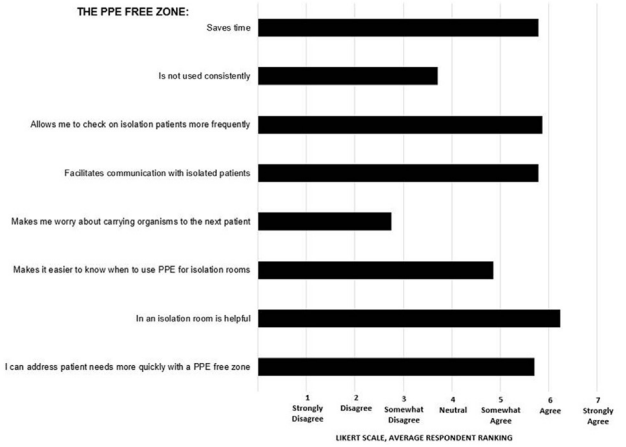
Figure 1: Effect of the PPE Free Zone Intervention on Hand Hygiene (HH) and Glove and Gown Use

	β Estimate	95% Confidence Interval	p value
Model 1: Entry Hand Hygiene Compliance, N= 2,444			
Intervention effect	0.71	(0.19, 1.23)	**0.007**
Model 2: Entry Hand Hygiene Compliance, stratified by precautions type			
Model 2a: MRSA precautions (n=1,433)	0.31	(-0.31, 0.94)	0.328
Model 2b: Enteric precautions (n=855)	1.47	(0.78, 2.18)	**<0.001**
Model 3: Overall PPE Compliance (glove and/or gown, as indicated), N= 3,126			
Intervention effect	0.39	(-0.12, 0.91)	0.133

NOTE: estimates have a reference point of *zero*: + values indicate greater compliance among intervention units compared to control. β estimates = a difference of differences: [intervention compliance – pre-intervention compliance *among intervention units*] – [intervention compliance – pre-intervention compliance *among control units*].
Models 1 & 2 are adjusted for facility, unit, calendar month, and glove use. Model 3 is adjusted for facility, unit, and calendar month of observation.

FIGURE 2: HEALTHCARE PERSONNEL AVERAGE LIKERT SCORE PERCEPTIONS OF THE PPE FREE ZONE



Disclosures. **All authors:** No reported disclosures.

1729. Effect of Glove Disinfection on Bacterial Contamination of Healthcare Worker Hands

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Session: 201. The World Around Us: Reducing Exposures to Pathogens in the Healthcare Environment

Saturday, October 6, 2018: 8:45 AM

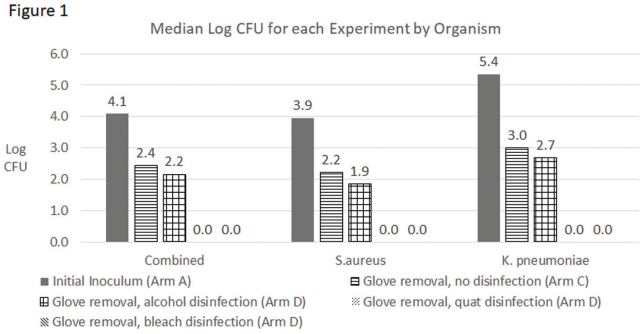
Background. Disinfection of gloves and gowns was recommended to decrease healthcare worker (HCW) self-contamination during doffing of gloves and gowns in the Ebola epidemic. To understand the potential role of this practice in preventing bacterial transmission, we examined the effect of disinfectants on bacterial contamination of HCW hands following glove removal.

Methods. A laboratory simulation study was conducted using methicillin-susceptible *Staphylococcus aureus* and antibiotic-sensitive *Klebsiella pneumoniae* among volunteer HCWs (n = 10 per organism). For each experiment, the volunteer donned 2 pairs of gloves with the "under glove" simulating HCW hands and "top glove" simulating actual glove use in the clinical setting. The top-glove was inoculated with 10^8 CFU bacteria for each step. Top gloves were sampled directly after inoculation (Arm A), and after disinfection with alcohol gel, bleach wipes, and quaternary ammonium (quat) wipes, in separate steps (Arm B). Under gloves were sampled after top glove removal without disinfection (Arm C), and top glove removal post disinfection (Arm D). Quantitative bacterial load reduction was compared for glove use (Arm C – Arm A), and for disinfectant use in addition to glove use (Arm D – Arm C). Qualitative detection of any bacterial load (present/absent) on under glove in the setting of disinfection prior to top glove removal was also assessed.

Results. Of 10^8 CFU inoculated, the median recovery was 1.2×10^4 CFU (both bacteria combined). After glove removal (no disinfection), the median recovery from the under glove was 2.7×10^2 CFU, for a reduction of 98% (1.6 log) in bacterial load. After top glove disinfection and removal, the median bacterial recovery from the under glove was 1.4×10^2, 0, and 0 CFU for alcohol, quat, and bleach (47% or 0.3 log reduction for alcohol; 99% or 2 log reduction for quat and bleach) (Figure 1). Regardless of quantity, bacteria were recovered from under gloves even after top glove disinfection in 70%, 40%, and 35% cases for alcohol, quat, and bleach, respectively (Figure 2).

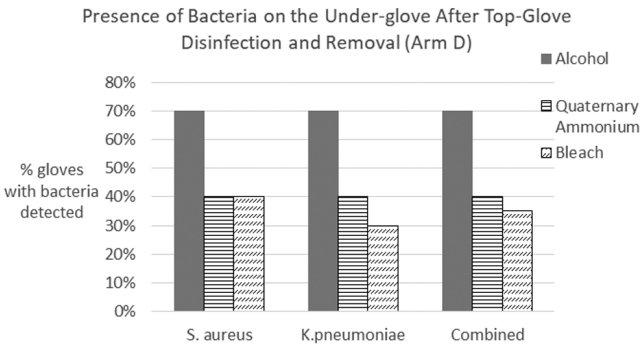
Conclusion. Glove disinfection prior to glove removal is effective at reducing bacterial contamination of HCW hands. However, despite disinfection, some level of hand contamination occurs frequently.

Figure 1



Reduction of bacterial load (median CFU) of *S. aureus* and *K. pneumoniae* combined (n=20)					
	Arm A (Initial Inoculum)	Arm C (Glove removal without prior disinfection)	Arm D (Glove removal after glove disinfection)	Percent reduction (Arm C - Arm D)	Log reduction (Arm C - Arm D)
Alcohol	1.2×10^4	2.7×10^2	1.4×10^2	47%	0.28
Quat	1.2×10^4	2.7×10^2	0	99%	2.0
Bleach	1.2×10^4	2.7×10^2	0	99%	2.0

Figure 2



Presence of Bacteria on the Top Glove and Under Glove After Disinfection (n=20)		
	% positive after disinfection – top glove (Arm B)	% positive after disinfection – under glove (Arm D)
Alcohol	(13/20) 65%	(14/20) 70%
Quat	(13/20) 65%	(8/20) 40%
Bleach	(13/20) 65%	(7/20) 35%

Disclosures. **J. K. Johnson**, Q-Linea: Investigator, Research grant. Applied Biocode: Investigator, Research grant

1730. Outcomes of Patients With Detectable Cytomegalovirus (CMV) DNA at Randomization in the Double-blind, Placebo-Controlled Phase 3 Trial of Letermovir (LET) Prophylaxis for CMV-Seropositive Allogeneic Hematopoietic-Cell Transplantation (HCT) Recipients

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Session: 202. Transplant and Immunocompromised Hosts: Emerging Issues

Saturday, October 6, 2018: 8:45 AM

Background. LET prophylaxis through HCT Week 14 was highly effective in preventing clinically significant CMV infection (CS-CMVi), had a good safety profile, and was associated with lower all-cause mortality by HCT Week 24 compared with placebo (PBO). Patients with detectable CMV DNA at randomization were excluded from the trial's efficacy analyses (NCT02137772). Here we report the outcomes of these patients.

Methods. We compared patients randomized 2:1 and treated with LET or PBO who had detectable CMV DNA at randomization (n = 70) to those with undetectable CMV DNA (n = 495; primary efficacy population, PEP). CS-CMVi was defined as CMV viremia requiring antiviral preemptive therapy (PET) or CMV disease; patients with missing data were imputed as events. PET was prescribed blinded to study drug. We analyzed CS-CMVi incidence, CMV viral load (VL) kinetics, and mortality using post study vital status. Detectable, nonquantifiable CMV VL (<151 c/mL) was imputed as 150 c/mL.