SR-118-02
Respirator Policies and Practices for Aerosol-Transmissible Diseases in Acute Care Hospitals

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Objective: The goal of this project was to assess respiratory protection program policies and practices for aerosol-transmissible diseases in acute care hospitals.

Methods: Twenty-eight representative hospitals were selected by size, location and ownership in Minnesota and Illinois. Interviews were conducted with 363 healthcare workers (HCW) and 171 hospital and unit managers; written programs were scored for required elements; 77 HCW were observed donning and doffing an N95 FFR.

Results: Written programs in Minnesota exceeded those in Illinois, particularly in the areas of risk assessment, fit testing and program evaluation. The most serious deficiency in many written programs was failure to identify a program administrator. Most written programs lacked details about medical evaluation, fit testing and training and did not include a comprehensive risk assessment for airborne infectious diseases; tuberculosis (TB) was often the only pathogen addressed. Conversely, HCW in Illinois were more likely to give better or more protective responses about airborne pathogen exposures, medical evaluation, fit testing, training and respirator reuse than those in Minnesota. Healthcare workers were more likely than managers to say they could wear a respirator without a fit test. A large fraction of respondents said that training was less than 15 minutes. The most frequent respirator donning deficiencies were failure to correctly place straps, perform a user seal check and remove the respirator using straps.

Conclusions: Minnesota had more rural and smaller urban hospitals where there may be lower awareness of or perceived need for respiratory protection programs, which may account for differences in interview responses between the states. There were important deficiencies in frequency of fit testing and training, communication of fit test results and content and length of training. We recommend that hospitals consider designating a single program administrator and using periodic evaluations to assess program effectiveness.

CS-118-03
Control Strategies for Patient Protection when Performing Microbial Remediation in Critical Care Areas in a Hospital

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Situation/Problem: Microbial growth developed on building materials in a Hematology/Oncology and Sterile Processing Department (SPD) in a hospital. A team of experts determined that a thoughtfully designed and meticulously controlled remediation process would present less risk than relocating patients or shutting down the SPD.

Resolution: Restoration of Hematology/Oncology involved a unique approach. This included removing a window and constructing a roof-top structure to allow for pressure control and worker access. Access to affected rooms was then established by creating pathways through interior walls. In SPD a rigid barrier was constructed that separated the functioning portion of the SPD from the exterior wall. Pressure differentials and contractor egress were established by an adjacent tunnel and cutting through the wall into the isolated area of SPD. Conditions were closely monitored in both areas by deploying continuous particle monitors and digital manometers with alarms. A bioaerosol sampling strategy was implemented to monitor and document the efficacy of controls and remediation. Containments were designed to allow time for remediation, moisture intrusion analysis and repairs. Communication was maintained with affected hospital staff throughout the process.

Results: More than 100 ft^2 of mold damaged building materials was removed from critical high risk areas and the building was repaired while both departments remained operational. There were no pathogenic outcomes associated with the process. Trust was

ABSTRACTS

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