

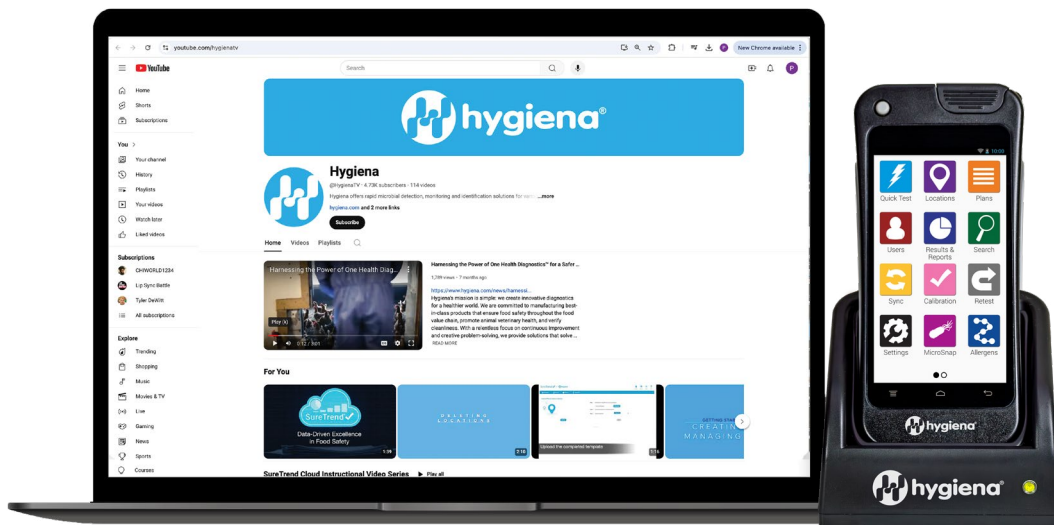
EnSURE[®] Touch

ATP Cleaning Verification System

System Implementation Guide

This guide is designed to assist users in setting up and operating an ATP cleaning verification program using the EnSURE® Touch ATP Cleaning Verification System within healthcare facilities.

For instructions on how to operate the EnSURE Touch, please refer to our product operation instructional materials online.



Watch Instructional Demos at:

vimeo.com/hygienatv

Find downloadable resources and more information at:





www.hygiena.com/solutions-by-industry/healthcare-hospital

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Introduction to the EnSURE Touch ATP Cleaning Verification System

Hygiena's EnSURE Touch ATP Cleaning Verification System is a tool used to:

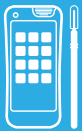
-  Educate environmental services professionals and other personnel on proper cleaning technique
-  Monitor and improve the cleanliness levels of surfaces in healthcare facilities
-  Monitor the effects of changes within a cleaning program
-  Document and track individual and overall cleaning performance



Healthcare facilities that implement an objective monitoring system experience a 42% increase in cleaning thoroughness.ⁱ The Centers for Disease Control and Prevention (CDC) encourages all healthcare facilities to develop preventative programs to optimize and monitor the thoroughness of high-touch surface cleaning.ⁱⁱ

The EnSURE Touch ATP Cleaning Verification System enables healthcare organizations to:

- Quickly assess surface cleanliness for immediate corrective action
- Standardize acceptable cleaning performance to reduce variation
- Improve environmental services personnel training
- Evaluate cleaning processes and tools for effectiveness
- Reduce reliance on slow, costly, labor-intensive microbiological tests
- Identify problem areas, track improvements, and ensure compliance
- Strengthen cleaning programs to prevent infections (HAIs)
- Enhance patient safety and satisfaction through the commitment to cleanliness



Using Hygiena's EnSURE Touch ATP Cleaning Verification System, in healthcare facilities create a standard of cleaning effectiveness.

ⁱ Carling, P.C., & Bartley, J.M. (2010). Evaluating hygienic cleaning in health care settings: What you do not know can harm your patients. *American Journal of Infection Control*; 38: S41

ⁱⁱ [Access CDC toolkit here](#)

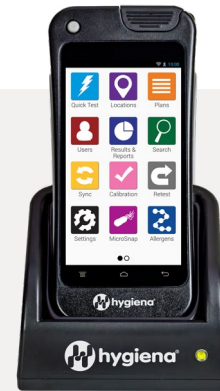
Components of the EnSURE Touch ATP Cleaning Verification System

The EnSURE Touch ATP Cleaning Verification System consists of four parts:

1. EnSURE Touch Luminometer

A user-friendly, handheld, light-reading unit that provides precise, on-site test results. Used with the UltraSnap testing device, extremely low levels of contamination can be detected in just 10 seconds.

(Catalog # ETOUCH)



2. UltraSnap® Testing Device

A convenient, all-in-one ATP test device. Simply swab, snap, and squeeze, and the test is ready to be measured in the EnSURE Touch. Packaged 100 tests per box.

(Catalog # US2020)



3. SureTrend® Data Analysis Software

A powerful software program that allows users to upload test results to a database, analyze trends, and generate reports for management and record-keeping.

(Free basic version included with your EnSURE Touch luminometer; Starter, Power and Premium packages available for a nominal fee).



4. Calibration Verification

Confirm your EnSURE Touch is operating within specification.

(Catalog #CAL) See section 2.10 Calibration for more details.



Hygiena's luminometer, testing devices, and software are designed to be easy to use, enabling operation by both technical and non-technical staff.

Section I: An Overview of ATP Cleaning Verification

The EnSURE Touch ATP Cleaning Verification System is a rapid cleaning monitoring system used to help hospitals and other healthcare organizations achieve optimal standardized cleaning levels. The system uses bioluminescence technology to identify and measure **adenosine triphosphate**, commonly known as **ATP**.

1.1 What is ATP?

ATP is an energy molecule found in all living cells that allows cellular metabolism to take place. All organic matter contains ATP, including blood, saliva, and bacteria. In healthcare facilities, organic matter such as bodily fluids, blood, and bacteria left on surfaces can become a point of cross-contamination between patients and staff, leading to infections if not properly cleaned. Therefore, the detection of ATP on a surface after cleaning is an indication of improper cleaning.

1.2 Measuring ATP with Bioluminescence Technology

UltraSnap ATP surface tests contain an enzyme called luciferase, which produces a bioluminescence (light-producing) reaction when it comes into contact with ATP. The light emitted from the reaction is measured and quantified in the EnSURE Touch luminometer. The graphic below illustrates how ATP on a surface reacts with the enzyme in UltraSnap ATP test devices to emit light.

ATP on a Surface

+

Enzyme in UltraSnap

=

Emitted Light



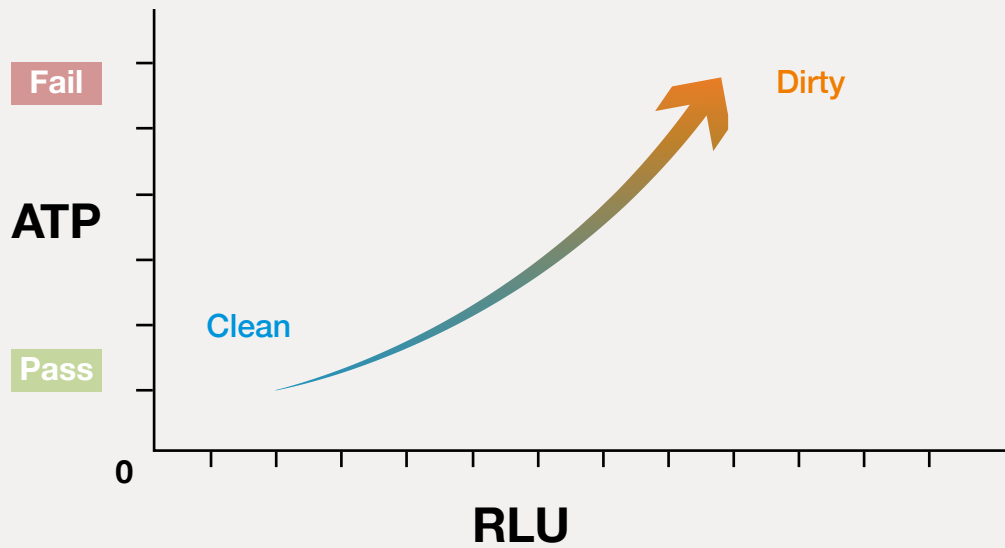
High-touch point not properly cleaned



Luciferase enzyme inside ATP test device



ATP Presence and RLU Measurement



Higher Contamination = Higher RLU

The quantity of light generated by the bioluminescence reaction is directly proportional to the amount of ATP present in the sample. The reaction is immediate, allowing results to be processed in real time.

Results are then expressed numerically on the EnSURE Touch screen as Relative Light Units (RLU).



1.3 Additional Uses

In addition to routine ATP cleaning verification by Environmental Services (EVS), the EnSURE Touch ATP Cleaning Verification System can be used for:

Central/Sterile Services & Endoscopy

Used for verifying the cleanliness of flexible endoscopes and other reusable medical devices. Improper cleaning of equipment before sterilization can lead to non-sterile equipment.



Hand Hygiene Compliance

An easy method to measure levels of ATP present on personnel hands before and after hand washing to demonstrate efficacy and thoroughness of hand washing efforts.



Food Service & Cafeteria Food Safety

Verifies food preparation surfaces and dining areas have been cleaned properly as part of a Hazard Analysis and Critical Control Point (HACCP) food safety plan.



Facilities Management

Helpful for monitoring water quality and water treatment effectiveness at point of use. Also commonly used to verify thorough cleanup after new construction and remodeling of patient areas.



Section 2: Implementing an ATP Cleaning Verification System

2.1 Establishing Test Locations and Limits

The EnSURE Touch comes with a preset pass limit of 50 RLU a fail limit of 100 RLU. These limits are based on studies conducted in healthcare facilities and a starting point from which custom limits can be refined.

Pass	<50 RLU
Caution	50-100 RLU
Fail	100+ RLU

This section will guide users through identifying test locations and establishing appropriate pass/fail limits for those locations. To optimize an ATP cleaning verification program, many hospitals choose to set custom limits for test locations. Before testing begins, it is necessary to:

1. Set up a SureTrend software account. Visit www.hygiene.com and click on the 'SureTrend login' at the top of the page to set up an account. Once logged in, follow the instructions to sync an EnSURE Touch with the software.
2. Identify and program SureTrend Software accordingly, syncing it with the EnSURE Touch devices.

The CDC and professional organizations such as the Association of Perioperative Registered Nurses (AORN) provide lists of recommended locations to monitor for cleanliness. Locations typically tested are high-touch surfaces where the chance of spreading infectious bacteria is high. Monitoring of low-risk surfaces on a less frequent basis is also essential to verifying a facility is being thoroughly cleaned.



2.2 Broad Risk Location Categories and Limits

Once locations to be tested have been identified, pass and fail RLU limits for each location can be established by assigning the locations to broad risk categories. Limits for broad-risk categories have been validated by published, peer-reviewed, and third-party studies.

Refer to the technical document: [Lower and Upper RLU Limits for ATP Monitoring Programs](#)

The general recommended limits below reflect an elimination of the caution zone. For hospitals that wish to use the caution zone, simply double the pass RLU (pass RLU x 2) to determine the fail RLU number.

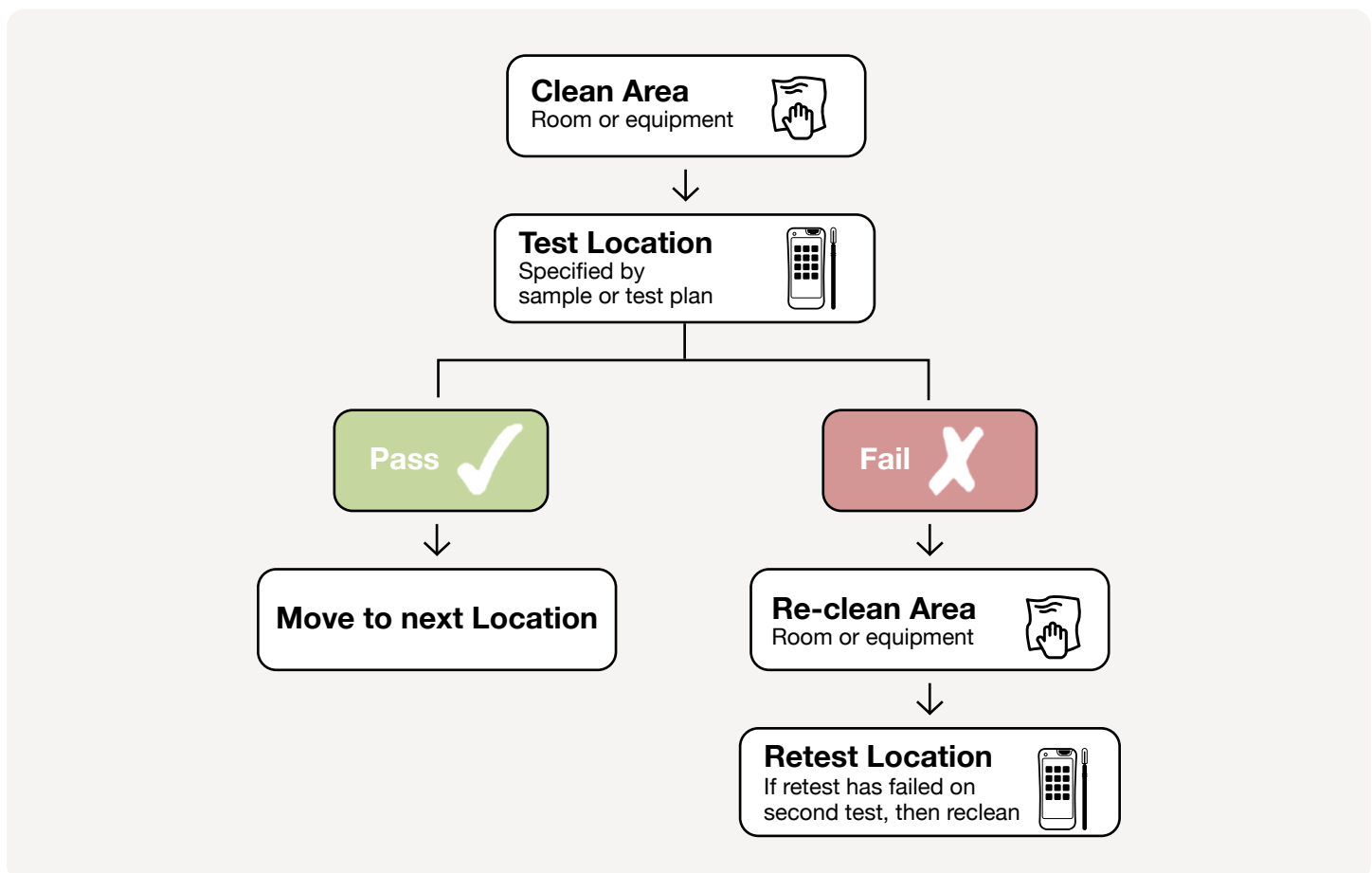
Application	General Recommended Limits	
	Pass (RLU)	Fail (RLU)
Public Areas Examples: Elevator call buttons Hallway handrails Waiting room areas	<100	100+
Patient Rooms Examples: Call button Bed rails Patient restroom Monitor panels IV pole	<50	50+
Food Preparation & Catering	<20	20+
Hand Washing	<120	120+
Sterile Services	<20	20+
Operating Rooms	<20	20+
ICU	<20	20+

2.3 Corrective Action Procedures

Corrective action procedures provide clear instructions for what steps should be taken following pass, caution, or fail results. Recommended corrective action procedures are as follows:

Symbol	Test Results	Corrective Action
✓	Pass	The surface has been adequately cleaned. No action required.
!	Caution (if applicable)	The surface may not have been adequately cleaned. The area may be re-cleaned or monitored for future problems. Cleaning personnel may require retraining on proper cleaning procedures.
X	Fail	The surface has not been cleaned to the cleaning standard and must be re-cleaned and retested. Cleaning personnel should also be retrained on proper cleaning procedures.

2.4 Suggested Cleaning, Testing, and Corrective Action Procedure Flowchart



2.5 Programming Location Pass/Fail Limits into Software

Once test locations have been identified and Pass/Fail limits determined, they must be entered into the SureTrend software and synced with the EnSURE Touch luminometer.

For instructions on how to install SureTrend software and add locations, refer to the instructional videos available at www.hygiene.com. Please contact your Hygiene representative for free training and assistance in setting up your program.

Other location information such as Group, Surface, Rank, or any desired custom fields may also be entered in SureTrend at this time. [Here is an example of the location setup in the SureTrend software.](#)

Location Name	Lower	Upper
Bedrail	50	50
Remote control	50	50
Call button	50	50
Light switch	50	50
Sink	50	50
Door handle	50	50
Tray table	50	50
Bedside table	50	50
Bathroom handrail	50	50
Flush handle	50	50

2.6 Setting up Test Plans

Once locations and limits have been input into SureTrend software, test plans may then be set up. Test plans are helpful groups of locations that are tested one after another, grouped together, or tested on a specific day. Test plans help to keep testing and data analysis organized. See the instructional videos at www.hygiene.com for instructions on creating test plans.

[Here are some examples of test plans with locations:](#)

ICU Patient Room

- Ventilator control panel
- IV pole
- Monitor cable
- Call button
- Door handle

West Wing Patient Room

- Bed tray table
- Patient phone
- Call button
- Bed rail
- Main light switch
- Sink handles
- Toilet flush handle
- Bathroom light switch
- Bathroom handrail
- Television remote

Nurses' Station

- Keyboard
- Phone
- Countertop
- File cabinet handle
- Light switch

ER Mobile Workstations

- Crash cart
- ECG cart
- Laceration cart
- Bedside cart
- Trauma cart
- IV cart
- IV medication cart
- Cast cart

Public Areas

- Handrail
- Door lever
- Waiting area chair
- Telephone
- Water cooler

Monday

- Bedrail
- IV pole
- Bedside table
- Remote

2.7 Testing Frequency

Once test plans are programmed into the SureTrend software, sync the EnSURE Touch with the software and begin testing. The frequency of testing will be determined by:

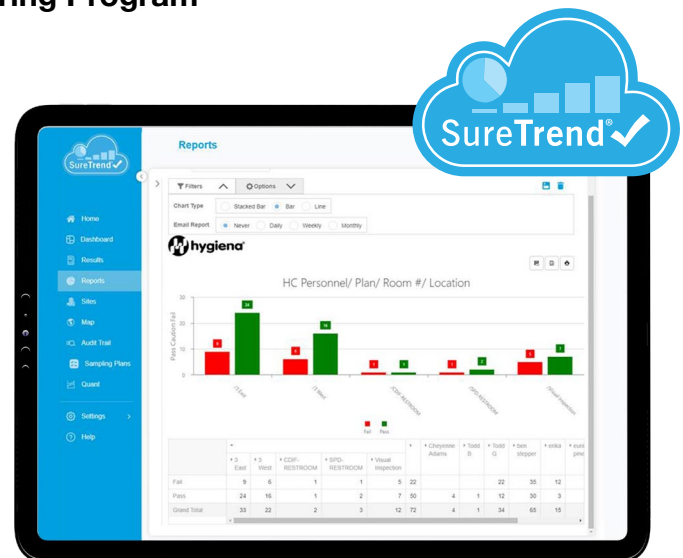
- Size of facility
- Room turnover rate
- Importance of the cleaning standard
- Desired statistical accuracy of reports
(the greater the amount of data generated, the more truly representative the data is of actual hospital cleanliness)

In a toolkit titled [Options for Evaluating Environmental Cleaning](#), The Centers for Disease Control and Prevention (CDC) offers minimum swabbing recommendations for evaluating environmental cleanlinessⁱⁱⁱ. The recommendations propose a periodic testing regimen to assess levels of cleanliness and compliance with cleaning processes, to be conducted at least three times per year. While the periodic testing in this recommendation assesses cleaning practices, the end user would miss out on the vast benefits of a daily monitoring program.

To experience the full benefits of an ATP cleaning verification program, hospitals should implement daily monitoring as part of their regular procedures. Daily monitoring holds EVS staff accountable for achieving an optimal level of cleanliness. Utilizing the data generated and reward system based on daily results in SureTrend software is an important tool for providing feedback to personnel.

2.8 Use SureTrend Software to Maximize a Monitoring Program

SureTrend software is a robust database of test results to aid in decision-making and management of hospital cleanliness programs. By frequently collecting test results, a hospital can build up a database of records to identify trends, assess training opportunities, and compare cleaning performance between departments, shifts, or facilities. Using these reports in regular performance feedback meetings with frontline personnel can be crucial for maintaining environmental cleaning effectiveness. SureTrend comes with dozens of preset reports, so little setup is required by the user and reports can be automatically emailed to stakeholders.

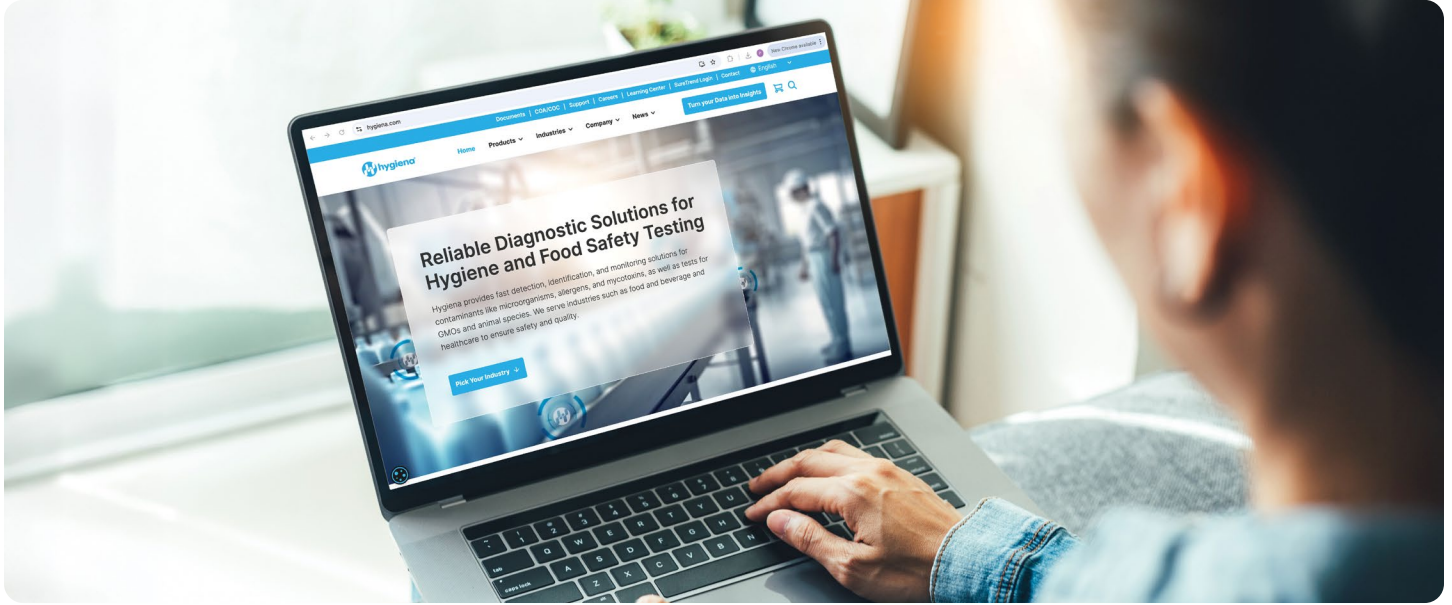


Visit www.hygiena.com to download a helpful guide for using SureTrend reports in hospitals: [Quick Start Software Report Guide for the Healthcare Industry](#).

ⁱⁱⁱ CDC Toolkit for Evaluating Environmental Cleaning

2.9 Additional Resources

Hygiena's website, www.hygiena.com/healthcare, is home to a vast and growing library of resources designed to aid in the implementation, training, and optimization of your cleaning verification program. **For additional support, please contact your Hygiena technical representative.**



2.10 Calibration

CalCheck is a reusable LED device for quick and reliable luminometer calibration verification – in less than one minute.

Though Hygiena luminometers already run a calibration self-check at start-up, a robust quality control program often requires proof of instrument calibration. In-house calibration checks confirm the Hygiena luminometer is working properly and demonstrate due diligence that a monitoring system is in control. CalCheck provides an all-in-one, reusable positive and negative calibration verification device, activated by the click of a button.



Appendix A: Recommended Test Locations

Patient Areas

- Airway cart
- Anesthesia cart
- Bathroom door knobs & levers
- Bathroom handrails
- Bathroom light switch
- Bed control
- Bed rails
- Bedpan cleaner
- Bedside chair
- Bedside tables
- BP machine cuff
- Cabinet door handles
- Call button
- Door knobs
- ECG cart
- Flush handle
- IV cart
- IV pole
- IV pump control
- Laceration cart
- Light switch
- Medication cart
- Monitor controls
- Monitor touch screen
- Monitor cables
- Privacy curtain
- Phone
- Sink top
- Sink handles
- Supply cart
- Toilet seat
- Trauma cart
- Tray table
- TV remote
- Ventilator control panel

Endoscopy

- Internal channels
- Exterior surfaces

- Flushed water
- Control head
- Work surfaces

Operating Rooms

- Anesthesia cart
- Anesthesia machine
- IV pole
- IV pump
- Patient monitor
- OR bed
- Reusable table straps
- Bed attachment
- Positioning devices
- Patient transfer devices
- Overhead procedure lights
- Tables
- Boom
- Mayo stands
- Suction regulators
- Medical gas regulators
- Imaging monitors
- Radiology equipment
- Electrosurgical units
- Microscopes
- Robots
- Lasers
- Storage cabinets
- Supply carts
- Light switches
- Door handles
- Push plates
- Telephones
- Computer accessories

Sterile Services

- Autoclave interior
- Tools post-sterilization
- Sterilizer handle

Public Areas

- Drinking fountain button
- Elevator call button
- Hallway handrail
- Nurses' keyboard
- Nurses' phone
- Vending machine button
- Visitor bathroom light switch
- Visitor bathroom door knob
- Waiting room chair

Laundry

- Linen carts
- Linen trucks
- Storage shelving
- Work surfaces
- Folding stations

Food Preparation

- Cutlery
- Cutting board
- Dishwasher
- Freezer handles
- Fridge handles
- Knives
- Service trays
- Serving utensils
- Sink
- Sink handles

Hand Hygiene

- Pre-clean hands
- Post-clean hands
- Scrub sink
- Sink handles
- Soap dispenser

Sources:

CDC Environmental Checklist for Monitoring Terminal Cleaning available at [CDC Environmental Checklist for Monitoring Terminal Cleaning](#) AORN Sample Cleaning Checklist available from <http://www.aorn.org>

One Health Diagnostics®



If you have any questions, visit: www.hygiena.com

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