

Congenital Cytomegalovirus

Opportunities for prevention

A/Prof Hayley Smithers-Sheedy

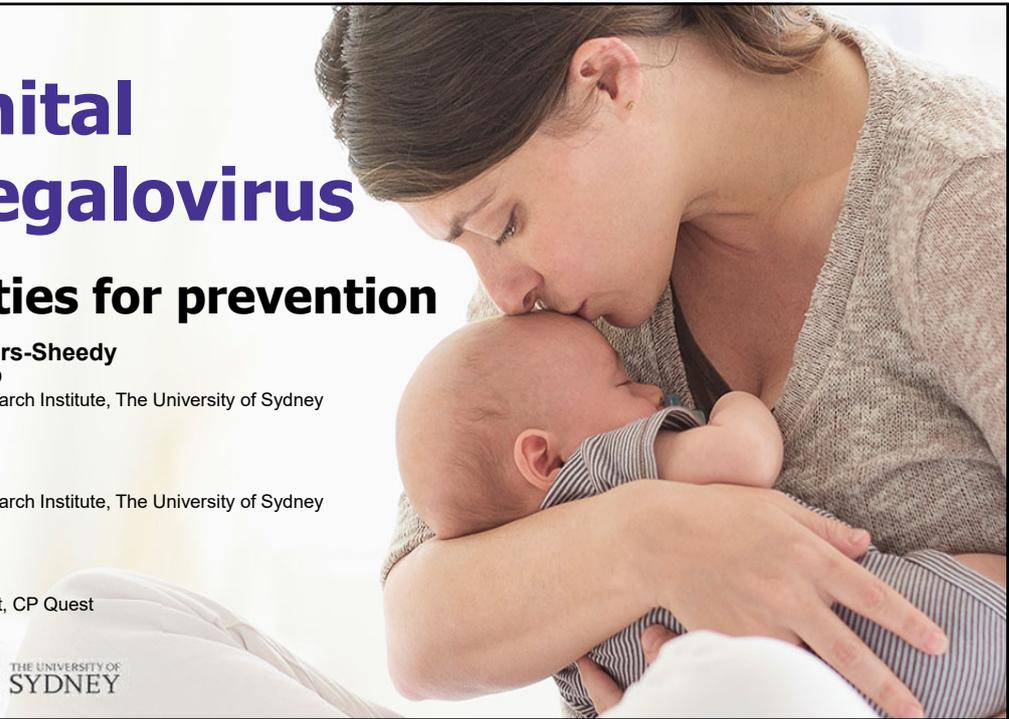
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Acknowledgement of Country

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 Australian Cerebral Palsy Register Group
 Congenital CMV Register Group
 Australian College of Midwives
 Royal Australian College of General Practitioners
 Royal Australian & New Zealand College of Obstetricians & Gynaecologists

COLLABORATION

Cerebral Palsy Alliance est 1945

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The Cerebral Palsy Alliance Research Institute est. 2005

Bree and Dax

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What is Cytomegalovirus?



Common herpesvirus

Endemic – largely asymptomatic

Transmitted through person to person contact with infected secretions

At risk groups: people who are pregnant / immunosuppressed

Common in young children

Can be shed in urine and saliva up to 2 years after infection

People caring for young children are at increased risk

Clinical outcomes of congenital CMV



Majority ($\approx 80\%$) remain well

cCMV and hearing loss

- 20% - 30% of all SNHL in young children is due to congenital CMV ^{1,2}
- Usually progressive and/or late-onset SNHL as a result of the ongoing inflammatory response to the infection
- 10% - 20% of babies born with congenital CMV will have normal hearing at birth but develop hearing loss in the first 5 to 6 years of age
- Fluctuating hearing loss, balance and vestibular disorders are common

1. Barbi et al, 2003. 2. Schleiss et al 2006



All babies born with congenital CMV should get regular hearing checks

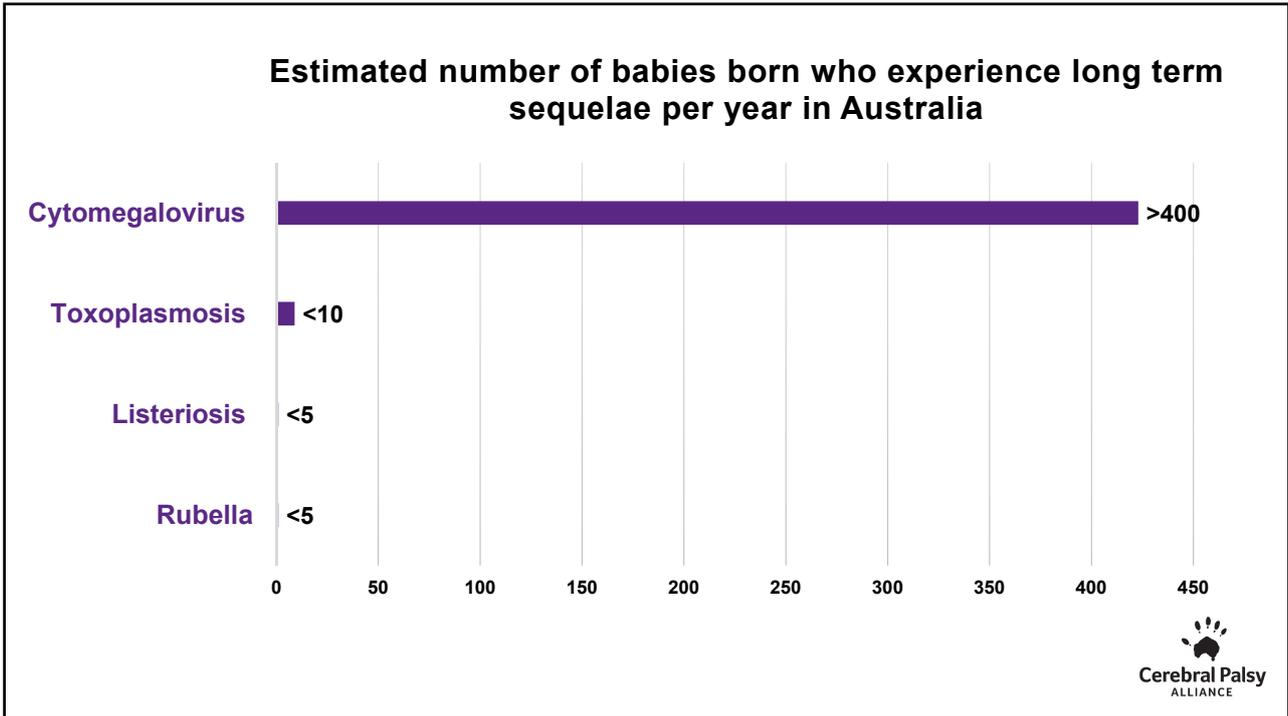


FIGURE 1
Primary, secondary, and tertiary prevention opportunities for reducing congenital cytomegalovirus infection

Opportunities for prevention

Wash with care
Washing your hands for at least 20 seconds, especially after contact with urine or saliva of young children during activities like changing nappies, lowering nappies, or handling children's toys.

Kiss with care
Avoiding contact with saliva when kissing a child - instead, try a kiss on the forehead.

Don't share
Not sharing toys, bottles, pacifiers, teething rings or dummies with young children.

Valaciclovir to prevent vertical transmission of cytomegalovirus after maternal primary infection during pregnancy: a randomised, double-blind, placebo-controlled trial

Keen-Shuh Wuang*, Joseph Parke†, Orit Harel, Eli Knausz, Efram Blouvy, Aaron Wintzler, Eran Haber, Jacob Anzi†

ORIGINAL ARTICLE

Valganciclovir for Symptomatic Congenital Cytomegalovirus Disease

Authors: David W. Kimberlin, M.D., Penelope M. Jester, B.S.N., M.P.H., Pablo J. Sanchez, M.D., Amina Ahmed, M.D., Ravi Arora-Roger, M.D., Marisa C. Michaels, M.D., M.P.H., Neeraj Arora, M.D., JGI, for the National Institute of Allergy and Infectious Diseases Collaborative Antiviral Study Group. Author info & Affiliations

Published March 5, 2015 | N Engl J Med 2015;372:933-941 | DOI: 10.1056/NEJMoa1404591 | VOL. 372, NO. 10 Copyright © 2015

Hui. Routine cytomegalovirus screening in pregnancy? *Nat Am J Obstet Gynecol* **MF2021**.

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01. Wash with care

Wash hands carefully, especially after changing nappies and wiping noses.



02. Kiss with care

While you are pregnant, avoid kissing toddlers on the lips. **Kiss on the forehead instead.**



03. Don't share

Don't share food, cups or cutlery with young children and avoid putting your child's dummy/toothbrush in your mouth.



These hygiene precautions are effective in reducing CMV seroconversion during pregnancy.

References: Picone et al BJOG 2009, Vauloup-Fellous et al JClinVirol 2009, Revello et al EBioMedicine 2015

CONGENITAL CYTOMEGALOVIRUS INFECTION IN PREGNANCY AND THE NEONATAL DIAGNOSIS

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REVIEW | VOLUME 40, 100892, MAY 2024 Download Full Issue PDF [334 KB]

Consensus recommendation for prenatal, neonatal and postnatal management of congenital cytomegalovirus infection from the European congenital infection initiative (ECCI)

Marianne Leruez-Ville [✉] • Christos Chatzakis ^u • Daniele Lilleri ^v • Daniel Blazquez-Gamero ^v • Ana Alarcon • Nicolas Bourgon • et al. [Show all authors](#) • [Show footnotes](#)

✓ Clinical guidelines

the Women's Health Committee and approved by the RANZCOG Board and Council.

A list of Women's Health Committee Members can be found in [Appendix A](#).

Disclosure statements have been received from all members of this committee.

The Committee acknowledges contributing authorship in [Appendix B](#).

Objectives: To provide guidance for maternity care providers and the community on the prevention of maternal cytomegalovirus (CMV) infection during pregnancy in order to reduce mother to child transmission (MTC) of virus, fetal infection and clinical sequelae (symptomatic congenital CMV); and to provide a general overview of the diagnosis and management of congenital CMV.

Outcomes: Improved awareness about CMV prevention among maternity health care providers and improved routine provision of patient education on hygiene measures which have been shown to reduce CMV transmission during pregnancy.



Only 20% of pregnant women know about CMV
(Lazzaro 2019)

Only 10% of maternity health professionals routinely discuss CMV prevention with women in their care
(Shand 2018)

Free CMV Information Resources

Available free: <https://cerebralpalsy.org.au/cmV/>



CMV brochures and further information

Resources in other languages

CPA embraces and respects our multicultural community. We have translated the 'Reducing the risk of CMV during pregnancy' brochure into five languages: **Arabic, Chinese (Simplified), Chinese (Traditional), Hindi, Vietnamese**

Download these as pdfs and/or request free printed copies through our online form.



Free CMV eLearning courses for midwives, GPs and Obstetricians



CMV prevention needs your action.

- Update knowledge
- Educate patients
- Upskill for free

REGISTER NOW



praxhub

CPD Educational Module

Infections in Pregnancy

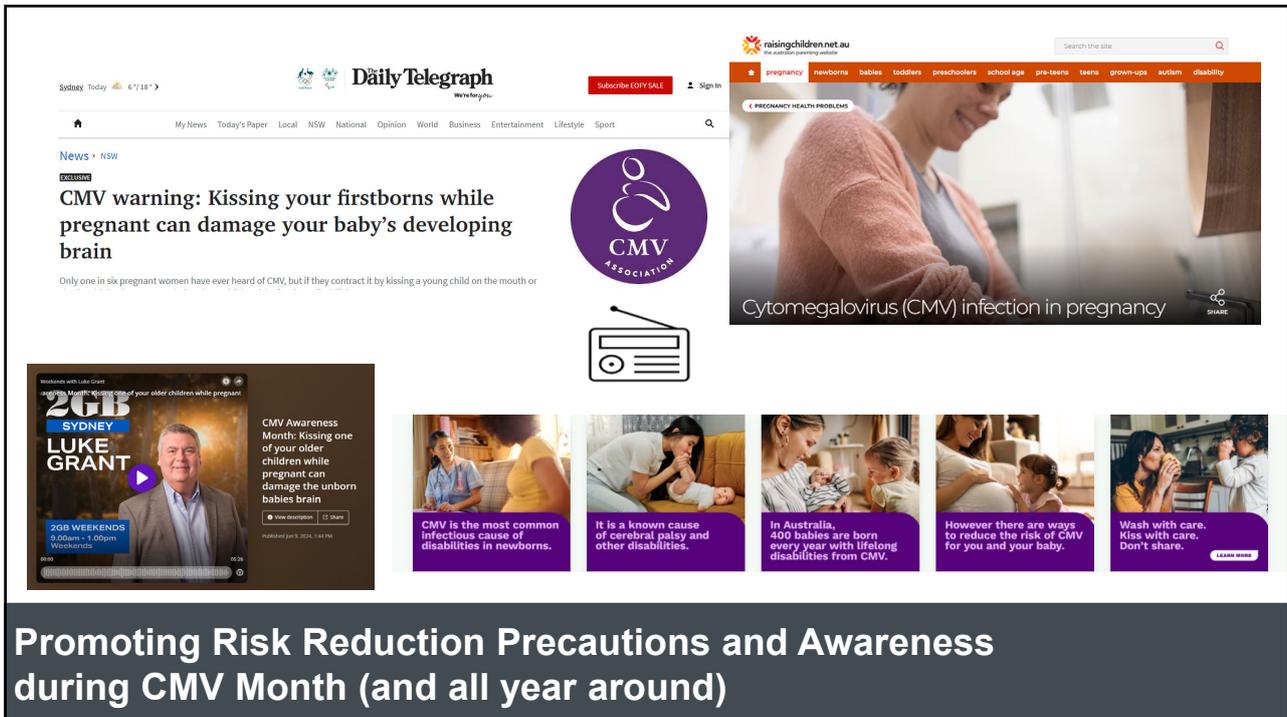
What's new in congenital CMV and syphilis

RACGP CPD 1.5
ACRRM CPD ACCREDITED ACTIVITY 2023-2025

Access Education

If you are not already a Praxhub member, you will need to register for free before accessing this education.

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Daily Telegraph

News > NSW

CMV warning: Kissing your firstborns while pregnant can damage your baby's developing brain

Only one in six pregnant women have ever heard of CMV, but if they contract it by kissing a young child on the mouth or

CMV Association

Cytomegalovirus (CMV) infection in pregnancy

2GB SYDNEY **LUKE GRANT**

CMV Awareness Month: Kissing one of your older children while pregnant can damage the unborn babies brain

Published Jan 9, 2024, 1:44 PM

- CMV is the most common infectious cause of disabilities in newborns.
- It is a known cause of cerebral palsy and other disabilities.
- In Australia, 400 babies are born every year with lifelong disabilities from CMV.
- However there are ways to reduce the risk of CMV for you and your baby.
- Wash with care. Kiss with care. Don't share.

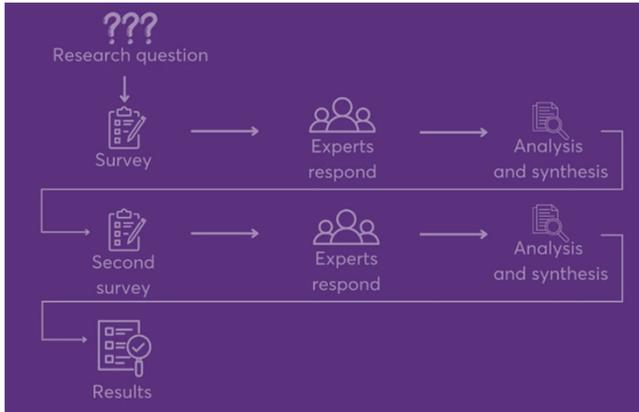
Promoting Risk Reduction Precautions and Awareness during CMV Month (and all year around)

CMV RESEARCH PRIORITY SETTING DELPHI STUDY



ESE-CMV study

Education, Serology & Evaluation
to prevent congenital cytomegalovirus



cCMV 
Register

*CMV*Victory

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CHRISTOPHER'S STORY

Mrs Pam Rogers



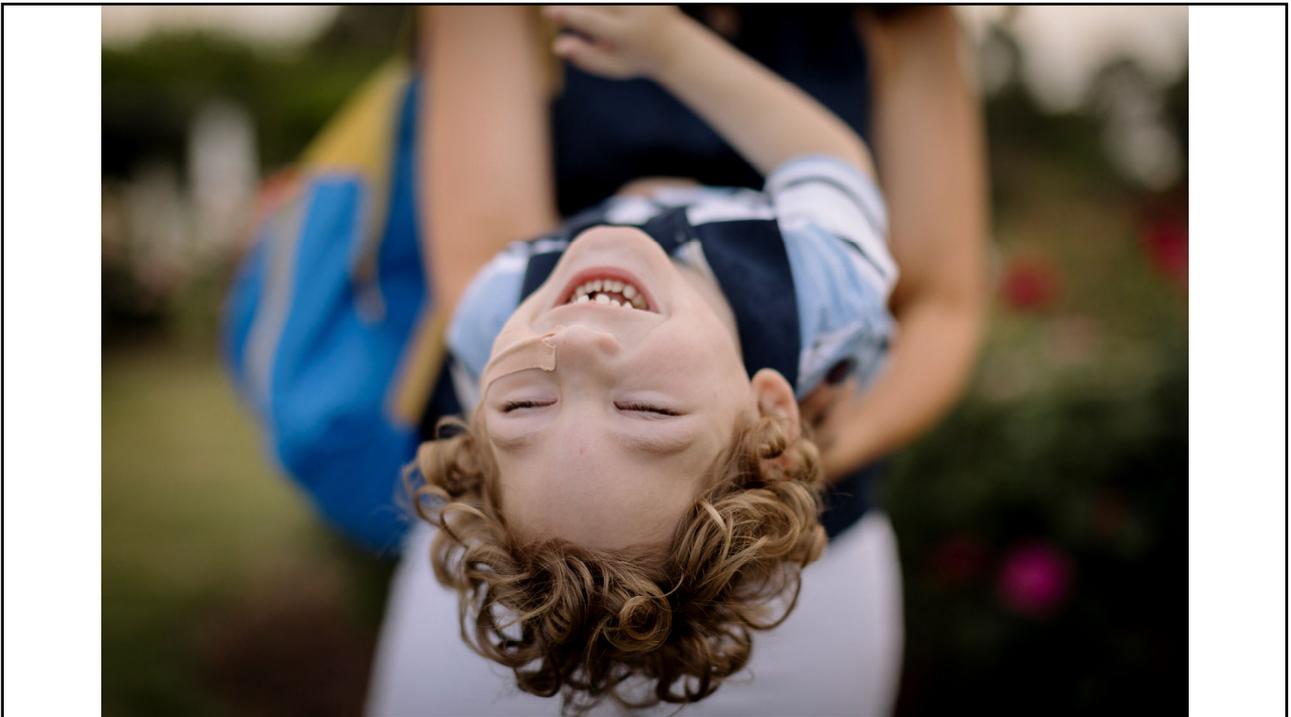








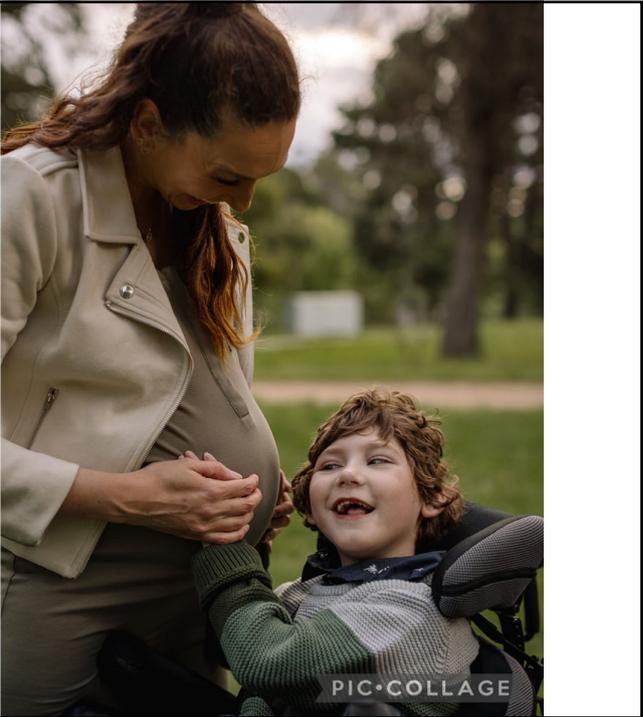










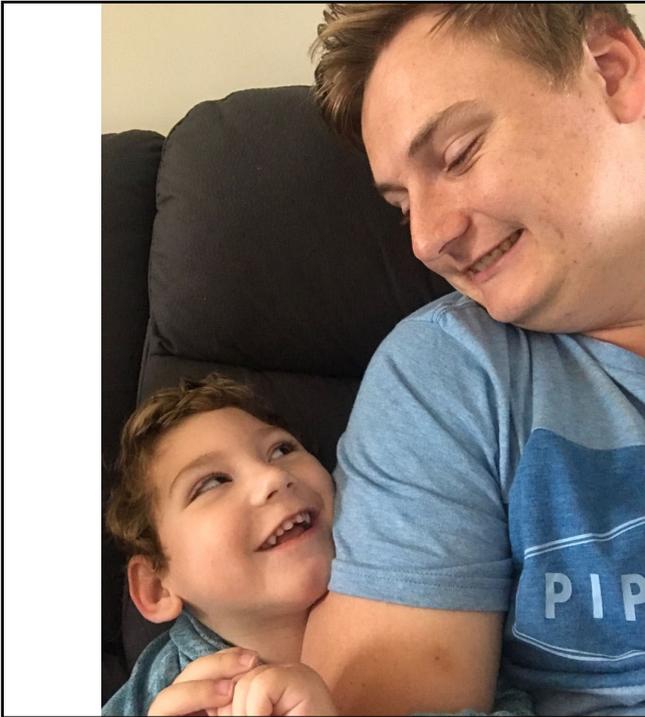


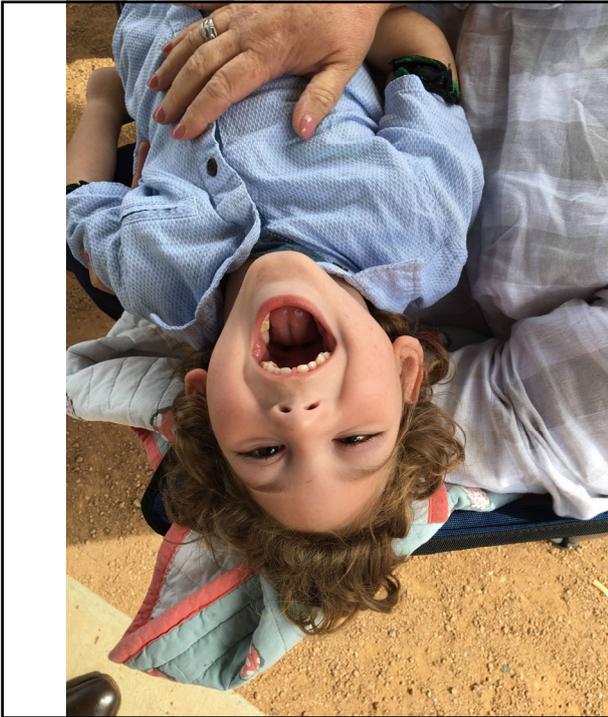
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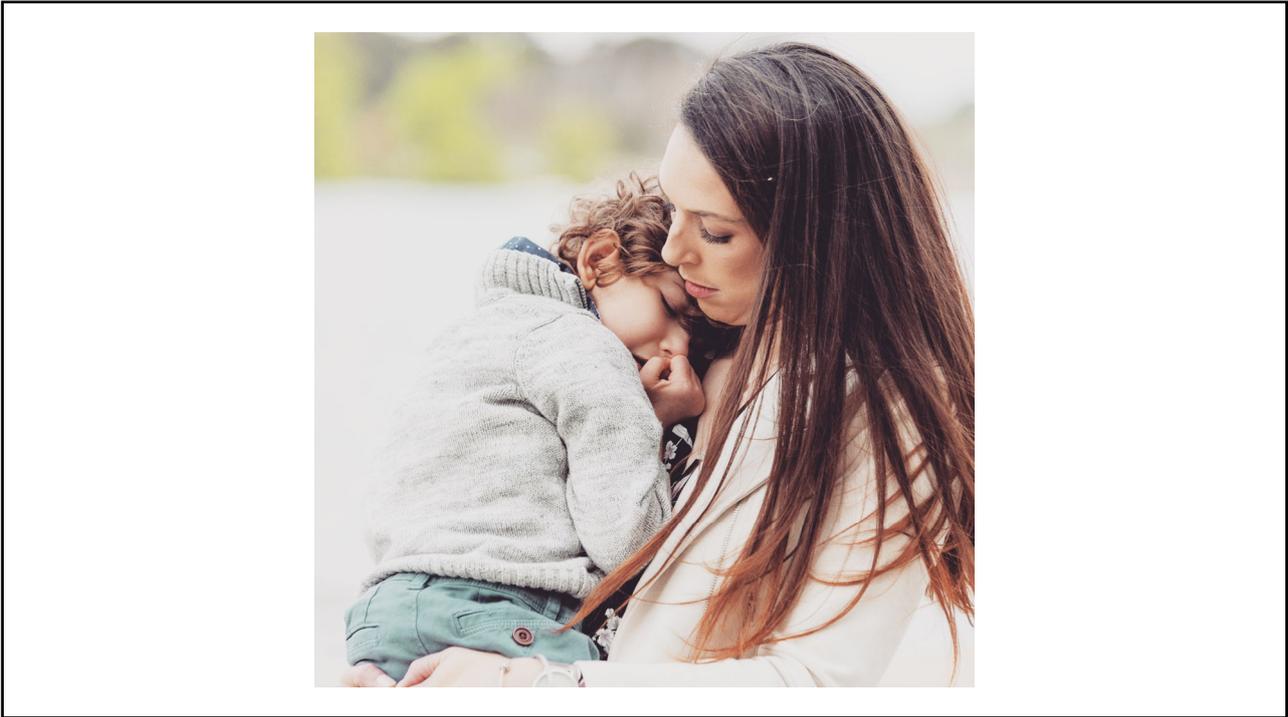


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Congenital Cytomegalovirus Network Bulletin

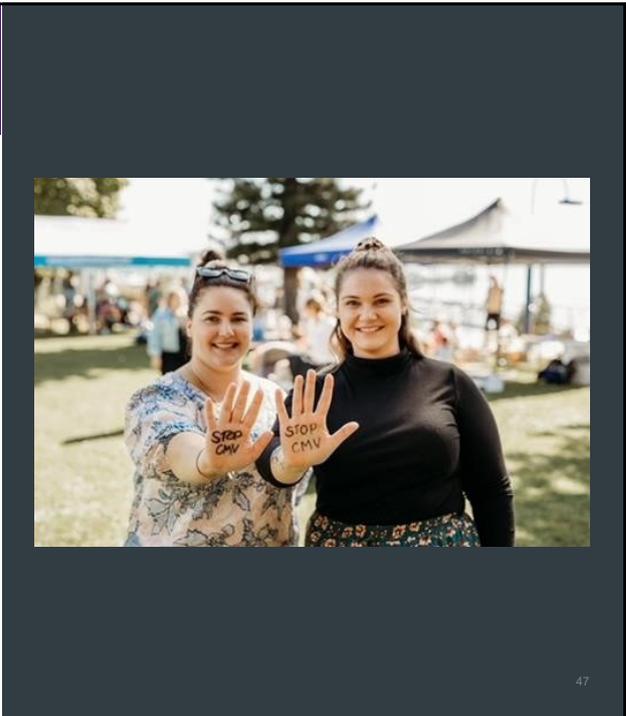








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