Aim: This evidence based practice initiative was conducted to identify the correlation between hand hygiene compliance among Certified Nursing Assistants (CNAs) and Registered Nurses (RNs) when exiting a Clostridium difficile isolation patient room and an in-service educational offering. Methods: This study was conducted on two nursing units, 3CD and 3EF, at a large metropolitan hospital. This study was based on the evaluation of 192 total encounters of CNAs and RNs entering C. diff isolation patient rooms, 101 encounters prior to in-service education and 91 encounters after in-service education. In-service education was provided to 47 CNAs and RNs. In-service education included scientific information regarding the C. diff bacteria, severity of C. diff infections, and previous nosocomial infection rates at the clinical site. Results: The collected data were analyzed by computing means, using a Chi-Square Test, where p-value of <0.05 were considered statistically significant. Overall hand hygiene compliance did increase by 6%, but this was determined to not be statically significant,  $X^2(2, N = 192) = 0.7895$ , p = 0.374258. Conclusion: This in-service educational offering did not improve hand hygiene compliance of nursing staff. Continued research with larger sample size is recommended. Continued research into different causes of poor hand hygiene, other than a lack of education, is also recommended.