

## **Maternal characteristics associated with the likelihood of adequate syphilis treatment in pregnancy in Australia, 2016 to 2021.**

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### **Background:**

Congenital syphilis is a serious condition caused by *Treponema pallidum* infection of a foetus or infant acquired in utero, from a mother with inadequately treated or untreated syphilis. There are no Australian studies investigating maternal characteristics associated with a congenital syphilis outcome in an infant or fetus. This study aims to understand the gaps in the prevention of congenital syphilis in Australia by investigating the demographics, clinical care and risk behaviour characteristics of mothers who did not receive adequate treatment for syphilis in pregnancy in comparison with those who did.

### **Methods:**

We conducted a case-control study. We identified mothers who did not receive adequate treatment for syphilis during pregnancy and went on to have a baby with congenital syphilis (cases) from the national enhanced congenital syphilis data set and compared them to mothers with syphilis in pregnancy who did receive adequate treatment and did not have an infant with congenital syphilis (controls) from national syphilis surveillance data and jurisdictional databases from January 2016 to December 2021.

### **Results:**

Between 2016 and 2021, 760\* syphilis notifications were confirmed to have syphilis in pregnancy. 49 of these notifications resulted in a congenital syphilis outcome and 46 of these had not received adequate treatment for syphilis in pregnancy. Results of the case-control study are not available at time of abstract writing.

### **Conclusion:**

Congenital syphilis is a serious condition that can be easily prevented by the timely identification and treatment of maternal syphilis in pregnancy. By understanding the gaps in the prevention of congenital syphilis in Australia evidence can be developed to support improved access to timely treatment in pregnancy and inform policy to eliminate congenital syphilis in Australia.

\*At time of abstract writing South Australian data is not included but is expected to be included in the final presentation.

### **Disclosure of Interest Statement:**

Nothing to disclose