endonuclease analysis (REA) strain typing was performed on the recovered CD isolates.

**Results.** Toxicity testing was positive in 19/50 (38%) cases. Compared to stool tox- in-negative cases, toxin-positive cases were older (95% vs. 71% were age ≥65, p = 0.06), more likely to have a history of CDO (37% vs. 23%, p = 0.34, and have ≥1 CD episodes within 6 months (37% vs. 19%, p = 0.26). Treatment for CD was more common in patients who had a positive toxin test. (95% vs 61%, p = 0.009). Among the 38 patients that received treatment, 33 received vancomycin (87%) and 8 patients (21%) had rCDI at 30 days. Of the 8 patients with rCDI, 2 were re-admitted to the hospital for CDO. The average PCR cycle threshold was lower in the toxin-positive stool compared to toxin-negative stools (24.46 and 29.96, p < 0.001). Fig. 1) The endemic REA group Y was the most common CD strain recovered (30%) and the previously epidemic and virulent REA group BI strain was recovered in 11% of the cases.

**Conclusion.** CDI cases diagnosed by positive stool PCR and positive toxin tests had more typical risk factors for CDI, a lower PCR cycle threshold and were more likely to have been treated for CDI. Outcomes were similar in this setting where infection with the virulent BI strain was uncommon.

**Disclosures.** Stuart Johnson, MD. Acurx Pharmaceuticals (Advisor or Review Panel member) Bio-K+. (Advisor or Review Panel member) Ferring Pharmaceutical (Advisor or Review Panel member)

747. **Association of Clostridioides difficile Infection Incidence With Renewed Vigor in Infection Prevention Practices With the Onset of the COVID-19 Pandemic**

Ahmed A. Khan, MD; Sandra Waqar, MD; Southern Illinois University School of Medicine, Springfield, IL; Southern Illinois University Springfield, IL

**Session: P-36. HAI. C. difficile**

**Background.** *Clostridioides difficile* is the leading cause of hospital associated infections. In 2017 it lead to an estimated 233,900 cases, 12,800 deaths and $1 billion in attributable healthcare costs.12 Judicious use of antibiotics and good hand hygiene practices form the cornerstone of prevention. During the COVID-19 pandemic there has been a focus on infection control practices such as hand hygiene, which would also lead to the reduced incidence of other contagious infections such as *C. difficile* diarrhea.

**Methods.** We looked at the incidence of *C. difficile* infection in a tertiary care hos- pital, 1 year before and 1 year after the start of the COVID-19 pandemic. We looked at the absolute number of hospital associated *C. difficile* infections and the rate per 1000 patient days. The testing methodology changed during the time of the study. Initially it included NAAT for *C. difficile*, however in March of 2020 the testing strategy included testing for GDH antigen and toxin A/B to differentiate between infection and asymptom- colonic colonization.

**Results.** From January 1st and December 31st 2019 there were a total of 182 *C. dif- ficle* infections with a rate of 1.29% per 1000 patient days. Between January 1st and December 31st 2020 there was a total of 51 *C. difficile* infections with a rate of 0.39% per 1000 patient days. There was an absolute risk reduction of 0.9% and relative risk re- duction of 69.7%. Hand hygiene audits did not show a difference in adherence between the two periods, with a compliance rate of 98% for both.

**Conclusion.** Our data suggests that there was a substantial reduction in *C. difficile* infection rate after widespread knowledge of COVID-19 and implementation of enhanced infection prevention strategies. These included frequent reminders of hand washing, gowing and social distancing to name some. This information was conveyed in the form of widely disseminated signs in highly visible areas, frequent reminders electronically and in person between staff and providers. There are limitations in our study which include difficulty in longitudinally ascertaining the extent to which patients care providers adhered to infection prevention strategies and a change in testing strategy for *C. difficile* diagnosis during this time.

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

748. **The Changing Epidemiology of Clostridioides difficile Infection and the NAPI-027 Strain in Two Quebec Hospitals**

Sandrine Couture, M.D., M.C.M.;1 Charles Frenette, MD, FRCP(C);2 Rowin Alfaro, B. Se1; Lorne Schweitzer, MD1, Ian Schiller, MSc1; Nancy Doherty, College Diploma 1; Rahul Nanda, M.D., M.C.M.;1 Yves Longtin, MD;1 Daniel Thirion, PharmD;3 Vivian Loo, MD, M.Sc.;3 McGill University Health Centre, Montreal, Quebec, Canada;1 Jewish General Hospital, Montreal, Montreal, QC, Canada;2 McGill University, Montreal, QC, Canada

**Session: P-36. HAI. C. difficile**

**Background.** *Clostridioides difficile* infections (CDI) are a significant cause of hos- pital-acquired infections, resulting in significant morbidity and mortality. Early detec- tion of CDI has been shown to reduce the spread of CDI within the hospital. As nurses are frequently at the patient’s bedside, we proposed to empower the nursing staff to assess, collect stool samples, and order *C. difficile* testing.

**Methods.** Rates of CDI were measured by our Infection Control Department. Hospital-onset CDI (HO-CDI) was defined as a positive *C. difficile* PCR assay after 3 days of admission, defined as a stay of at least 3 midnights. Community-onset CDI (CO-CDI) was defined as any patient that developed a new (incident) or persistent colitis within 3 days of hospitalization based on stool testing as above. Nursing was instructed and empowered to assess, collect stool specimens, and place an order for *C. difficile* testing, based on the criteria of ≥3 loose or watery stools over 24 hours. Nursing was also educated to not order a test if patients had received stool softeners, enemas, or laxatives within 24 hours. The protocol was initiated in February 2019.

**Results.** Rates of HO-CDI increased during the intervention period, rising from 2.6 cases/1000 patient days and peaking at 17.7 cases/1000 patient days (average 6.7 vs. 12.1 monthly cases per 10,000 patient days. Rates of CO-CDI did not significantly change (12.4 vs. 11.5 monthly cases per 10000 patient days). Due to concerns of inappropriate testing, which included testing after laxatives, enemas, or sending specimens despite < 3 stools over 24 hours, the protocol was discontinued in June 2019. Although the HO-CDI rate remained elevated over the next month, the rate subsequently decreased over the next several months (12.1 vs. 8.0 cases per 10,000 patient days). Overall testing also increased over the study period (148.3 vs. 169.9 cases per/1000 patient days).

**Conclusion.** An important change in HA-CDI epidemiology was observed in two Canadian tertiary care hospitals in Montréal between 2003 and 2019. There was a significant decrease in incidence of HA-CDI and a genotype shift from a predomin- ance of NAP1 strains to non-NAP1 strains. Utilization of fluoroquinolones, to which the NAP1 strain is resistant, concurrently decreased. Infection control interventions targeting isolation, diagnosis, disinfection, and antibiotic stewardship have contributed to the major observed reduction in HA-CDI incidence.

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

749. **A Nurse-Driven Protocol for Early Detection of Clostridioides difficile Infections**

Shannon Beckman, RN, BSN1; Jonathan Chia, DO1; Bethany Stubbe, MASC2; Monica Bryske, MPH, CHES1; Michael S. Wang, MD2; Spectrum Health, Saint Joseph, Michigan;3 Spectrum Health Lakeland, St Joseph, Michigan

**Session: P-36. HAI. C. difficile**

**Background.** *Clostridioides difficile* infections (CDI) are a significant cause of hos- pital-acquired infections, resulting in significant morbidity and mortality. Early detec-