

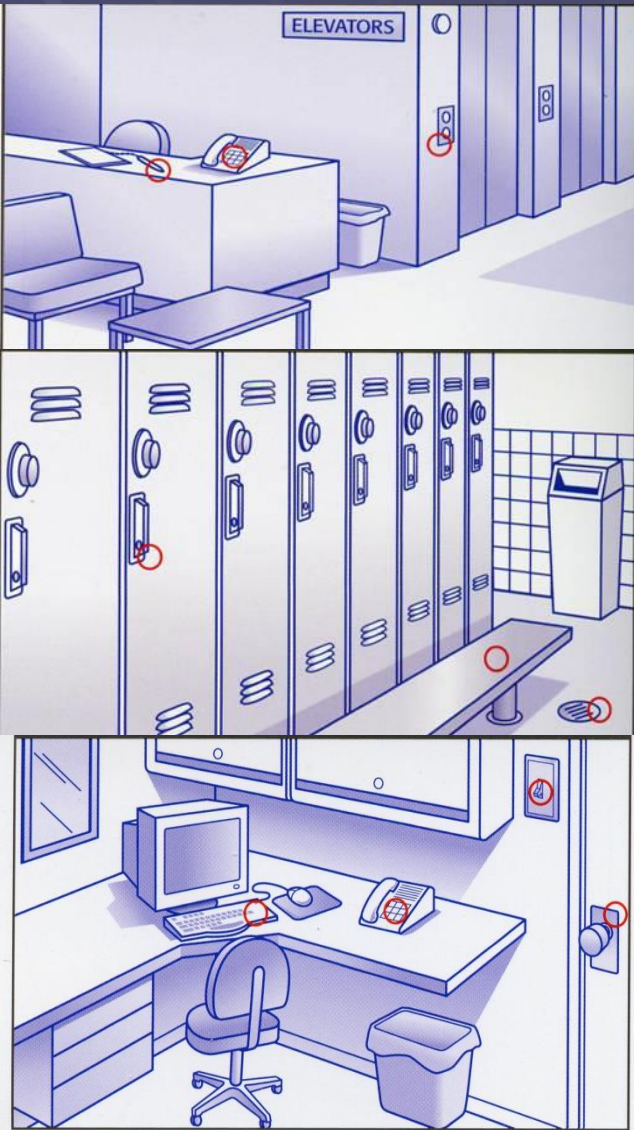
**BioProtect**

**Antimicrobial**

**Biostatic Surface**

**Protection**

# What is BioProtect antimicrobial product protection?



- BioProtect is a patented, EPA registered, innovative new product.
- BioProtect technology is a spray-on antimicrobial protection for porous and non-porous surfaces.
- BioProtect antimicrobial protection gives substrates an added level of protection against damaging microbes such as bacteria, mold and mildew that can cause stains, odors and product deterioration.

# Problem Areas

- Hi-Touch points: touched by many people, multiple times per day
- Door handles, doors, desks, cleaning equipment, toilets, medical equipment, walls, beds, bed linen, uniforms, towels, gym equipment, AC ducting, ceilings.....the list is endless
- 80% of infection spreads through touch-points
- Touch points, floors, ceilings, AC ducting which are not cleaned regularly are reservoirs for health-damaging bacteria

# How Does BioProtect protection work?

- The active ingredient in BioProtect polymerizes to all surfaces and is both colorless and odorless.
- Think of BioProtect as a layer of electrically charged swords. When a microorganism comes in contact with the treated surface, the quaternary amine sword punctures the cell membrane and the remnants are then electrocuted.
- Since nothing is transferred to the now dead cell, the antimicrobial does not lose its strength and the sword is now ready for the next cell to contact it. (NOTE: Normal cleaning of the treated surfaces is necessary in order for the BioProtect antimicrobials to continue their effectiveness. Dirt buildup, paint, dead microbes, etc. will cover the treatment prohibiting it from killing microorganisms.)

# Microbial Attack

- Microbial growth is activated by high temperature and moisture
- Standard cleaning chemicals and protocols are often ineffective and short-lived
- Microbes rapidly adapt, mutate and multiply
- Chemical residues and dead microbes become food source for mutated, more resistant microbes
- The more you clean with conventional chemicals, the greater the risk of microbe mutation!



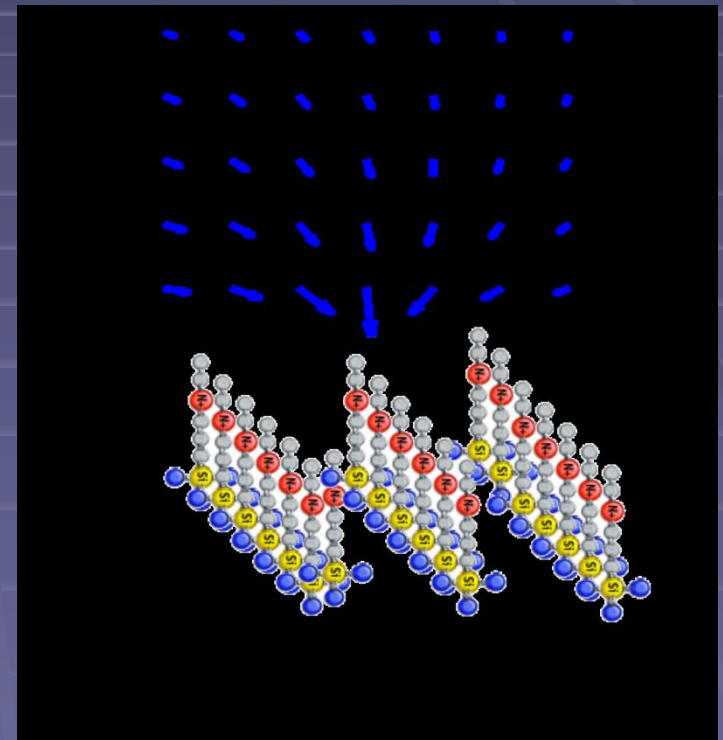
# Why is BioProtect different?

- BioProtect is a biostatic surface protectant. It is not:
  - Leaching Poisons
  - Heavy Metals
  - Triclosans
- All of the products listed above can create superbugs and do not have a residual effect.
- BioProtect protects surfaces and textiles in between cleanings.

# How It Works



- **BioProtect** forms an almost permanent bond with the surface substrate.
- A ‘wheat field’ of carbon shafts protects the surface from microbes.
- Microbes are drawn to the ‘wheat field’ of shafts by the positively charged nitrogen atom.
- The microbe’s cell wall is ruptured by the shafts.
- A positive charge from the nitrogen atom delivers a fatal electrical charge to the cell wall of the microbe



# What benefit do I get from products that are treated with BioProtect?

- BioProtect continuously fights the growth of microbes that can cause stains, odors and product degradation.
- BioProtect protection makes all surfaces that are treated easier to clean and keeps them cleaner and fresher between cleanings.



# Does BioProtect begin working immediately?

- BioProtect starts to work as soon as the microorganism comes into contact with the treated surface.
- It then works continuously to maintain a consistently lower bio-burden than would be expected on a surface without BioProtect protection.

# How do I know that BioProtect is safe?

- BioProtect technology has undergone extensive independent laboratory testing and has a long history of safe use.
- It is registered with the EPA for all applications in which it used.