

THE CURRENT STATUS AND CLINICAL MANAGEMENT OF ANTENATAL RUBELLA SCREENING.



Dr Lorna Holcroft ¹ Carol O'Connor ² Mantse Corderroura ¹ Dr Susan Knowles² Prof John F Murphy ² Childrens Health Ireland at Crumlin. National Maternity Hospital

BACKGROUND

- Rubella infection during pregnancy in a non-immune mother may cause severe teratogenic effects in the fetus, particularly if infection occurs in the first trimester.
- All mothers have antenatal serology testing for Rubella immunity levels at the booking visit.
- Levels of Rubella IgG below 10 IU are considered to be inadequate.
- A dose of the MMR vaccination is prescribed to mothers with low immunity in the postnatal period if they do not have a previous history of Rubella vaccination.

AIMS

- 1) This study was undertaken to evaluate the current status of the Rubella screening program.
- To identify the prevalence of inadequate Rubella immunity on booking serology.
- To determine the number of women with low Rubella immunity who were prescribed a dose of MMR vaccination in the postnatal period.

METHODS

- The study period was from August 2018 to July 2022
- The antenatal Rubella serology records and the pharmacy records of postnatal MMR prescription were obtained and reviewed.
- The number of mothers with low immunity to Rubella was identified.
- The number of mothers with inadequate Rubella immunity who were prescribed a postnatal dose of the MMR vaccine was determined.

RESULTS					
	Aug 18- July 19	Aug 19- July 20	Aug 20- July 21	Aug 21- July 22	Total
No. tested for Rubella IgG	8542	7927	8177	7256	31902
No. of inadequate Rubella IgG	795	466	457	529	2247
Prevalence Rubella Non immunity on serology	0.093	0.059	0.056	0.073	0.070
No. prescribed MMR postpartum	309	217	222	209	957
Percentage of those who were Rubella non immune on serology prescribed MMR	39%	47%	49%	40%	43%
Percentage of total who had antenatal serology testing prescribed MMR	3.6%	2.7%	2.7%	2.9%	3.0%

Conclusion

- The purpose of the Rubella Screening Program is to identify mothers with low immunity and no MMR vaccination.
- The risk of antenatal Rubella infection in Ireland is very low because the incidence of Rubella in the community has been zero since 2016. However the continuation of antenatal screening is justified because a small cluster of Rubella cases among children is still possible.
- Current risk factors for Rubella outbreaks include immigrant children aged over 4-5 who may have missed routine childhood vaccinations and the reduction in the uptake of the MMR vaccination between 2019 and 2021 which decreased from 91.1% to 88% in Ireland. The target uptake is 95%.
- Antenatal Rubella screening identifies women with inadequate Rubella immunity and offers an opportunity for catch up vaccination