in 17 patients who underwent ALCS insertion within 30 days of infection diagnosis compared to the other 33 patients. **Conclusions:** The 2-stage primary TKA for patients with infected knee arthritis with coexisting joint destruction showed satisfactory outcomes with a low infection recurrence. However, constrained prostheses or augmentation use may be necessary. Notably, some functional scores were better in the group that underwent ALCS insertion relatively early after the infection diagnosis.

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Subject Category: Emerging and re-emerging infectious diseases in the healthcare setting
Abstract Number: SG-APSIC1035
Prospective safety surveillance study of ACAM2000 smallpox vaccine in deployed military personnel
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Objectives: We compared rates of myopericarditis adverse events and evaluated potential risk factors of development. We compared rates of dermatological–neurological adverse events (severe and serious) with other adverse events in a specific population of deployed US military personnel who received or did not receive ACAM2000 vaccine (ie, Vaccinia smallpox live vaccine). **Methods:** Up to 20,000 military personnel recipients were enrolled in a prospective observational cohort study: up to 15,000 ACAM2000 recipients in cohort 1 and up to 5,000 military personnel who were eligible for ACAM2000 vaccination but were not vaccinated due to recent vaccination or characteristics of their contacts in cohort 2. Enrollment was at a 3:1 ratio, respectively. Serum specimens and data were collected at the initial visit and 10 days later (cf, window of 6–17 days). Study participants with evidence, either clinical or laboratory, of possible myopericarditis were referred to a blinded independent review committee for further evaluation and adjudication. The primary analysis was logistic regression with adjudicated myopericarditis as the dependent variable and age, sex, race, and exercise regimen as the independent variables. **Results:** Initial data and serum specimens were obtained from 14,667 participants (cohort 1, N = 10,825; cohort 2, N = 3,842). According to protocol, 2 visits were completed by 12,110 participants (cohort 1, N = 8,945; cohort 2, N = 3,165), and 125 participants (cohort 1, N = 111; cohort 2, N = 14) were referred for myopericarditis adjudication, of whom 1 had confirmed myocarditis, 5 had suspected myocarditis, 1 had suspected pericarditis, and 54 (cohort 1, N = 44; cohort 2, N = 10) had subclinical myopericarditis. The unadjusted myopericarditis rates were 5.7 per 1,000 (95% CI, 4.3–7.5) for cohort 1 and 3.2 per 1,000 (95% CI, 1.7–5.8) for cohort 2. The unadjusted and adjusted odds ratios for myopericarditis for cohort 1 and cohort 2 were 1.8 (95% CI, 0.9–3.6) and 1.3 (95% CI, 0.6–2.6), respectively. At least 1 serious adverse event was experienced by 117 participants (1.1%) in cohort 1 and 13 (0.3%) in cohort 2. No serious and severe neurological or dermatological adverse events were reported. **Conclusions:** ACAM2000 vaccination was associated with a modest but nonsignificant increase in the risk of myopericarditis in this prudently screened, young and healthy service-member population. The adjusted OR was 1.3 and the unadjusted OR was 1.8. Overall, all but 7 cases were subclinical. Citation: Faix DJ, Gordon DM, Perry LN, et al. Prospective safety surveillance study of ACAM2000 smallpox vaccine in deploying military personnel. *Vaccine* 2020;38:7323–7330.

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Subject Category: Emerging and re-emerging infectious diseases in the healthcare setting
Abstract Number: SG-APSIC1155
Drug susceptibility patterns of fulminant group G *Streptococcus* (GGS) infection as a re-emerging infectious disease in Japan
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Objectives: Severe streptococcal infections are invasive, re-emerging infections that rapidly worsen and lead to death. Not only group A *Streptococcus* (GAS) but also group g *Streptococcus* (GGS) are the causative agents of this infection. Moreover, GGS produces hemolytic toxins, proteolytic toxins, and other toxins like GAS. Furthermore, drug-resistant *Streptococcus* spp, like other pathogenic bacteria, are on the rise worldwide. However, drug resistance has not been studied extensively in invasive GGS. Therefore, we investigated the drug susceptibility of GGS clinical isolates that are closely related to fulminant streptococcal infections. **Methods:** We used GGS strains isolated from sterile sites of invasive infections at a hospital in Nagoya City, Japan, from 2017 to 2021. Bacterial identification and drug-susceptibility testing were performed using a VITEK-2 system. **Results:** Overall, 53 strains were included in the study. The GGS strains examined in this study were resistant to 3 different antibiotics (erythromycin, clindamycin, and minocycline). Also, 18 strains (34%) were resistant to erythromycin, 9 (17%) were resistant to clindamycin, and 18 (34%) were resistant to minocycline. Moreover, there were 5 strains (9.4%) of 2-drug–resistant bacteria and 8 strains (15.1%) of 3-drug–resistant bacteria. **Conclusions:** Acquired resistance not only to individual antibiotics but also to multiple antibiotics suggests that GGS tends to become multidrug resistant. Continued surveillance of the drug susceptibility of GGS as a potential cause of fulminant streptococcal infections will be necessary in the future.

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Subject Category: Emerging and re-emerging infectious diseases in the healthcare setting
Abstract Number: SG-APSIC1011
Factors associated with improved knowledge of COVID-19 prevention and control following a training of healthcare workers in Vietnam
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Objectives: SARS-CoV-2 is a novel and highly infectious virus. An effective response requires rapid training of healthcare workers (HCWs). We measured the change in knowledge related to COVID-19 and associated factors before and after training of HCWs in Vietnam. **Methods:** A quasi-experimental design was used to evaluate HCW knowledge related to prevention and control of SARS-CoV-2 before and after attending a