



## Biofilms are forming on many dry hospital surfaces because they aren't cleaned frequently or effectively enough.

The bacteria have a chance to attach and excrete extracellular organic substances, or slime, which makes them more resistant to removal and tolerant to disinfectants.

### Process used by bacteria to form biofilms on dry surfaces

- Individual bacterial cells land on a surface.
- Some attach to surface, and may be aided by organic chemical or soil residues.
- Attached bacteria release extracellular organic substances which allow additional mixed bacteria to adhere to the colony being formed.
- Biofilm bacterial communities shed bacteria back into the environment
- Once the bacterial community has matured the bacterial population is protected from cleaning processes and biocides.



## PCS OFFERS TWO OPTIONS TO ADDRESS ACCUMULATED FIXED ORGANIC SOILS FROM SURFACES.

### 1 - PCS Prevention Process

Frequent cleaning with PCS microfiber cloths and PCS 7000 Disinfectant Cleaner diluted to the cleaning and sanitizing solution of 200 ppm of sodium hypochlorite.

Frequently damp wiping surfaces with this process keeps organic soils oxidized and our microfibre cloths add the friction needed to remove and prevent organic soils from accumulating.

PCS 7000 cleaning and sanitizing solution has demonstrated a greater than 7 log reduction in Staphylococcus aureus and Escherichia coli in 30 seconds (Germicidal and Detergent Sanitizing Action of Disinfectants). Approved and recommended for no rinse sanitization of pre cleaned direct food contact surfaces.

Unlike detergents and disinfecting detergents PCS 7000 contains no organic substances that microbes could consume the residues as a nutrient source.

#### The process

- ✓ Dampen PCS microfiber cloths in a solution containing 200 ppm of PCS stabilized sodium hypochlorite solution.
- ✓ Double wipe surfaces applying pressure to maximize removal of soil.
- ✓ Oxidizing cleaning without depositing organic chemicals.

### 2 - PCS Deep Cleaning Process

For added efficacy during persistent outbreaks and to oxidize and remove accumulated organic soils. Organic soils or mature biofilms resist cleaning and disinfecting and there is evidence bacteria lodged within biofilms can be up to 1000 times more resistant to disinfecting chemicals.

#### The Process

- ✓ Apply PCS 7000 Disinfectant Cleaner with PCS Disinfectant Application cloths
- ✓ Keep surfaces wet for five minutes to kill C difficile spores and to oxidize accumulated organic soils.
- ✓ To prevent oxidized organic soils from reattaching wipe surfaces with a PCS microfiber cloth dampened in cleaning and sanitizing solution of 200 ppm of PCS 7000.

\*Alternatively PCS 7000 can be applied undiluted to a pre dampened PCS microfiber cloth.

There is evidence concentrations of sodium hypochlorite can oxidize biofilms matrix therefore adding a damp wiping step after disinfection will improve the removal of organic soils.

