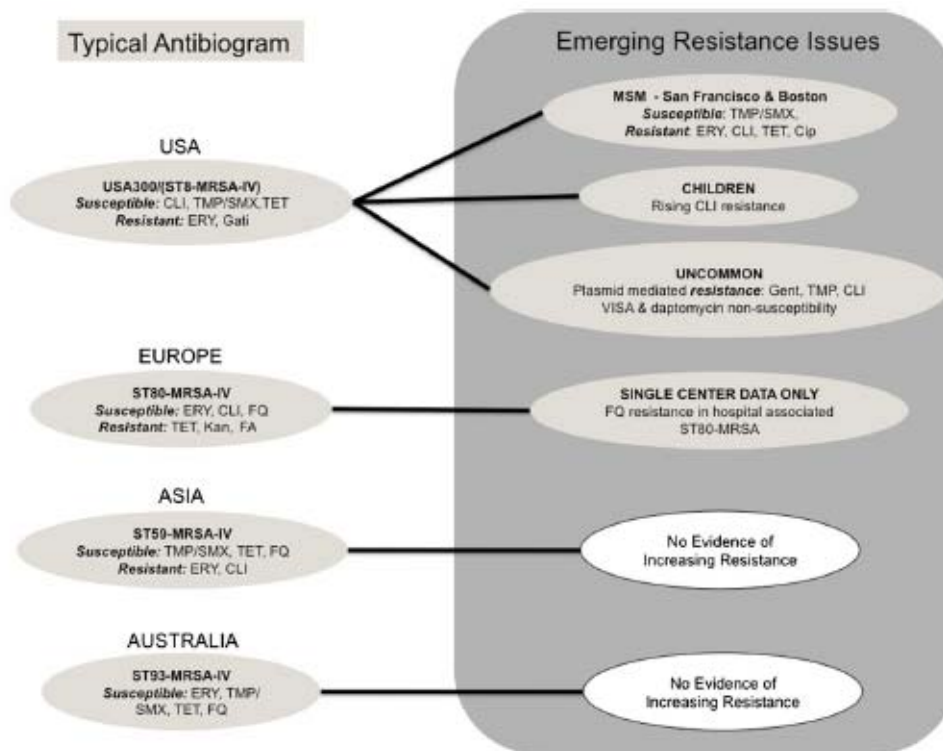


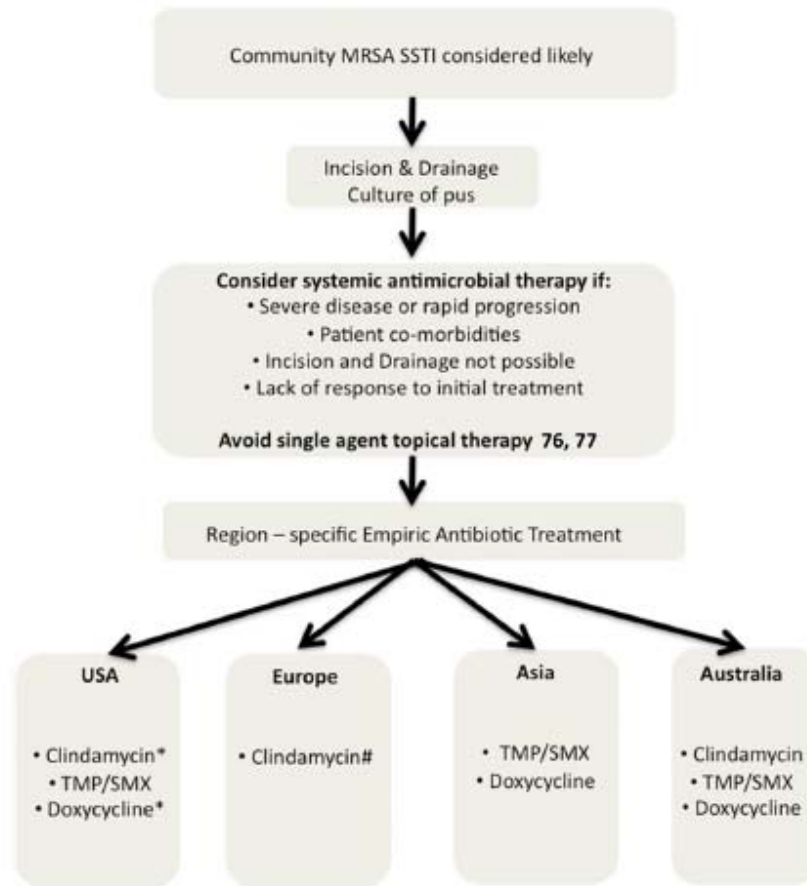
## Antimicrobial resistance: Not community-associated methicillin-resistant *Staphylococcus aureus* (CA-MRSA)! A clinician's guide to community MRSA - its evolving antimicrobial resistance and implications for therapy.

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There is significant diversity in methicillin-resistant *Staphylococcus aureus* (MRSA) clones arising in the community worldwide, with considerable geographical differences in typical antimicrobial resistance profiles. Many community clones of MRSA have a non-multidrug resistant antimicrobial profile, providing increased options for empirical and directed therapy of infections caused by these strains. However, the recent description of increasing non- $\beta$  lactam resistance in community clones of MRSA, especially USA300, provides a timely warning for clinicians making decisions about therapy for patients potentially infected with these strains. Continued monitoring of global epidemiology and emerging drug resistance data is critical for the effective management of these infections.



**Figure 2.** Summary of typical antimicrobial resistance profile of dominant global clones of community methicillin-resistant *Staphylococcus aureus* (MRSA) and emerging resistance issues. CLI, clindamycin; ERY, erythromycin; FA, fusidic acid; FQ, fluoroquinolone; Gati, gatifloxacin; Gen, gentamicin; Kan, kanamycin; MSM, men who have sex with men; TET, tetracycline; TMP-SMX, trimethoprim-sulfamethoxazole; VISA, vancomycin-intermediate *S. aureus*



**Figure 3.** Treatment algorithm for empirical therapy of skin and soft-tissue infections (SSTIs) potentially caused by community methicillin-resistant *Staphylococcus aureus* (MRSA). For severe invasive disease potentially caused by community MRSA. MSM, men who have sex with men; TMP-SMX, trimethoprim-sulfamethoxazole. \*Consider use of alternative agent in MSM population in San Francisco & Boston [34]. #Possible alternative agents to clindamycin include rifampicin and fusidic acid. These agents should not be used as single agents because of the risk of development of resistance. However, combination therapy may incur additive adverse drug reactions. Whether antibiotic therapy is necessary for uncomplicated skin infection should therefore be considered.