

**Figure 2.** USA300 isolates. **A.** Number of pairwise comparisons that yielded a shared room, shared unit (not room), shared room within 7 days or shared unit (not room) within 7 days between genetically related cases when the single nucleotide polymorphisms (SNPs) cutoff for defining relatedness was set at 10, 20 and 30. **B.** Percentage of pairwise comparisons that yielded any strong hospital epidemiologic link when the SNPs cutoff for defining relatedness was set at 10, 20 and 30.

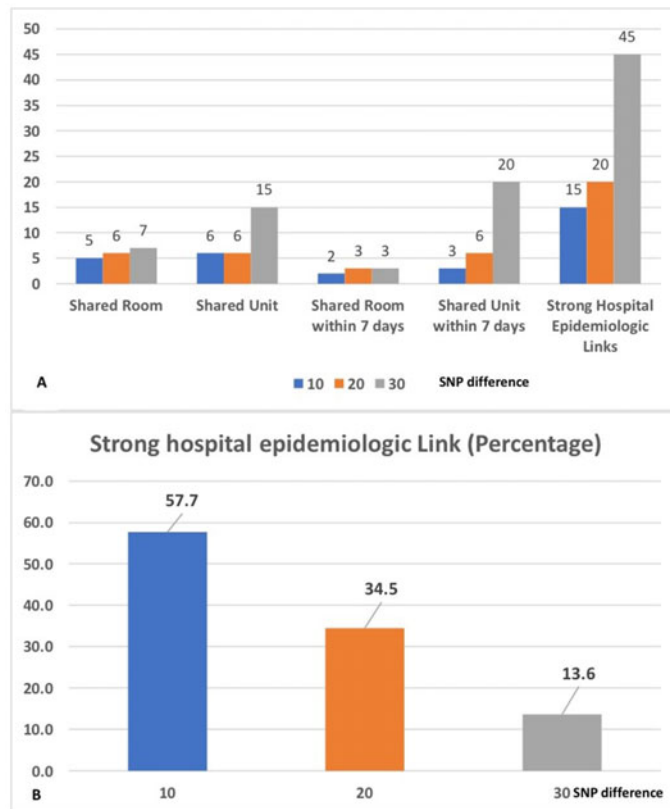


Fig. 2.

### Presentation Type:

Poster Presentation

### Using a Critical Safety Behavior Scoring Tool for N95 Respirator Use to Evaluate Training Interventions

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**Background:** Hospitals struggle nationally to educate healthcare workers on the safe use of N95 respirators as part of their respiratory protection programs. Practical and effective interventions are needed to improve this clinical behavior, which is critical to healthcare worker safety in airborne precautions, hazardous drug administration, and pandemic response. **Objective:** In this analysis, we specifically investigated 2 just-in-time training interventions that would be practical to implement in a hospital setting. **Methods:** A simulation approach was used to evaluate 2 interventions for N95 respirator use at a Midwestern Academy Hospital system (n = 62 respirators: 32 control and 30 treatment). Healthcare workers were asked to don and doff an N95 respirator while being video-recorded in an empty hospital corridor and room. After a randomized intervention was applied, they repeated the respirator donning and doffing while being video-recorded. One intervention used an instructional video alone, and the other used the same instructional

video but added a video reflection intervention. The video reflection intervention asked the participant to review and score their first performance of N95 donning and doffing using the Critical Safety Behavior Scoring Tool (CSBST). The research team used the same CSBST to score all performances of donning and doffing for comparison and evaluation. **Result:** The critical safety behaviors at the pretest and posttest for the 2 intervention groups reveal the impact of the 2 types of just-in-time training on demonstrated N95 respirator skills. The video alone and video reflection scores were not significantly different at pretest between the 2 groups. Scores were significantly higher on the posttest for the reflective practice intervention. Findings related to demographic information included years in healthcare, frequency of use, history of needlestick, and fatigue. **Conclusions:** Video reflection may improve compliance with critical safety behaviors for just-in-time training on N95 respirator use. Further research should examine the video-recorded findings for measurement elements that can be expanded in a scoring tool such as facial hair, hairstyle, and the quality of hand hygiene. Intervention studies should also examine how often the training must be repeated to maintain competency. This intervention may have implications for the training of other critical safety behaviors in infection control and other high-risk procedures.

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