**Topic Area: ENVIRONMENTAL HYGIENE**

*Visit the* [*HQIN 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/), Cause & Effect Diagram)
* Conduct a [Plan-Do-Study-Act (PDSA)](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhqin.org%2Fwp-content%2Fuploads%2F2021%2F03%2FPDSA-Worksheet-508.pdf&data=05%7C01%7Clfinch%40hqi.solutions%7C62686d1b484f4cbb5aee08dbf123fc86%7Cd2798d0f9fe24eacbdf166c9890342c9%7C0%7C0%7C638368909098562408%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=9PuwxE9Onb6eeea7k3%2F1l1pedMpNVeGv7F04o%2F7XkTM%3D&reserved=0) to test intervention, review results and adjust actions needed

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

* [CDC’s Infection Control Assessment and Response (ICAR) Tool for General Infection Prevention and Control (IPC) Across Settings](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.

**1**

|  |
| --- |
| **Area of Opportunity**  |
| Daily resident room, terminal cleaning and common area cleaning not comprehensive or adequate |
| **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. Staff do not understand how to interpret Material Safety Data Sheets (MSDSs)
 |
| 1. After first week of orientation, no additional disinfectant product education provided and observation audits on all environmental services (EVS) shifts not performed regularly
 |
| **S.M.A.R.T. Goal: (Specific, Measurable, Achievable, Relevant, Time-based)** |
| Achieve 95% compliance with resident room environmental cleaning by [SPECIFIC DATE] |

**2**

| **Project Start/Completion Date** | **Specific Actions & Interventions** | **Person/Team Responsible***\*Include QAPI Committee* | **Ongoing Monitoring & Surveillance** | **Resources & Additional Comments** |
| --- | --- | --- | --- | --- |
|  | * Review environmental cleaning policies and procedures and update if needed
 | Administrator, Director of Nursing, Infection Preventionist, Environmental Services Manager**3** |  | **Ensure policies and procedures are evidence-based (e.g., CDC, EPA, APIC guidelines)*** [Environmental Infection Control Guidelines | CDC](https://www.cdc.gov/infectioncontrol/guidelines/environmental/index.html)
* [Guidelines for Environmental Infection Control in Health-Care Facilities – updated 2018 (CDC/HICPAC)](https://www.cdc.gov/infectioncontrol/pdf/guidelines/environmental-guidelines-P.pdf)
* [List K: EPA’s Registered Antimicrobial Products Effective against Clostridium difficile Spores](https://www.epa.gov/pesticide-registration/list-k-epas-registered-antimicrobial-products-effective-against-clostridium)
* [Coronavirus (COVID-19)](https://www.epa.gov/coronavirus) (EPA)
* [Options for Evaluating Environmental Cleaning (CDC)](https://www.cdc.gov/HAI/toolkits/Evaluating-Environmental-Cleaning.html)
 |
|  | * 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) 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/)
 |
|  | * Audit 100% of EVS staff and provide verbal and written feedback
* Audit on all three shifts
* Audit routine room cleaning, transmission-based precautions room cleaning and terminal room cleaning with special focus on resident bathrooms
* Audit frequency of cleaning, not simply intensity of cleaning
* Audit proper use of PPE as appropriate
 | Infection Preventionist, Environmental Services Manager |  | * [Environmental Checklist for Monitoring Terminal Cleaning (CDC)](https://www.cdc.gov/hai/pdfs/toolkits/environmental-cleaning-checklist-10-6-2010.pdf)
* [APIC Daily Cleaning Inspection Audit | HQIN](https://hqin.org/resource/apic-daily-cleaning-inspection-audit/)
 |
| **4** | * Audit EVS staff selection of product based on required cleaning by setting/situation
 | Infection Preventionist, Environmental Services Manager |  |  |
| **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 |  |  |
|  | * Establish facility baseline compliance rates from audits above

**5****4** | QAPI Team |  |  |
|  | * Ensure supplies needed for appropriate cleaning and disinfection are identifiable and available with instructions for use in English and other languages as appropriate
 | Administrator, Infection Preventionist, Environmental Services Manager, Central Supply Manager |  |  |
|  | * 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 |  |
|  | Educate EVS staff on: * Infection prevention and control principles
* Product selection, use, contact time and special instructions

**5*** Routine room cleaning
* Common area cleaning
* Terminal room cleaning
* Disinfecting reusable and shared equipment
* Transmission-based precautions
* Personal protective equipment (PPE) for EVS staff
* Laundry special considerations

**6*** Water-borne contamination prevention and identification
 | Administrator, Infection Preventionist, Director of Nursing, Environmental Services Manager |  | * [Environmental Services STRIVE Program for Infection Prevention (APIC)](https://apic.org/Resources/Topic-specific-infection-prevention/Environmental-services/)
* [Environmental Services and Infection Control Training and Education (CDC)](https://www.cdc.gov/infectioncontrol/training/evs-battle-infection.html)
* [Targeted COVID-19 Training for](https://qsep.cms.gov/welcome.aspx) Nursing Homes [Note: This training requires logging in to the Quality, Safety & Education Portal (QSEP)]
 |
|  | * 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 |  |
|  | * Establish uncomplicated communication system between nursing and EVS staff to ensure timely and specific required cleaning
* Ensure communication system can be tracked and monitored to confirm nothing is missed and follow up is initiated when needed
* Delineate clear responsibility for cleaning assignment to ensure all departments understand accountability
 | Administrator, Infection Preventionist, Environmental Services Manager, Director of Nursing |  |  |
|  | * Educate staff in all departments and EVS team on communication system and process

**7*** Revise as necessary
 | Administrator, Infection Preventionist, Director of Nursing, Environmental Services Manager, All Department Managers | Review at orientation, annually and as needed during an outbreak or pandemic |  |
|  | * EVS staff on various shifts will be audited for environmental hygiene compliance, 15-20 per week for 8 weeks, or until goal is met and sustained for 6 consecutive weeks
* Report weekly data to HQI, if applicable
 | Administrator, Infection Preventionist, Director of Nursing, Environmental Services Manager, All Department Managers |  |  |
|  | * Report findings and compliance at monthly/quarterly QAPI meeting
 | QAPI Team |  | * [QAPI At a Glance: A Step by Step Guide to Implementing Quality Assurance and Performance Improvement (QAPI) in Your Nursing Home](https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/qapiataglance.pdf)
 |
|  | * Download and distribute recommended resources from the [Health Quality Innovation Network Resource Center](https://hqin.org/resources/) (Copy and paste resource titles in the search bar at the top right side of the page)
 |  |  | * [APIC Daily Cleaning Tracking Tool](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fhqin.org%2Fwp-content%2Fuploads%2F2023%2F04%2FHQIN-APIC-Daily-Cleaning-Tracking-Tool.xlsx&wdOrigin=BROWSELINK)
* [CDC Environmental Checklist for Monitoring Terminal Cleaning](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fhqin.org%2Fwp-content%2Fuploads%2F2020%2F08%2FHQIN-CDC-Terminal-Cleaning-Tracking-Tool.xlsx&wdOrigin=BROWSELINK)
 |

**8**

**8**

This material was prepared by Health Quality Innovators (HQI), a Quality Innovation Network-Quality Improvement Organization (QIN-QIO) under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. 12SOW/HQI/QIN-QIO-0772-04/18/24