devices and supplies. Detailed summary reports were provided to the participating facilities after each site visit that included identified gaps, recommendations for improvement, and evidence-based resources. **Results:** Deficiencies were grouped into 7 major infection prevention categories among the 17 assessments, including cleaning and disinfection (n = 17, 100%), hand hygiene (n = 9, 53%), PPE use (n = 9, 53%), appropriate use of single and multiuse devices and supplies (n = 6, 35%), bloodborne pathogen prevention measures (n = 6, 35%), aseptic technique (n = 5, 29%), and storage of devices and supplies (n = 4, 24%). **Conclusions:** Our program's prototype has been successful at detecting gaps in dialysis-based IP programs. By conducting data analyses of assessment findings, we have been able to assist the organization in establishing priorities for quality and performance improvement. Based on the results, comprehensive and robust systems to assess infection prevention programs, including those in dialysis settings, are necessary to enhance infection prevention operations across the continuum of care.

Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2023;3(Suppl. S2):s63–s64
doi:10.1017/ash.2023.309

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Dialysis

Characterization of negative health outcomes for dialysis events by vascular access type—Tennessee, 2015–2019

Tara Suhs; Alex Kurutz and Christopher Wilson

Background: The dialysis patient population is at a higher risk for nosocomial infections as well as related negative consequences including hospitalization and death. The CMS and the state of Tennessee mandate reporting of 3 types of dialysis events: positive blood culture, intravenous antimicrobial starts, and pus, redness, or increased swelling at the access site. We explored hospitalization and death outcomes by vascular access types for dialysis events reported to the NHSN for licensed outpatient hemodialysis clinics in Tennessee from 2015 to 2019. **Methods:** We looked at the frequency of hospitalization and death among those who experienced a dialysis event for 3 types of vascular access: arteriovenous fistula, arteriovenous graft, and tunneled central venous catheter (CVC). Other vascular-access types were excluded due to low usage rates. Odds ratios and confidence intervals were used to quantify the relationship between access type and hospitalization, and access type and death. Pooled analysis was used due to the stable rates of death and hospitalization among access types from 2015 to 2019. **Results:** From 2015 to 2019, 16,742 dialysis events were reported for the 3 access types: 8,055 dialysis events (48.1%) occurred among those with tunneled CVCs, 7,107 (42.5%) occurred among those with fistulas, and 1,580 (9.4%) occurred among those with grafts. Of the 16,742 dialysis events, 3,420 patients (20.4%) were hospitalized either due or related to their dialysis event; 220 (1.3%) deaths occurred either due to or related to the patient's dialysis event. The odds of being hospitalized was 1.47 (95% CI, 1.29–1.67) times greater in those with grafts compared to those with fistulas. Patients with tunneled CVCs were 1.30 (95% CI, 1.20–1.41) times greater to be hospitalized compared to those with fistulas. The odds of death was 1.09 (95% CI, 0.9–2.5) times greater in those patient with tunneled CVCs compared to those with fistulas, whereas the odds of death among patients with grafts was 0.73 (95% CI, 0.82–1.43) times the odds of death compared to patients with fistulas.

TABLE 1

DIALYSIS EVENTS (ALL ACCESS TYPES)	**16742**
TUNNELED CVC	8055
FISTULA	7107
GRAFT	1580
DEATHS	**220**
TUNNELED CVC	113
FISTULA	92
GRAFT	15
HOSPITALIZATION	**3420**
TUNNELED CVC	1772
FISTULA	1266
GRAFT	381

Conclusions: Overall, our findings conclude hemodialysis patients with tunneled CVCs have an increased risk for the negative health outcomes of hospitalization and death when compared to the other access types, supporting previous studies. Additionally, grafts had a higher risk of hospitalization compared to fistulas, but patients with grafts had lower odds of death than those with fistulas. Further investigation is needed to study how the COVID-19 pandemic may have affected the trends of negative health outcomes related to dialysis events.

Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2023;3(Suppl. S2):s64
doi:10.1017/ash.2023.310

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Disinfection/Sterilization

Measuring the efficacy of routine disinfection methods on frequently used physical therapy equipment

Aaron Barrett; Amanda Graves; Elaine De Jesus; Jennifer Edelschick; Diandrea McCotter; Deverick Anderson; Nicholas Turner and Bobby Warren

Background: Frequently used physical therapy (PT) equipment is notably difficult to disinfect due to equipment material and shape, however, the efficacy of standard disinfection of PT equipment is poorly understood. **Methods:** We completed a prospective observational microbiological analysis of fomites used in adult or pediatric PT at Duke University Health System, Durham, North Carolina, from September to December 2022. Predetermined study fomites were obtained after being used during a clinical shift and standard disinfection had been completed by clinical service staff. Fomites were split into 2 halves, left and right, for sampling. Samples were taken with premoistened cellulose sponges processed using the stomacher technique and were incubated on appropriate selective and general medias. We defined antimicrobial-resistant, clinically important pathogens (AMR-CIP) as MRSA, VRE, and MDR-gram-negative isolates, and non–AMR-CIP as MSSA, VSE, and gram-negative species. Study fomites were grouped as follows: (1) pediatric pig toy, (2) walking aids (walkers or canes), (3) balls (medicine, dodge, etc), and (4) other (foam roller, sliding board, etc). **Results:** In total, 47 patients, 61 fomites, and

Table 1

	Overall N = 122 n (IQR)	Left N = 61 n (IQR)	Right N = 61 n (IQR)	p
Total CFU	1348 (398-2365)	468 (161-1230)	540 (102-1221)	0.45
Pig (N = 42)	586 (172-725)	228 (112-460)	96 (48-350)	0.19
Walking aids (N = 36)	1076 (374-2320)	660 (198-1260)	638 (251-1231)	0.16
Therapy Balls (N = 32)	2237 (1425-2658)	813 (613-1233)	918 (732-1628)	0.44
Other (N = 12)	909 (428-1619)	350 (309-715)	325 (119-1138)	0.94

Table 2

	Overall N = 122 n (%)	Left N = 61 n (%)	Right N = 61 n (%)	p
Total CIP				
Total	52 (43)	23 (38)	29 (48)	0.27
AMR CIPs	15 (12)	7 (11)	8 (13)	0.78
Non AMR CIPs	37 (30)	16 (26)	21 (34)	0.33
Pig (N = 42)				
Total	5 (12)	2 (9)	3 (14)	0.65
AMR CIPs	1 (2)	0	1 (5)	
Non AMR CIPs	4 (9)	2 (9)	2 (9)	
Walking aids (N = 36)				
Total	26 (72)	14 (78)	12 (67)	0.62
AMR CIPs	8 (22)	4 (22)	4 (22)	
Non AMR CIPs	18 (50)	10 (56)	8 (44)	
Therapy Balls (N = 32)				
Total	21 (66)	7 (44)	14 (88)	0.06
AMR CIPs	6 (19)	3 (19)	3 (19)	
Non AMR CIPs	15 (47)	4 (25)	11 (69)	
Other (N = 12)				
Total	0	0	0	1
AMR CIPs	0	0	0	
Non AMR CIPs	0	0	0	

https://doi.org/10.1017/ash.2023.311 Published online by Cambridge University Press

122 were analyzed. Of the study patients, 24 (51%) were female, 13 (27%) had active infections, and 15 (32%) were on contact precautions. Because fomites were split in half, patients in the left and right study arms were identical. Overall, the median total colony-forming-units (CFU) of study fomites was 1,348 (IQR, 398–2,365): 468 (IQR, 161–1,230) for the left side study arm and 540 (IQR, 102–1,221) for the right study arm ($P = .45$). At the sample level, 52 (43%), 15 (12%), and 37 (30%) of 122 samples harbored any CIPs, AMR CIPs, or non-AMR CIPs, respectively. At the fomite level, 27 (44%), 5 (8%), 15(25%), and 7 (11%) of 61 fomites harbored any CIPs, only AMR-CIPs, only non-AMR CIPs, or both AMR and non-AMR CIPs, respectively. Generally, therapy balls were the most contaminated study fomites (n = 2,237; IQR, 1,425–2,658), and walking aids were most frequently contaminated with any CIPs (n = 26, 72%), AMR CIPs (n = 8, 22%), and non-AMR CIPs (n = 15, 47%). **Discussion:** Following routine disinfection, frequently used PT equipment remained heavily contaminated and harbored AMR and non-AMR CIPs, supporting the notion that PT equipment is difficult to disinfect via standard disinfection. Additionally, left-, and right-side fomite divisions had similar pathogens, suggesting that this sampling model of intrapatient comparisons may be helpful for resolving case-mix issues in future studies. Future work should focus on PT-specific enhanced disinfection strategies to improve the disinfection of PT equipment.

Financial support: This study was funded by PURioLABS.

Disclosures: None

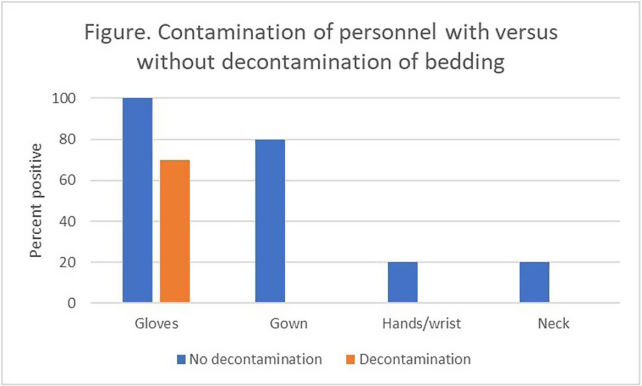
Antimicrobial Stewardship & Healthcare Epidemiology 2023;3(Suppl. S2):s64–s65
doi:10.1017/ash.2023.311

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Disinfection/Sterilization
Decontamination of bedding reduces the risk for contamination of personnel changing bedding: A simulation study
Jennifer Cadnum; Andrew Osborne; Samir Memic; Curtis Donskey and Maria Torres-Teran

Background: The recent worldwide outbreak of Mpox virus infections has raised concern about the potential for nosocomial acquisition during handling of contaminated bedding or clothing. We conducted simulations to test the hypothesis that decontamination of bedding prior to handling could reduce the risk for contamination of personnel. **Methods:** We conducted a crossover trial to test the effectiveness of spraying contaminated bedding with a hydrogen peroxide disinfectant in reducing contamination of personnel during handling of the contaminated bedding. Bedding was contaminated on top and bottom surfaces with aerosolized bacteriophage MS2. Personnel (N = 10) wearing a cover gown and gloves removed the bedding from a patient bed and placed it into a hamper both with and without prior hydrogen peroxide spray decontamination. After handling the bedding, samples were collected to assess viral contamination of gloves, cover gown, neck or chest, and hands or wrists. **Results:** Contamination of the gloves and cover gown of personnel occurred frequently during handling of bedding and 20% of participants had contamination of their hands or wrists and neck after the simulation (Fig.). Decontamination of the bedding reduced contamination of the gloves and eliminated contamination of the cover gown, hands or wrists, or neck. **Conclusion:** Decontamination of bedding prior to handling could be an effective strategy to reduce the risk for nosocomial acquisition of Mpox by healthcare personnel.

Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2023;3(Suppl. S2):s65
doi:10.1017/ash.2023.312



Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Emerging Pathogens
Healthcare personnel with laboratory-confirmed mpox in California
Allison Bailey; Jane Siegel; Shua Chai; David Bui; Robert Snyder; Linda Lewis; Kayla Saadeh; J.B. Bertumen and Erin Epson

Objectives: Few reports have been published about the transmission of mpox in healthcare settings. During the 2022 multinational outbreak, the California Department of Public Health (CDPH) conducted a systematic review of healthcare personnel (HCP) with mpox, including their community and occupational exposures, to understand the transmission risk in healthcare settings. We also sought to inform return-to-work protocols by describing the frequency of HCP working while symptomatic for mpox and identifying occurrences of secondary transmission from infected HCP to patients. **Methods:** We analyzed surveillance data for laboratory-confirmed mpox cases in California with symptom onset from May 17 to September 30, 2022, collected by investigators at local health departments and reported to the CDPH. The reported data were supplemented by review of free-text variables, interview notes, and other files uploaded to state and county disease surveillance data registries. We identified HCP as all persons working in healthcare settings with potential for direct or indirect exposure to patients or infectious materials, including clinical and nonclinical staff but excluding remote workers. **Results:** The CDPH received reports of 3,176 mpox cases during the study period: 109 were HCP. Of the 109 HCP identified from 19 counties, 78 (72%) were aged 30–49 years, 102 (94%) were male, and 43 (39%) were Hispanic or Latino. Also, 29 HCP (27%) had received at least 1 dose of the JYNNEOS vaccine. Occupations requiring frequent physical interactions with patients were reported for 66 individuals (61%). During interviews with local health department investigators, nearly all HCP (n = 98, 90%) reported potential or confirmed sources of community exposure; 1 had confirmed occupational exposure with symptom onset 9 days after a sharps injury acquired during collection of an mpox specimen for testing. Of the 60 HCP who provided information about the days they worked, 35 (58%) worked while symptomatic, for a mean of 3.14 days (median, 2; IQR, 3). Also, 2 HCP worked for 12 days after symptom onset. No secondary cases of mpox were associated with HCP reported to the CDPH. **Conclusions:** This analysis suggests that HCP are more likely to be exposed to mpox in community settings than healthcare settings. The findings support recommendations against sharps use for mpox specimen collection. Although transmission between symptomatic HCP and patients was not reported, HCP can decrease opportunities for mpox transmission by closely monitoring themselves for symptoms after potential exposures and staying home from work if symptoms develop.

Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2023;3(Suppl. S2):s65
doi:10.1017/ash.2023.313

https://doi.org/10.1017/ash.2023.311 Published online by Cambridge University Press