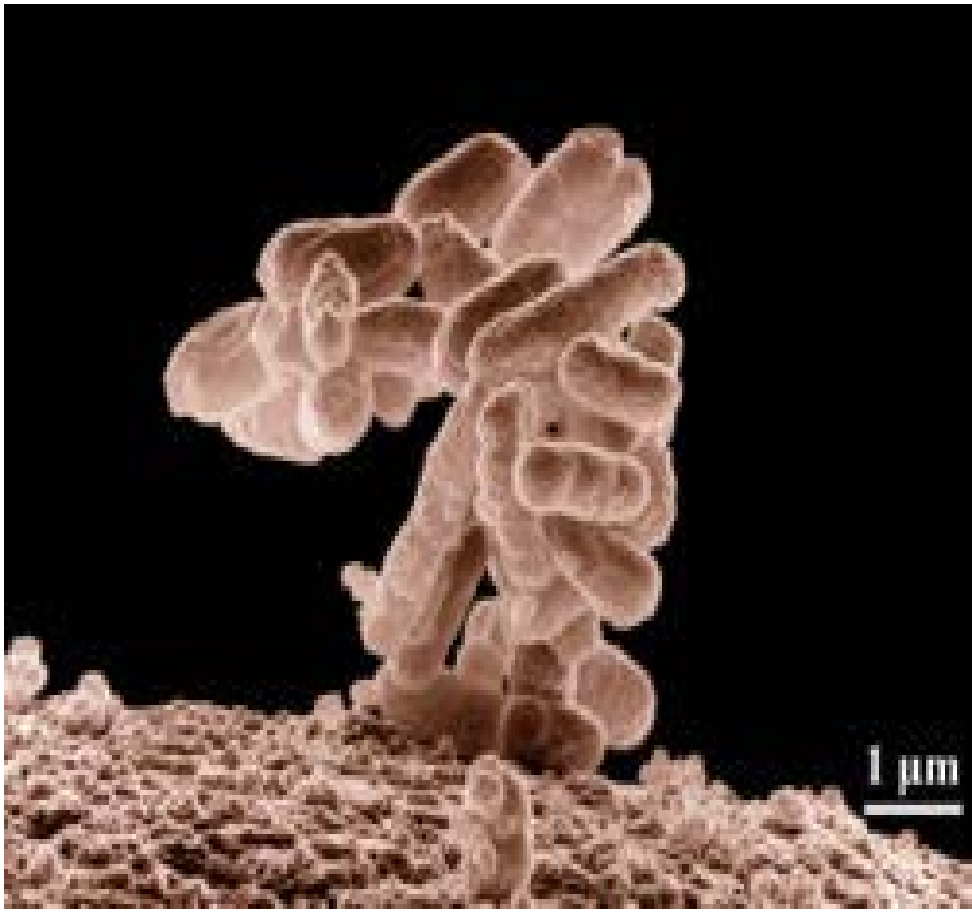
- 300 – 1000 different species
- 1 gram feces (dry weight) = 1x10^{12} bacteria
  - 1 ug feces = 1 x 10^{6} bacteria

We have 1.8-2.3 Kg (4 – 5 pounds)! of bacteria in and on us

Some Stuff You Don't Really Want to Know!

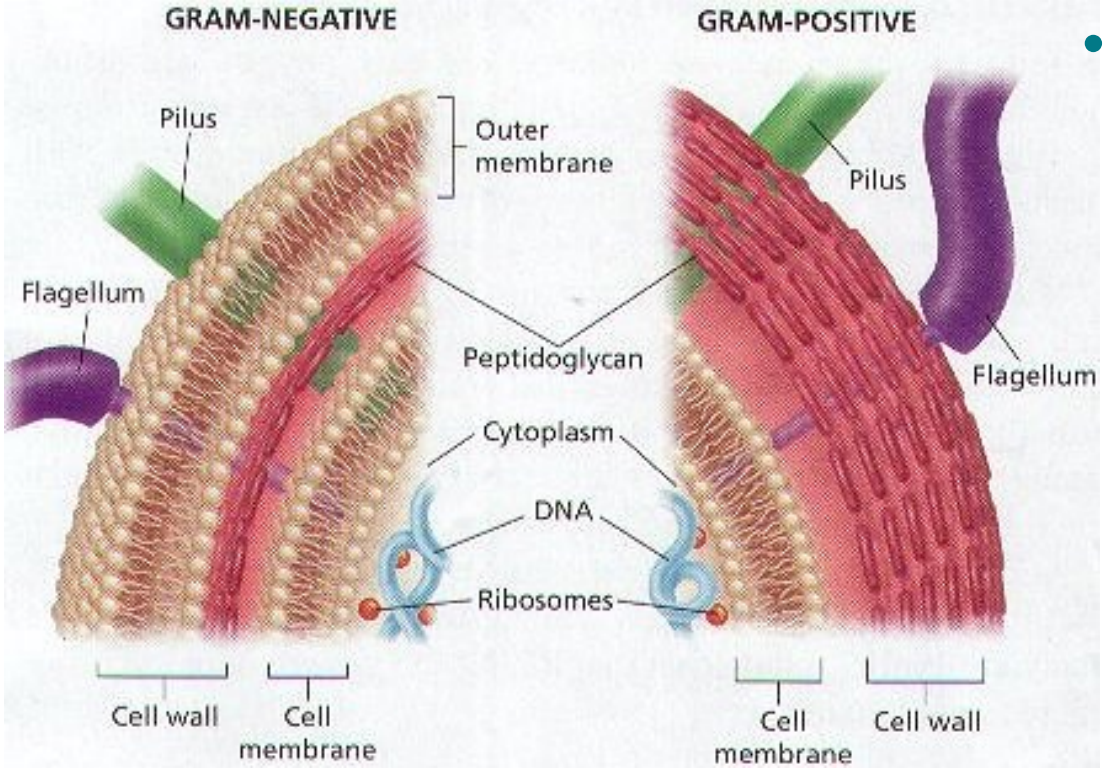
The average person passes 100 – 250 gm of feces per day

Defecation may occur from once every two or three days to several times per day



Wikipedia.org

Fecal Fellows



- Gram negative bacteria
  - *E. coli*
  - *Klebsiella pneumonia*
  - Enterobacter species
  - Citrobacter species
  - Proteus species
  - Providencia species
  - Serratia species

sps.k12.ar.us/massengale/bacteria_notes_b1.htm

Other Poop Pathogens

Salmonella species

Shigella species

Yersinia species

E. coli O157:H7 et al.

Campylobacter species

Aeromonas / Vibrio species

Hepatitis A

Pathogens Can Survive on Surfaces

Kramer 2006

Pathogen	Survival Time
Staph aureus (including MRSA)	7 days – 7 months
Enterococcus species	5 days – 4 months
Acinetobacter species	3 days – 5 months
Clostridium difficile (spores)	5 months
Norovirus (including feline calicivirus)	8 hours – 7 days
Pseudomonas aeruginosa	6 hours – 16 months
Klebsiella species	2 hours - >30 months

Housekeeping Routine Practices

Yes, Jim’s new sign:

WARNING!!

This patient has:

- Skin!
- Feces!
- Mucous Membranes!

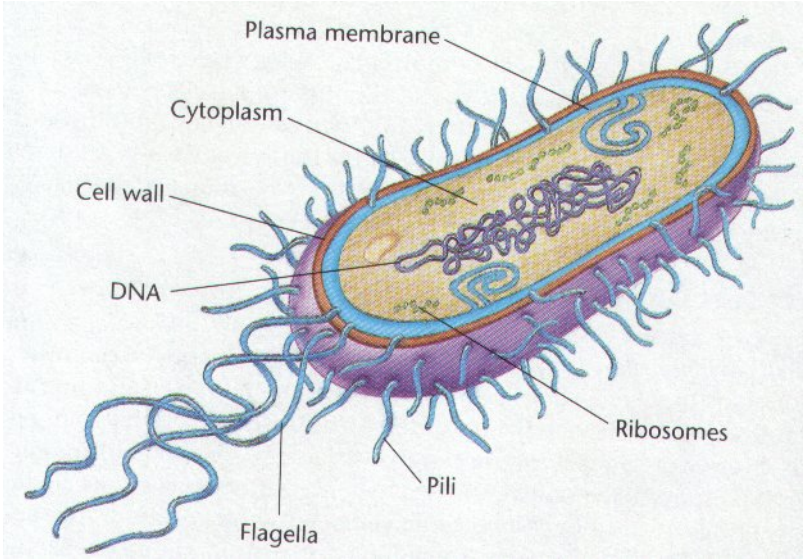
CLEAN AS IF THEY EXPLODED!

Why Would I Say This?

Shock value?

Watching too much “Walking Dead”?

Just knows his Microbiology



How Do I Visualize Patients?

http://www.hahnfamilies.com/Fun%20Stuff/Comics/Peanuts/Pages/pigpen.htm

Is it Just Incontinent Patients?

14 cVRE, continent – Mock exam rooms

Chair cultures positive

- 36% outpatient, 58% hemodialysis

Couch Cultures positive

- 48% outpatient, 42% radiology, 45% hemodialysis

(Grabsch 2006)

How Might This Be Possible

Contamination of patient's clothing?

Poor patient/public hand hygiene?

Do2learn.org

Traditionally

Disinfectant on high touch surfaces

"…those that have frequent contact with hands. Examples include doorknobs, call bells, bedrails, light switches, wall areas around the toilet and edges of privacy curtains"

Clean floors

- Unless visible body fluids

OAHPP 2009

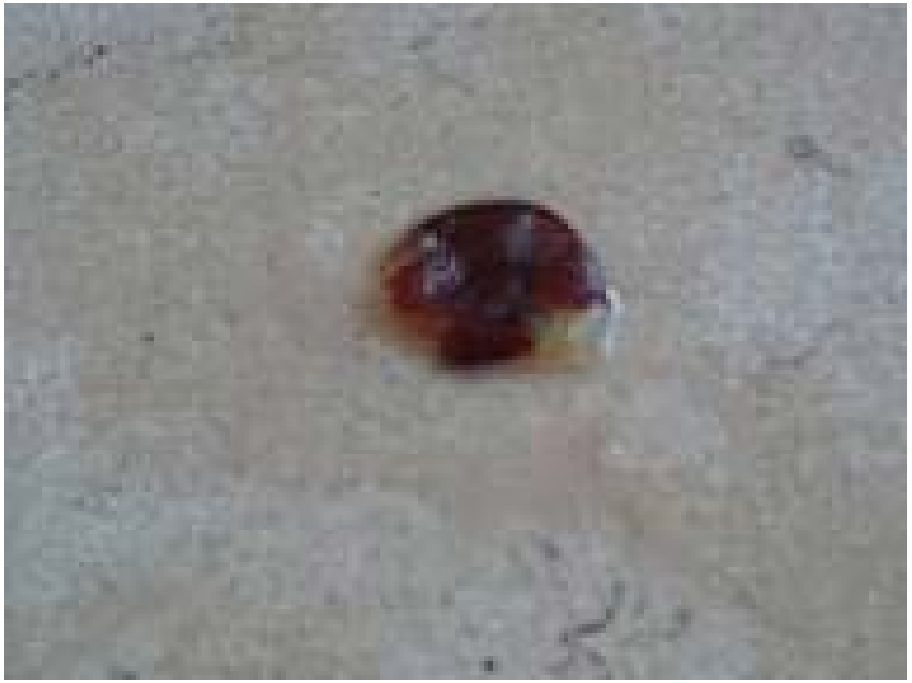
Normal *C. difficile*

Old numbers are 3 – 5% of the population

Up to 21% of hospitalized patients

Kong et al found 4.1% of just over 5000 patients in Quebec colonizied

Why Do We Clean Differently



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www.legalrss.co.uk


SPORICIDAL SLAMMER
YO-HO
QUALITY TOOLS

How Clean is Clean?

Hotel Clean: A measure of cleanliness based on visual appearance that includes dust and dirt removal, waste disposal and cleaning of windows and surfaces.
Hotel clean is the basic level of cleaning that takes place in all areas of a health care setting.

Routine Cleaning

What is required if patient 1 is continent, compliant, capable of hand hygiene?

What is required if patient 2 is incontinent, 1 episode diarrhea (CDI negative), and bed ridden?

Routine Cleaning

Should we clean based on how badly the environment may have been soiled?

- Incontinent
- Wound dressings
- Sputum
- Self suctioning
- Bed baths

Some of this should have required Contact Precautions (warning staff that room may have more soiling than expected?

Point of Care Disinfection

Ready to use wipes at point of soiling

Clear indication of

- When to wipe
- What to wipe
- Who can wipe
- Families, patient, visitors

This will require a good “Why”!

This will require a wipe that is safe for keeping in the patient area, and safe in terms of PPE (Rutala ICHE 2014)

Routine Cleaning

Should toilet areas be cleaned routinely with a sporicidal?

- In case!
- How often?
  - Discharge?
  - Weekly?
  - Patient symptomatic, incontinent?

Physical removal also works (Alfa 2015)

- As can physical spreading! (Satar 2015, Sifuentes 2013)

Auditing

- Providing feedback to staff
  - Helps with motivation
  - NOT punitive
  - Improves compliance (Carling 2006, 2008)
- Checklists, audit tools
  - PIDAC document
  - IPAC-Canada

Double Cleaning

Usually for enteric related organisms

- CDI
- VRE

Clean room

Clean room again with Bleach solution

- Effective
- But Why?

Whole Room Systems

UV

- Still have to clean room (hotel clean)
- Line of sight issues
- Log reductions

Fogger/Mister

- Still have to clean room
- Turn around time
- Toxicity

Bedside Curtains

One of those frequent questions

Edges are considered high touch by PIDAC

PIDAC Environmental Cleaning (OAHPP 2009)

- Scheduled
- If visibly soiled
- If contact precautions were in place

Bedside Curtains

One Month?

Three Months?

Six Months?

Don’t Forget:

- 4 Moments for Hand Hygiene

Spray with hydrogen peroxide based disinfectants (Rutala AJIC 2014, Cadnum 2015) to decontaminate


Fairlee

Cleaning and Disinfecting

We need to clean better (Alfa 2015)

- Microfibre and quat binding
- Single Dip Methods (non-cotton based cloths)
- Remove dirt, organisms, spores

We need to clean effectively

- Well trained
- Check the work (fluorescent marker, ATP)

(Alfa 2015, Buntrock 2005, Carling 2006, Carling 2008, Dettenkofer 2004)

Cleaning Equipment Cleaning

Should be cleaned!

Mop press and bucket

Smaller ‘rag’ pails

- Does not matter if it had disinfectant in it!
- Don’t over-saturate microfiber cloths or mops

http://farm3.static.flickr.com/2131/2151479844_8c3c82b964.jpg?v=0

Cleaning and Disinfecting

Florence Nightingale recognized that cleaning was vital in 1850's

(Dancer 1999)

Disinfecting is not as important as effective cleaning

(Dettenkofer 2004, Alfa 2015)

Housekeeping has been cut too far in many institutions

- Or lowest bidder!
- Turn over of 150%

Let’s Be Politically Incorrect!

Patients acquiring VRE, CDI, ESBL, CRO exposed to feces – not colonized!

- Main source of gram negative bacilli anywhere!

I still feel most nosocomial cases of VRE and CDI indicates that:

- the patient has ingested feces!

(Cartmill 1994)


don't eat poop

What Did I Learn?

Hard Work

Not pleasant smelling work

Vitally important work

Potentially very dangerous to patients/public

Can be confusing

- Contact
- Modified Contact
- CDI Clean
- Daily, weekly, terminal


SensiCare
SensiCare
SensiCare
GOLDEN OPPORTUNITIES

What Do I Preach?

Very important work

- Patients, staff, public

Need consistent training for all

- Part of orientation

Need auditing

Need mock rooms?

Questions?

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