



A guide to reducing hospital-acquired infections

How hospitals are mitigating HAIs with an integrated, evidence-based approach

The importance of infection prevention

Hospital leaders are often aware of reported hospital-acquired infection (HAI) issues the facility may be experiencing — past, present and future. What can be challenging on many levels, however, is working against a reputational impact that happened when 12-month-old data was reported by CMS and mitigations already put into place aren't realized in reporting for another year or more.

You may be well aware that your hospital's HAI issues have decreased, but the reporting won't show that for another 12 months. Hospital ratings due to HAI concerns can impact a hospital for years, even when an issue does get under control. The time to act on infection prevention is now, so you can stay ahead of both the short-term and long-term consequences of a infection prevention issue.





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What is a modern HAI?

Infection prevention in hospitals is constantly evolving. Prevalence of “superbugs,” or multi-drug resistant organisms (MDROs) is increasing in hospitals. According to the CDC, these MDROs alone are causing 35,000 deaths per year, greatly contributing to the 72,000 deaths per year caused by all HAIs. Consistent environmental infection prevention programs, handwashing, and employee competency training are some of the most effective ways to combat these infections.

Source: U.S. Centers for Disease Control and Prevention 2019 AR Threats Report: <https://www.cdc.gov/drugresistance/pdf/threats-report/2019-ar-threats-report-508.pdf>

HAIs kill

72,000

people every year
in the U.S. alone.





HAI quick facts

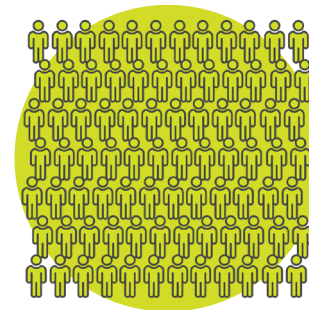
HAIs continue to be a very real threat to acute care settings.



More than 2.8 million antibiotic-resistant infections affected patients in the U.S. last year.



In 2017, there were more than 200,000 *C. diff* cases in the U.S.



More than 200 patients die every day in the U.S. due to HAIs



Only 40-50% of healthcare surfaces are properly cleaned and disinfected

#Source: U.S. Centers for Disease Control and Prevention 2019 AR Threats Report: <https://www.cdc.gov/drugresistance/pdf/threats-report/2019-ar-threats-report-508.pdf>

*Source: U.S. Centers for Disease Control and Prevention: <https://www.cdc.gov/media/releases/2014/p0326-hospital-patients.html>

The evolution of environmental infection prevention

Healthcare used to rely on bleach as its primary disinfecting chemical, but now there are more advanced products and methods available. Infection preventionists need to take an innovative approach to fighting HAIs in healthcare settings. HAIs can be transmitted through contamination due to improper disinfection or missed surfaces, such as floors.

The strategy to fight infection prevention need to take into account every aspect of cleaning and disinfection. Fighting HAIs requires the right tools and a comprehensive approach to make the most consistent impact. Protecta®, an environmental services infection prevention program from Sodexo, employs an integrated approach in its fight against HAIs.

HAIs are transmitted through contamination due to improper disinfection or missed surfaces, such as floors.



High-touch surfaces frequently missed during daily cleaning



Source: National Institutes of Health: Improving daily patient room cleaning: an observational study using a human factors and systems engineering approach: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6760906>

What to expect in an integrated approach

You might be familiar with the term “integrated.” In healthcare, it describes a set of standardized practices that ultimately improve patient care. When you choose an integrated approach to environmental infection prevention, the program is more effective and reliable than when the steps are done alone. Standardization of tools, technology and processes delivers consistent results is key to a reliable and effective infection prevention program.

Benefits of integrated approaches

Choosing an integrated approach to support your hospital’s environmental infection prevention program is ultimately more valuable than other philosophies of cleaning or disinfecting for several reasons:

- **Results are predictable and repeatable. You won’t have to wonder if something is working or not.**
- **You gain confidence in the compliance of your program. It is designed based on a structured risk framework, regular auditing and reporting compliance results to your infection prevention teams.**
- **Employees gain confidence in the program and its results. Hospital staff learn that each step within the program needs to happen in the same order, each and every time, to produce the same positive outcomes.**
- **You minimize the possibility of human error. The processes become simpler for your employees to follow because there isn’t any guessing as to which chemicals to use or where to use them.**



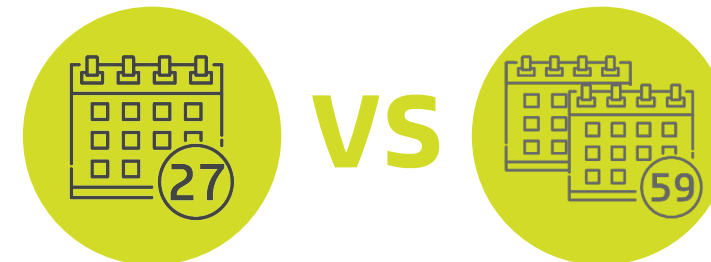
Risks to patient safety

CDC data from 2013-2019 show that infection prevention strategies in the U.S. reduced HAI deaths by 18% overall and 28% in hospital settings.# Infection prevention is critical to your hospital's success and your patients' safety, and a dependable environmental infection prevention program can be the cornerstone of these efforts.

When you have confidence in your environmental services department, you can take a proactive, strategic approach to reducing HAIs instead of working reactively to deal with compliance and infection control issues.

Modern HAIs are stubbornly difficult to combat and can be detrimental to patient health. Patients with HAIs are much more likely to be readmitted sooner — 27 days when they contracted an HAI versus 59 days without an HAI.

Mortality is another risk factor for patients with infections — HAIs kill 72,000 people in the U.S. every year.*



days to readmission
when patients
contracted an HAI

days to readmission
when they did not

#Source: U.S. Centers for Disease Control and Prevention 2019 AR Threats Report:
<https://www.cdc.gov/drugresistance/pdf/threats-report/2019-ar-threats-report-508.pdf>

*Source: U.S. Centers for Disease Control and Prevention HAI Hospital Prevalence Survey:
<https://www.cdc.gov/hai/data/portal/index.html>

Employee morale and retention

Employee satisfaction is another major benefit to having a handle on infection prevention. Your hospital staff want to work in an environment that they can trust is clean and safe. When you implement a consistent, comprehensive program, employees gain confidence in the cleaning procedures that are used. Hospitals with quality staff training programs can decrease turnover. Considering that the World Health Organization reports there will be a worldwide shortage of about 18 million healthcare workers by 2030, it is more important than ever to retain your qualified workforce and ensure their environment is safe.#

Engaged employees are productive employees

Staff training reinforces best practices that may have been lost over time or skipped due to time constraints. Plus, when your employees are engaged with training and best practices, they are more productive and are 27% more likely to rate their work as “excellent,” compared to unengaged employees.*

Ultimately, hospitals with positive employee engagement could see higher HCAHPS scores and increases in patients’ willingness to recommend.

#Source: World Health Organization:
<https://www.who.int/health-topics/health-workforce>

*Source: Gallup: <https://www.gallup.com/workplace/236483/enhances-benefits-employee-engagement.aspx>





Reputation and patient satisfaction

A history of fluctuating infection rates and poor safety grade ratings can impact community trust and confidence in your hospital. Public data does not provide the full picture of how safe and compliant your hospital actually is — so consistent approaches can become a powerful tool in improving your hospital reputation. When employees and patients understand the stringent cleaning protocols and progress toward lower HAIs, your hospital reputation can work toward improvement and ultimately higher public ratings over the long term.

Even if your hospital has low HAI rates and an excellent reputation in your community, consistent, integrated approaches can help you maintain those important indicators of success.

Protecta, an environmental infection prevention program from Sodexo Healthcare, is designed to help hospitals achieve better ratings, ultimately positively impacting their community reputation, improving patient and employee satisfaction and giving hospital leaders peace of mind.

Financial impacts

Hospitals that have difficulty controlling HAIs are familiar with penalties they may incur. Launched in 2015, Medicare's Hospital-Acquired Condition (HAC) Reduction Program has penalized more than 1,756 hospitals with lower reimbursements due to high HAC and HAI rates. Just one HAI can cost an average of \$45,000 — becoming a significant impact for hospitals.

A hospital's bottom line could be positively impacted by implementing Protecta. Hospitals that use Protecta have shown cost savings anywhere from \$300,000 to \$3,000,000 from avoided infections, reduced lengths of stays, reduced readmissions, and reduced HAC penalties.

Source: Kaiser Health News: <https://khn.org/news/medicare-trims-payments-to-800-hospitals-citing-patient-safety-incidents/>



\$45k

average HAI cost

Individual Protecta sites
have seen savings between

**\$300k and
\$3 million**



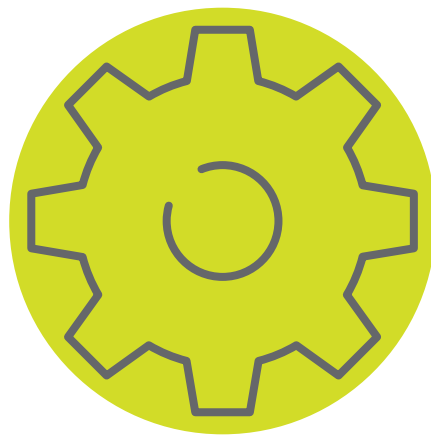
PROTECTA

What is Protecta?

Protecta from Sodexo is a step above your typical EVS program. It is an evidence-based EVS solution that includes a suite of components to help hospitals mitigate and fight HAIs. It employs a standardized approach to reducing HAIs in healthcare settings, incorporating tools, processes, training and best-in-class chemical disinfectant and sporicide.



Disinfecting
Chemicals



Tools and
Processes



Employee
Training

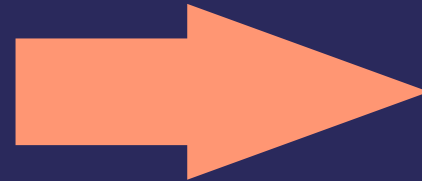


Technology



2,359

total avoided HAIs



\$85m

total cost savings



Data from 55 Protecta sites between 2017-2019

Once implemented, Protecta has been proven to reduce HAIs, readmissions, and lengths of stay. In turn, hospitals experience improved patient satisfaction, higher employee satisfaction, and increased revenue. Data from 55 Protecta sites from 2017-2019 illustrated an avoidance of 2,359 HAIs and a total cost savings of more than \$85 million.

Each component is used in a specific order based on what is required for that specific healthcare environment and the overall risk level based on specific circumstances. It ensures that the right people are applying the right processes and technology at the right time — every time.



Protecta ensures that the right people are applying the right processes and technology at the right times — every time.

Consistency is key

Inconsistent cleaning processes and standalone chemicals like bleach are struggling to deliver reliable results. A multidisciplinary approach to environmental infection prevention is the most consistent way to reduce HAIs in your hospital. By implementing Protecta, which utilizes standardized processes and employee training and implementation, you are able to reduce human error and improve compliance and outcomes.

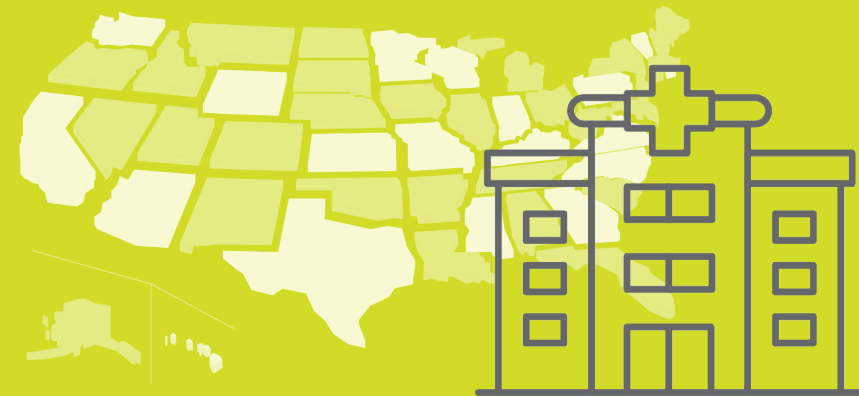


A dedicated team of IP experts

Evidence-based tools and disinfectants are one component of an effective infection prevention program — but the structure and processes around implementation and utilization are critical to its success.

When you leverage the power of Protecta, you gain the expertise of our Sodexo Infection Prevention team. Rigorous standardized processes are utilized to ensure protocols are followed properly and efficiently across operating procedures, supplies, and governance. With experience in hospitals across the country and internationally, we will guide your infection prevention team across these steps to establish and maintain regulatory standards for cleaning and disinfection.

Hospitals throughout the country and internationally use Protecta



Operational and risk framework: Our team members perform walkthroughs to determine which areas of your hospital are most at risk for non-compliance. These insights are shared along with a plan to ensure high-risk areas are sufficiently cleaned and disinfected.

Standard operating procedures (SOPs): All SOPs are identical throughout Protecta sites. Developed by Sodexo subject matter experts, they cover numerous topics related to environmental infection prevention, cleaning, and disinfection. These are all housed internally and are reviewed annually, as required by regulatory agencies.

Auditing protocols: Hospital general managers meet to check the work of EVS staff daily, and employees are given on-the-spot training for any errors. Data is reported monthly.

Reporting: Protecta site general managers work closely with site infection preventionists to collect most recent HAI data that is then reported to Sodexo Infection Prevention Specialists for internal tracking. All data reported to Sodexo has no patient identifiers and is kept secure.

Governance processes: We will ensure that auditing data is shared through several multidisciplinary committees, as required to fulfill Joint Commission and CMS requirements.

Results tracking: All Protecta sites are monitored for MRSA and *C. diff* HAI scores to ensure sites are successful at lowering infections. If there are sites experiencing problems, Sodexo’s Infection Prevention Specialist will travel to the site to work with cleaning staff and IP teams to determine where there may be gaps in knowledge or processes and retrain staff as necessary.



Infections avoided over time for all United States hospitals implementing the Protecta program (n=55).

	MRSA	<i>C. diff</i>
Expected Number of Infections in 2017	225	2419
Actual Number of Infections in 2017	184	1979
# Infections Avoided	41	440
Expected Number of Infections in 2018	227	2440
Actual Number of Infections in 2018	186	1813
# Infections Avoided	41	627
Expected Number of Infections in 2019	245	2371
Actual Number of Infections in 2019	208	1198
# Infections Avoided	37	1173

Note: Expected infections are calculated based on facility-specific data reported to CMS in the previous calendar year.

Protecta in action: one hospital's story

A hospital, located in the northeastern region of the United States, decided to overhaul its environmental services and infection prevention program, with a focus on cutting *C. diff* rates. Previously the hospital had relied on bleach to disinfect rooms but saw that this method of disinfecting was only temporarily successful. After one thorough cleaning, the infections would rise again due to recontamination, and bleach was harsh on both equipment and staff.

The new infection prevention leader enlisted the help of Sodexo's Protecta program, which included top-level EVS cleaning solutions, technology, disposable wipes and mops, employee training and expert counsel from Sodexo. Protecta was implemented and bleach was swapped — staff members appreciated the consistent approach to infection control.



The results

The consistent approach to infection prevention proved to be successful, and the hospital experienced a decrease in *C. diff* infections over time, among other positive outcomes.



Its Leapfrog rating went from a C to an A

The standardized infection ratio (SIR) went from .41 to .14.



In 2016 — before using Protecta — the hospital had 28 cases of *C. diff* per year. By August 2019 that number had **decreased to just 5.**

Reducing infections across the country

When you leverage the power of Protecta, you gain the expertise of our Sodexo Infection Prevention team. Rigorous standardized processes are utilized to ensure protocols are followed properly and efficiently across operating procedures, supplies, and governance. With experience in hospitals across the United States and several international locations, we will partner with your infection prevention team to ensure the program is implemented effectively and helps you achieve your goals.



42%

reduction in *C. diff* infection rates



13%

reduction in MRSA infection rates



2,359

total HAIs avoided over 3 years



\$85m

in total cost savings





5 ways to start the conversation at your hospital

You can be the voice of change at your facility — start the conversation with your hospital leadership about the proven results of Protecta. Here are some powerful discussion points to use when meeting with your leadership team about your hospital's infection prevention program:

1 Hospital's Safety Grade

The hospital's safety grade is directly tied to prevalence of HAIs. Decreasing HAIs is a powerful way to improve that rating and ultimately restore community trust in our hospital.

2 Infection Prevention Successes

Infection prevention successes don't always match what is being publicly reported. It takes consistency over time to impact CMS reporting. A standardized IP program will help our hospital achieve our long-term goals.

3 When Your HAI Rates are Already Low

A standardized approach will help our hospital maintain our positive safety grade rating. Staying ahead of any future HAI issues will help us reduce the need for any reactive efforts.

4 Reputation Management

A consistent environmental infection prevention program will allow us to maintain a benchmark of cleanliness and safety no matter what comes up. It also contributes to positive reviews and a spotless brand reputation.

5 Employee Trust

Our employees gain trust in our hospital as an employer when we have low infection rates and regular employee training. This allows us to maintain a quality workforce and decrease turnover.

Take the next step in fighting HAIs at your hospital.

To learn more about Sodexo
Healthcare's environmental services
and infection prevention solutions,
visit us at us.sodexo.com/healthcare

