According to CDC, central line associated bloodstream infection has resulted in a high percentage of morbidity and has incurred billions of dollars of healthcare costs. These infections are preventable and studies have been conducted to find out the most effective ways of preventing CLABSIs. Hospitals now implement evidence-based practices, guidelines, and tools in preventing this type of infection. One of the top guidelines is the education and training of the healthcare staff that will be involved in the insertion and maintenance of the central lines. The recommended guidelines include catheter bundles, proper catheter sites, the use of aseptic technique during catheter insertion, preparation of skin prior to insertion with >0.05% chlorexidine or 70% alcohol, the maintenance of the catheter site, and the use of antimicrobial or antiseptic impregnated catheter and cuffs. In this research paper, we aim to find out the effectiveness of the port protector cap in preventing CLABSIs.