Figure 1 SIRVA Shoulder Injury Related to Vaccine Administration What to watch for when landmarking: Too High* Acromion *Most reported cause of injury Bursa · Risk of injecting into shoulder joint or bursa Can cause inflammation leading to bursitis, frozen shoulder Axillary nerve syndrome, and other complications Watch for prolonged shoulder pain, weakness, and decreased range of motion Symptoms begin within hours to days Without treatment, symptoms last months and may never resolve Too Far to Side Too Low Can inject into axillary nerve Can inject into radial nerve Radial nerve Can cause paralysis and/or neuropathy Watch for burning, shooting pain during injection Symptoms start immediately What happens when: Tips to Avoid SIRVA Landmark, don't "eyeball" Expose the shoulder completely **Needle Too Short** Can inject into subcutaneous tissue Always sit to inject a seated When a shirt can't be removed. roll the sleeve up, don't pull the patient · More painful for patient shirt's neck over the shoulder · Risk of skin reaction Vaccine may be less effective **Needle Too Long** Can hit bone or nerve Remember! • If you hit bone, pull needle back slightly and inject 2-3 fingers down · If you hit nerve, pull needle from the acromion out and try again

Atanasoff S, Ryan T, Lightfoot R, Johann-Liang R. Vaccine 2010;28(51):8049-52.doi: 10.1016/j.vaccine.2010.10.005 Epub 2010 Oct 16.

*Barnes MG, Ledford C, Hogan K. J Am Board Fam Med 2012; 25(6):919-22.doi: 10.3122/jabfm.2012.06.110334.

*Cook IF, Hum Vaccin 2011; 7(8):845-8.doi: 10.4161/hv.7.8.16271.Epub 2011 Aug 1.

*Cook IF, Hum Vaccin ImmunoHert 2015; 11(5):1149-11.doi: 10.1080/1245515.2015.1017694.

*Cross GB, Moghaddas J, Buttery J, Ayoub S, Korman TM. Aust Fam Physician 2016; 45(5):303-6.

*Davidson LT, Carter GT, Kilmer DD, Han JJ. Am J Phys Med Rehabil 2007; 86(6):507-11.

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