Conclusions Although recommendations are being followed, there is still place for antibiotic therapy in RSV infection. The need for antibiotic cannot be easily predicted upon traditionally used inflammatory markers. Due to prolonged hospital stay, there is strong need for minimizing antibiotic use, and more precise clinical tools to assess the risk of antibiotic.

Introduction Rates of community acquired methicillin resistant staphylococcus aureus (MRSA) in Israel is quite low and estimated at the range of 3% out of staphylococcus aureus isolates.

This survey has been undertaken due to clinical impression of significant rise at the rates of MRSA isolates during the last few years in a closed community in Israel.

Methods All community acquired staphylococcus aureus isolates from children referred to Mayenei Hayeshuah Hospital in Bnei Brak Israel during the years 2015–2018 were analyzed. This hospital serves a closed Ultraorthodox Jewish community characterized by crowdedness.

Results A total of 201 isolates were reviewed. Most isolates (163) were from skin and soft tissue specimens and the rest were from normally sterile fluids, urine and ear specimens.

The rates of MRSA isolates out of all staphylococcal isolates were 14%.

Most MRSA isolated were from the skin and soft tissue while none of the isolated from normally sterile fluid fluids grew out MRSA.

During the study years there was a dramatic rise at the rates of MRSA from 4% in 2015 to 23% in 2018.

Children with MRSA infections were younger than those with methicillin sensitive staphylococcus aureus (MSSA) infection (mean ages were 2.9 years and 5.9 years in MRSA vs. MSSA infected children respectively, p<0.001).

Clindamycin inducible resistance was detected in 44% of MSSA isolates and in 7% of MRSA isolates.

Trimethoprim/sulfamethoxazole resistant was observed in 2% of MSSA and in 7% of MRSA isolates.

Conclusions These findings demonstrates the ability of MRSA clones to spread rapidly especially in a closed and crowded community.

Our findings also indicate that clindamycin is not an appropriate antibiotic for empiric treatment of staphylococcal infection unless administered with another anti staphylococcal agent.

In addition, the increased rate of trimethoprim/sulfamethoxazole resistant is worrisome and should be closely monitored.