



Revisiting Legacy IPC Guidelines

Why 20th-century detergent-based cleaning
no longer meets today's infection risks

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Objectives



REVISIT HISTORICAL
ASSUMPTIONS BEHIND
DETERGENT-BASED
CLEANING



EXAMINE WHY THESE
ASSUMPTIONS NO LONGER
ALIGN WITH INFECTION RISK



USE OUTBREAK EVIDENCE
TO TEST LEGACY MODELS



COMPARE AUSTRALIAN AND
NHS GUIDANCE



20th-Century Cleaning Assumptions

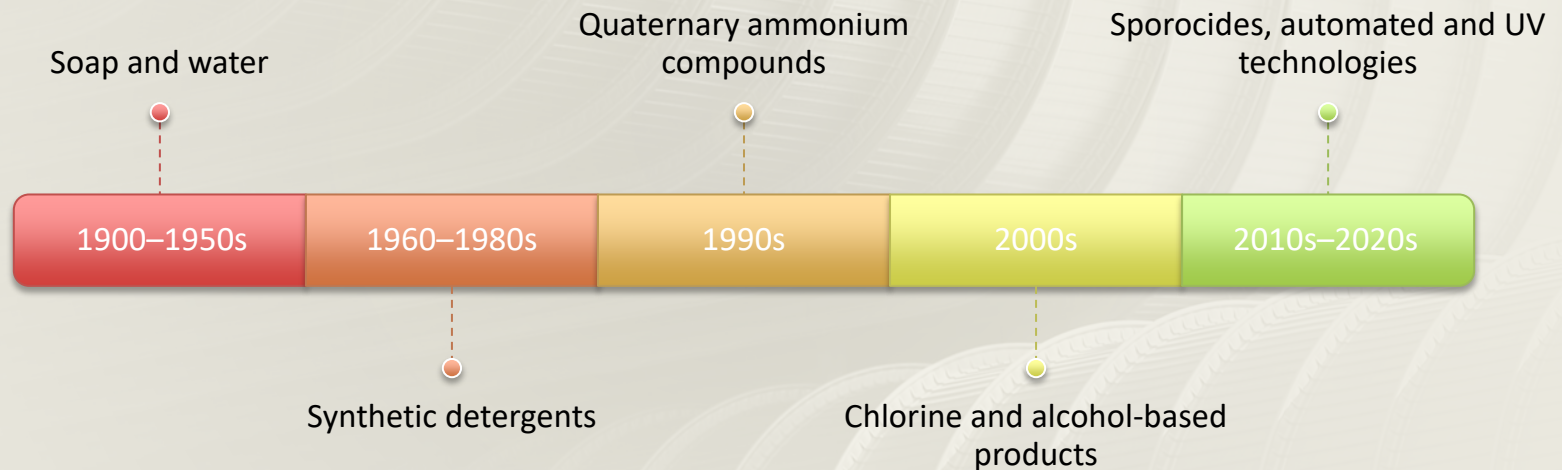
- Lower patient acuity and fewer invasive devices
- Limited understanding of surface persistence
- Minimal antimicrobial resistance
- Visible cleanliness equated with safety

What Detergents Do

- Surfactants remove organic soil
- Reduce bioburden but lack reliable kill
- Effectiveness reduced by biofilms and heavy soil



Timeline of Cleaning and Disinfection



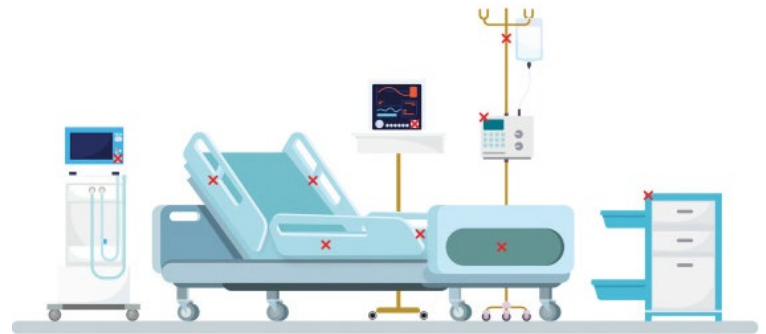
Biofilm: Critical Failure Point

- Microorganisms embedded in extracellular polymeric substance
- Physical and chemical protection from detergents
- Visual cleanliness does not reflect microbial load



Why Biofilm Matters for IPC

- High-touch surfaces seeded repeatedly
- Shared equipment amplifies transmission
- Detergent-only models fail silently



Outbreak Case Studies



DOCUMENTED
OUTBREAKS, NOT
ANECDOTES



ENVIRONMENT
REPEATEDLY IMPLICATED



SYSTEM DESIGN ISSUE
RATHER THAN STAFF
FAILURE

Case Study: Clostridioides difficile

- Spores resistant to detergent cleaning
- Persistence on surfaces weeks to months
- Sporocidal disinfection reduced outbreak duration



Case Study: MRSA / VRE

- High-touch surfaces rapidly re-contaminated
- Detergents reduce counts temporarily
- Transmission reduced when targeted disinfection implemented



Case Study: Shared Clinical Equipment

- Pumps, monitors, workstations on wheels
- Detergent wipes lack solution volume
- Ambiguous ownership drives risk



Australian Guidance – Key Messages

- Detergent cleaning is the first step
- Disinfection based on risk assessment
- Use of TGA-listed hospital-grade disinfectants
- Routine auditing and performance monitoring

NHS Guidance – Key Messages

- Risk-based environmental cleaning
- National standards of healthcare cleanliness
- Enhanced methods required for high-risk areas
- Mandatory escalation during outbreaks

Why Legacy Practice Persists

- Cost and workforce pressures
- Historical training models
- Comfort with visible cleanliness

Reframing Environmental Cleaning

- From housekeeping task to infection control intervention
- Layered controls matched to risk
- Integration with outbreak response and AMS



Key Take-Home Messages

- Detergent-only cleaning is historically contextual
- Modern infection risk demands escalation
- Guidelines already support contemporary practice

Appendix: Key References (1/2)

- Australian Guidelines for the Prevention and Control of Infection in Healthcare
- Australian Commission on Safety and Quality in Health Care – Environmental Cleaning Resources
- Principles of Environmental Cleaning – Product Selection (ACSQHC)

Appendix: Key References (2/2)

- NHS National Infection Prevention and Control Manual v2.12
- National Standards of Healthcare Cleanliness 2025
- CDC Environmental Cleaning and Disinfection in Healthcare