Influenza acquired in pregnancy can have serious sequalae for both mother and foetus. Recent studies have demonstrated that influenza vaccine in pregnancy is both safe and effective. Despite this, evidence suggests that vaccine uptake in pregnancy is suboptimal. Research suggests that between 43% and 76% of pregnant women receive the vaccine. The role of midwives in the promotion and provision of this vaccine is unknown. The purpose of this study was to investigate the role of midwives in the promotion and provision of antenatal influenza vaccine and, to provide a statistical and thematic description of the barriers and enablers midwives encounter in its promotion and provision. This mixed method study incorporated a cross sectional on-line survey and in-depth interviews conducted with midwives, employed in urban and regional South Australia. This study utilised convenience sampling and the qualitative phase supported and enhanced the results obtained in the quantitative phase. Inferences were drawn from both results. Quantitative data were available for 137 midwives and 10 midwives participated in the interviews. Whilst all midwives indicated that education and vaccine promotion were part of their role, only those employed in a Primary Health setting were actively providing the vaccine. Quantitative data suggests that less than 43% of midwives felt prepared to provide the vaccine. Midwives who had received formal immunization training were more likely to recommend the vaccine (93.7%) (p=0.001) when compared to those who had not received training. Qualitative data identified immunization education as an enabler to practise. Midwives identified an immunization knowledge deficit. Those midwives who had received immunization education were more likely to actively promote and provide the vaccine to pregnant women. These findings indicate the need for more immunization education of midwives in both university and practise settings. This is the first Australian study to investigate the role of midwives in antenatal influenza immunization, hence, the results are relevant to education, practise and policy.