

# Resident Versus Private Practice Post-Operative Infection Rates for Non-Scheduled Cesarean Sections

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## Background

Cesarean section is the most commonly performed major surgery in the world. Post-operative infections after cesarean sections are a major cause of maternal morbidity and mortality, prolonged hospital stay, and added healthcare costs. Sixty to seventy percent of cesarean sections are non-scheduled and infection rates for these surgeries approach 12%. There is renewed emphasis amongst obstetricians on improving this infection rate. Studies have shown mixed results on the impact of surgical residents on post-operative infection outcomes.

## Objective/Purpose

To determine if patient's undergoing non-scheduled cesarean sections with a resident practice are at a higher risk of post-operative infections compared to those undergoing surgery with a private practice.

## Methods

This was a retrospective cohort study. Chart review was performed on all non-scheduled cesarean sections for a one-year time frame at our single tertiary care hospital (N=515). Non-scheduled was defined as labor (change in cervical dilation or >4cm on presentation) or ruptured membranes prior to start of the cesarean section. Patients diagnosed with chorioamnionitis prior to surgery were excluded. The primary outcome was defined as a composite of post-operative infections including endometritis, wound infection and other major infections. Secondary outcomes were individual infections including endometritis, wound infection and other major infections.

## Results

Demographic data and known risk factors for infection including race, BMI, tobacco use, and diabetes were reviewed. The composite infection rate was calculated for both groups; residents 10.3 (26) and private practice 9.1 (24) (p=0.64).

## Conclusion

Despite differences in infection risk factors there was no significant difference in composite infection rates between residents and private practices for non-scheduled cesarean section.