**Topic Area: ENVIRONMENTAL HYGIENE**

*Visit our* [*Resource Center*](https://hqin.org/resource/action-plan-templates/) *to access additional action plan templates on topics including infection control, vaccination and hand hygiene.*

**Conduct Root Cause Analyses for Each Identified Gap or Opportunity:**

* Determine contributing factors, events, system issues and processes involved
* Utilize RCA tools as appropriate (e.g., [5 Whys Worksheet](https://hqin.org/resource/five-whys-worksheet/), [QAPI Fishbone Diagram](https://hqin.org/resource/qapi-fishbone-diagram/))
* Conduct a [Plan-Do-Study-Act (PDSA)](https://hqin.org/wp-content/uploads/2020/07/PDSA-Worksheet-508.pdf) to test intervention, review results and adjust actions needed

**Identify Infection Prevention and Control Gaps & Areas of Opportunity:**

* [Infection Control Assessment and Response (ICAR) Tool for General Infection Prevention and Control (IPC) Across Settings | CDC](https://www.cdc.gov/healthcare-associated-infections/php/toolkit/icar.html?CDC_AAref_Val=https://www.cdc.gov/hai/prevent/infection-control-assessment-tools.html)
* Review previous survey findings, federal and state regulations and CDC updates for long-term care facilities
* Check [CMS Quality Safety & Oversight (QSO) memos](https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Policy-and-Memos-to-States-and-Regions)

The sample RCA, actions, interventions, best practices and metrics illustrated here to address identified infection prevention areas of opportunity are solely intended as example guidance. Your team should perform an infection prevention gap analysis/risk assessment and build a customized action plan to best meet the needs of your specific organization and community.

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| **Area of Opportunity** |
| Failure to properly clean/disinfect shared equipment and/or store it in a manner which prevents contamination. |
| **Root Cause Analysis** **(specify each root cause and address each within the action plan) -*See examples below-*** |
| 1. Staff not aware of appropriate cleaning solutions and “contact times” |
| 1. Cleaning products and supplies are not readily available |
| 1. Lack of standardized process on what to clean, when to clean it and how to store it to prevent contamination |
| 1. Ambiguity regarding staff responsibility for cleaning equipment and lack of accountability |
| 1. Improper storage of clean vs dirty items |
| **S.M.A.R.T. Goal: (Specific, Measurable, Achievable, Relevant, Time-based)** |
| Achieve 95% or greater with cleaning and storage of equipment to prevent contamination for six consecutive weeks by [SPECIFIC DATE] |

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| **Project Start/ Completion Date** | **Specific Actions & Interventions** | **Person/Team Responsible**  *\*Include QAPI Committee* | **Ongoing Monitoring & Surveillance** | **Resources & Additional Comments** |
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|  | * Review environmental and equipment cleaning policies and procedures and update if needed * List all non-invasive portable clinical items shared among residents | Administrator, Director of Nursing, Infection Preventionist, Environmental Services Manager |  | **Ensure policies and procedures are evidence-based (e.g., CDC, EPA, APIC guidelines)**   * [Environmental Infection Control Guidelines | CDC](https://www.cdc.gov/infection-control/hcp/environmental-control/?CDC_AAref_Val=https://www.cdc.gov/infectioncontrol/guidelines/environmental/index.html) * [Options for Evaluating Environmental Cleaning | CDC](https://www.cdc.gov/infection-control/php/evaluating-environmental-cleaning/?CDC_AAref_Val=https://www.cdc.gov/HAI/toolkits/Evaluating-Environmental-Cleaning.html) * [List K: EPA’s Registered Antimicrobial Products Effective against Clostridium difficile Spores | EPA](https://www.epa.gov/pesticide-registration/list-k-epas-registered-antimicrobial-products-effective-against-clostridium) * [Coronavirus (COVID-19) and Disinfectants | EPA](https://www.epa.gov/coronavirus-and-disinfectants) * [Project Firstline | CDC](https://www.cdc.gov/project-firstline/hcp/training/?CDC_AAref_Val=https://www.cdc.gov/infectioncontrol/projectfirstline/healthcare/training.html) * [Guidance for Cleaning and Disinfecting Public Spaces, Workplaces, Businesses, Schools, and Homes | CDC](https://archive.cdc.gov/www_cdc_gov/coronavirus/2019-ncov/community/pdf/Reopening_America_Guidance.pdf) |
|  | * Conduct a risk assessment to identify: * Items used on residents that cannot be cleaned or disinfected * Potential for exposure – high touch versus low touch * Probability of contamination   3 | Administrator, Director of Nursing, Infection Preventionist, Environmental Services Manager  **3**  **3** |  | * [Assessment and Reduction of Risks for Infection among Healthcare Personnel Populations | CDC](https://www.cdc.gov/infection-control/hcp/healthcare-personnel-infrastructure-routine-practices/risk-assessment.html#cdc_generic_section_3-box-3-examples-of-hazard-identification-risk-assessment-and-risk-reduction-activities-in-which-occupational-health-services-might-participate) * [Survey Readiness Toolkit: Splash Zone Checklist](https://hqin.org/wp-content/uploads/2023/09/Splash-Zone-Checklist.pdf) * [Survey Readiness Toolkit: Splash Zone](https://hqin.org/wp-content/uploads/2023/09/Splash-Zone.pdf) * [HQI Academy module: Everyday, an HVA](https://hqiacademy.talentlms.com) |
|  | * Evaluate how staff and residents interact with non-critical items (those that only contact intact skin such as blood pressure cuffs, pulse oximetry, etc.) and the facility environment: * Identify risk behaviors when staff are in contact with residents and equipment * Address environmental obstacles (such as not enough cleaning stations, lack of supplies) * Consider how systems can be set up to minimize handling errors * Review workloads, responsibilities and priorities of staff | Administrator, Director of Nursing, Infection Preventionist, Environmental Services Manager |  | [Staffing Resources | HQIN](https://hqin.org/wp-content/uploads/2023/08/Staff-Onboarding-Training-and-Retention-Resources_rev11.14.23_508.pdf) |
| 4 | * Develop tools to monitor and track/trend compliance   **4** | Administrator, Director of Nursing, Infection Preventionist |  | * Notify a Health Quality Innovators (HQI) Quality Improvement Advisor (QIA) at [LTC@hqi.solutions](mailto:LTC@hqi.solutions) if auditing and monitoring tools are needed * [Simple Strategies – Environmental Cleaning and Infection Prevention | HQIN](https://hqin.org/resource/simple-strategies-environmental-cleaning-and-infection-prevention/) * [PPE Competency Validation |NC SPICE](https://spice.unc.edu/wp-content/uploads/2017/03/PPE-Competency-SPICE.pdf) * [Shared Equipment Cleaning Audit Tool | HQIN](https://hqin.org/wp-content/uploads/2024/08/Shared-Equipment-Cleaning-Audit-Tool.pdf) |
|  | * Establish communication system between nursing and EVS staff to ensure timely and specific required cleaning * Follow up as needed for improvements in communication * Delineate clear responsibility for cleaning assignment to ensure all resident care equipment (including non-critical devices) is assigned to be cleaned by a designated staff person * Educate staff in all departments on communication system and process * Revise as necessary | Administrator, Infection Preventionist, Environmental Services Manager, Director of Nursing, All Department Managers | Review at orientation, annually and as needed during an outbreak or pandemic | * Example of cleaning frequency and assignment: [Appendix B1 – Cleaning procedure summaries for general patient areas | HAIs | CDC](https://www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/appendix-b1.html) * [Survey Readiness Toolkit: Cleaning Assignments](https://hqin.org/wp-content/uploads/2023/09/Cleaning-Assignments.pdf) |
| 5 | * Establish facility baseline compliance rates | Infection Preventionist, Unit Managers/  Supervisors |  |  |
|  | Educate all staff on:   * Infection prevention and control principles * Policy/procedures for cleaning shared equipment * Product selection, use, contact time and special instructions * Disinfecting reusable and shared equipment * Transmission-based precautions * Personal protective equipment (PPE) used for cleaning | Administrator, Infection Preventionist, Director of Nursing, Environmental  Services Manager | Orientation, annually and as needed with changes in equipment or cleaning products | * [Environmental Services STRIVE Program for Infection Prevention | APIC](https://apic.org/Resources/Topic-specific-infection-prevention/Environmental-services/) * [Training: EVS and the Battle Against Infection | CDC](https://www.cdc.gov/infection-control/hcp/training/training-evs-and-the-battle-against-infection.html?CDC_AAref_Val=https://www.cdc.gov/infectioncontrol/training/evs-battle-infection.html) * [Targeted COVID-19 Training for Nursing Homes | CMS](https://qsep.cms.gov/welcome.aspx) [Note: This training requires logging in to the Quality, Safety & Education Portal (QSEP)] * [How Infections Spread Pocket Card | HQIN](https://hqin.org/wp-content/uploads/2022/12/How-Infections-Spread-Three-Card.pdf) * [Cleaning and Disinfection Pocket Card | HQIN](https://hqin.org/wp-content/uploads/2022/12/CD-508-Test-Form.pdf) * [Survival of Microorganisms on Inanimate Objects and Surfaces Pocket Card | HQIN](https://hqin.org/wp-content/uploads/2022/12/Survival-of-Microorganisms-on-Inanimate-Objects-and-Surfaces-Three-Card.pdf) * [Point of Care Testing (POCT) Pocket Card | HQIN](https://hqin.org/wp-content/uploads/2022/12/Point-of-Care-Testing-Three-Card.pdf) * [Cleaning Supplies and Equipment | CDC](https://www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/supplies-and-equipment.html#cdc_generic_section_6-3-4-personal-protective-equipment-for-environmental-cleaning) |
|  | * Audit staff and provide verbal and written feedback * Audit on all shifts and weekends * Audit frequency of cleaning, not simply intensity of cleaning * Audit proper use of PPE as appropriate * Audit proper selection of cleaning product for task   6 | Infection Preventionist, Unit Managers/  Supervisors |  | * [Survey Readiness Toolkit: Cleaning Checklist | HQIN](https://hqin.org/wp-content/uploads/2023/09/Cleaning-Checklist.pdf) * [Observational Audits | AHRQ](https://www.ahrq.gov/sites/default/files/wysiwyg/nursing-home/materials/observational-audits.pdf) * [Competency-Based Training, Audits and Feedback 103 | CDC](https://www.cdc.gov/infection-control/media/pdfs/strive-cbt103-508.pdf?CDC_AAref_Val=https://www.cdc.gov/infectioncontrol/pdf/strive/CBT103-508.pdf) * [Unit Cleaning Checklist | SPICE](https://www.dss.virginia.gov/files/division/licensing/train-the-trainer/auditing_and_monitoring/additional_resources/unc/UNC_SPICE_Unit_Cleaning_Checklist.pdf) * [Daily Cleaning Form | APIC](https://www.dss.virginia.gov/files/division/licensing/train-the-trainer/auditing_and_monitoring/additional_resources/apic/APIC_Daily_Cleaning_Form.pdf) |
| **5** | * If appropriate, create a product selection committee to ensure correct healthcare grade disinfectants are purchased and protocols for use are established uniformly | Administrator, QAPI Team, Infection Preventionist, Environmental Services, Central Supply, Director of Nursing |  | * [Project Firstline video on cleaning vs disinfection](https://www.youtube.com/watch?v=dIuRI9OpjnY) * [Cleaning Supplies and Equipment | CDC](https://www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/supplies-and-equipment.html) |
|  | * Create facility-specific visual product selection and use uncomplicated reference guides * Make guides available in English and other languages as appropriate | Environmental Services Manager, Infection Preventionist | Update reference guides as new products are introduced or retired and when guidance changes | [How to Read a Disinfectant Label | CDC](https://www.cdc.gov/project-firstline/media/pdfs/HowToReadALabel-Infographic-508.pdf) |
| 7 | * Train using multiple modalities including live demonstration, return demo and competency testing   **6** | Infection Preventionist, Director of Nursing, Environmental Services Manager, Staff Development | Competency testing required annually | [Cleaning Supplies and Equipment | CDC](https://www.cdc.gov/healthcare-associated-infections/hcp/cleaning-global/supplies-and-equipment.html) |
|  | * Report findings and compliance at monthly/quarterly QAPI meeting | QAPI Team |  | * [QAPI At a Glance | CMS](https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/qapiataglance.pdf) |

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