### Understanding the WA Infant Immunisation Schedule for RSV

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## Conflict of Interest Disclaimer

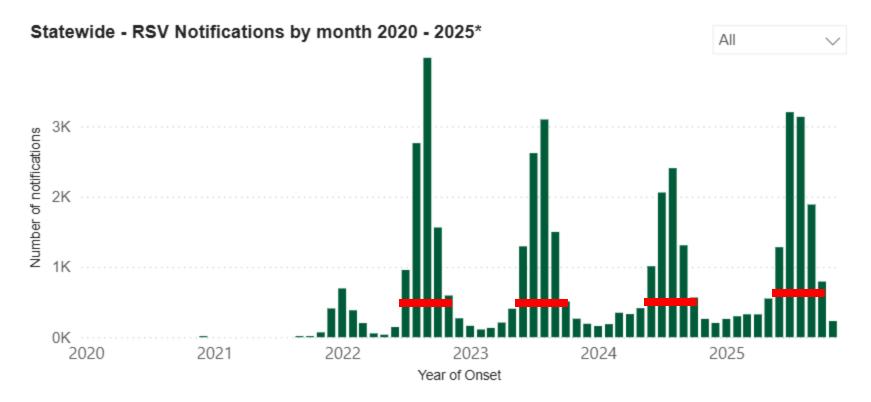
- No stock holdings
- No pharmaceutical affiliations
- No pharmaceutical payments

# Why is the WA RSV immunisation schedule so complicated?

- Two different products one for Mum's and one for Bubs
- Two different time periods targeted for different risk levels –
  - Most children for first RSV season only
  - But some also for second RSV season
- Two different RSV seasons in WA

## WA RSV immunisation first principles

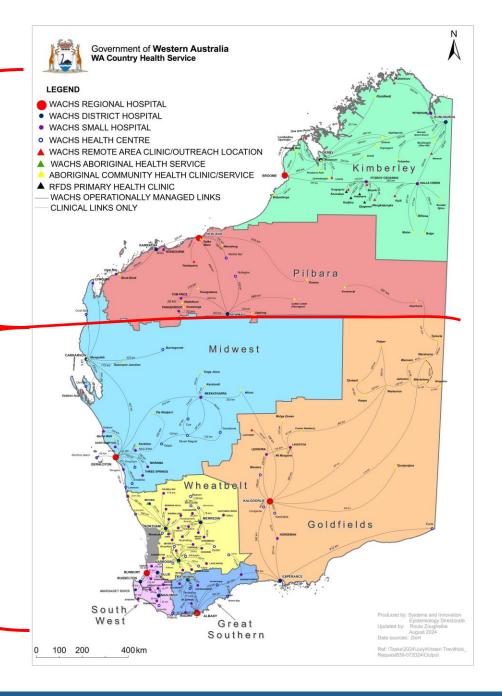
In WA overall RSV is highly seasonal and lasts5 months



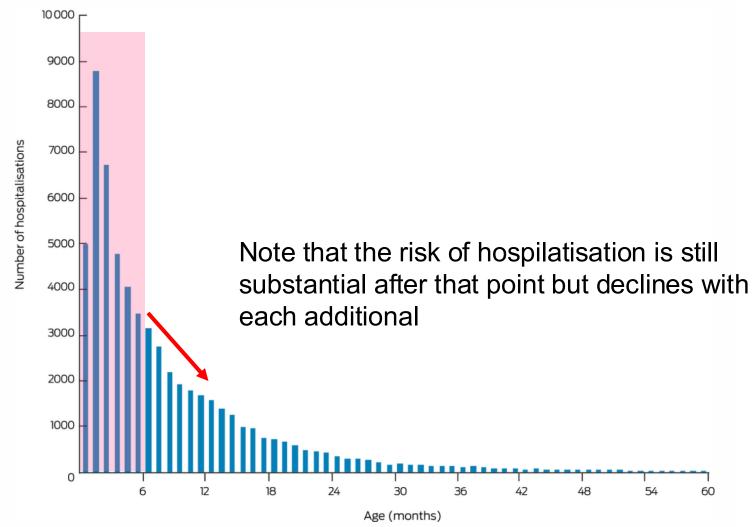
The protection provided by RSV immunisations also lasts 5-6 months

 4% live in regions where RSV transmission is more sustained year-round

 96% of WA children live in regions where RSV is highly seasonal



The greatest risk of RSV hospitalisation is in the first six months of life



Number of RSV-coded hospitalisations of children < 5 years of age, Australia, 2006–2015

# Children with medical risk factors and Aboriginal children are both at increased risk of RSV hospitalisation

But they are not the same thing...

**Aboriginal children** will benefit from receiving longer duration of protection – either maternal vaccination OR nirsevimab then followed by an appropriately timed second nirsevimab treatment

Children with medical risk factors will benefit from receiving nirsevimab regardless of mum's vaccination history and also longer duration of protection provided from an appropriately timed second nirsevimab treatment

## If you are caring for children in a region of WA where RSV is seasonal the goal should be:

- To protect all infants through their first RSV season with maternal vaccination or nirsevimab
- Also protect subset of infants at increased of RSV hospitalisation through their second RSV season

#### Aboriginal infants

RSV Season 1 – nirsevimab OR maternal vaccination

RSV Season 2 - second nirsevimab treatment

#### Medically at-risk infants

RSV Season 1 – nirsevimab *regardless of* maternal vaccination

RSV Season 2 - second nirsevimab treatment

## If you are caring for children in a region of WA where RSV season is year-round the goal should be:

 To protect all infants through their first six months of life – the time when they are most vulnerable

with maternal vaccination or nirsevimab

Also protect subset of infants at increased of RSV hospitalisation through their second six months of life

#### Aboriginal infants

First 6 months – protection from nirsevimab OR maternal vaccination

Second 6 months - second nirsevimab treatment

#### Medically at-risk infants

First 6 months – nirsevimab at birth regardless of maternal vaccination

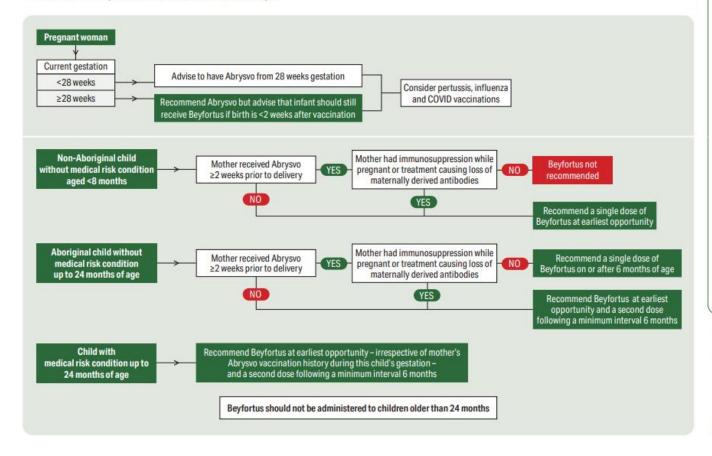
Second 6 months - second nirsevimab treatment



#### RSV immunisation decision aid – Kimberley and Pilbara regions

For patients residing (or soon to reside in) the Kimberley or Pilbara regions, and:

- · currently pregnant, or
- Non-Aboriginal child without high-risk condition aged <8 months, or</li>
- · Aboriginal child without high-risk condition up to 24 months of age, or
- All children with high-risk condition up to 24 months of age.



#### Eligibility for Beyfortus immunisation

#### Child medical risk conditions

- Preterm birth <32 weeks gestational age</li>
- · Haemodynamically significant congenital heart disease
- Significant immunosuppression, such as from malignancy, solid organ transplant
- Haematopoietic stem cell transplant, or primary immune deficiencies
- Chronic lung disease requiring ongoing oxygen or respiratory support
- · Neurological conditions that impair respiratory function
- Cystic fibrosis with severe lung disease or weight for length <10<sup>th</sup> percentile
- Trisomy 21 or another genetic condition that increases the risk of severe RSV disease.

#### Maternal immunosuppression

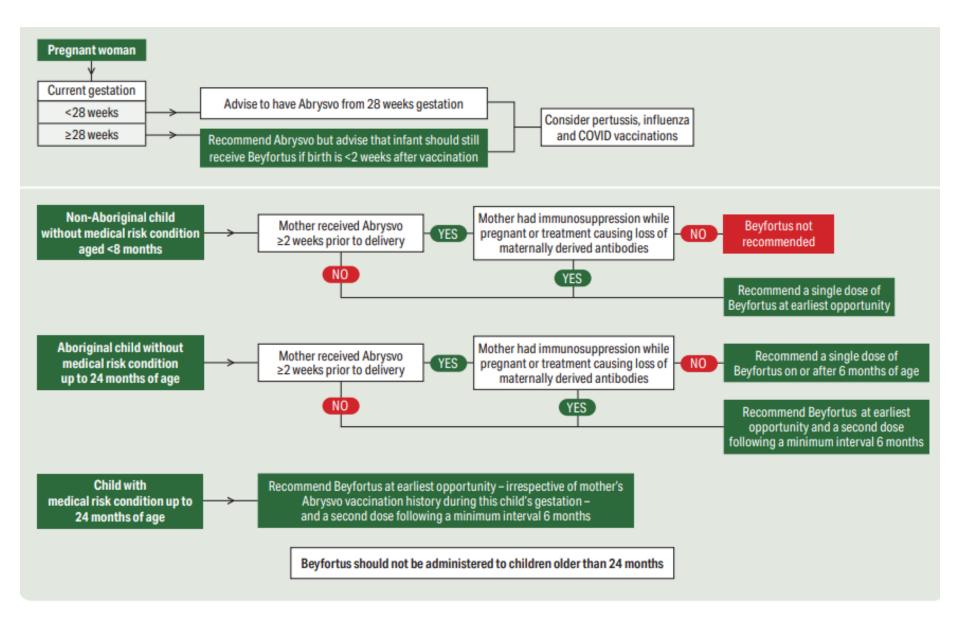
- Active leukaemia or lymphoma, or other generalised malignancy
- · Received recent chemotherapy or radiotherapy
- · HIV (certain people only)
- Solid organ transplant (SOT) or Haematopoietic stem cell transplant (HSCT) less than 2 years ago, or are still immunocompromised or taking immunosuppressive drugs, or have graft-versus-host disease
- Immunosuppressive therapy, including bDMARDs or tsDMARDs (biological or targeted synthetic disease-modifying anti-rheumatic drugs), or high-dose corticosteroids
- Certain autoimmune diseases, particularly if they are on highly immunosuppressive therapy;
- · Have congenital immunodeficiency.

#### Dosage Information

The below 3 options each equate to 1 dose

- <5kg = 50mg</p>
- ≥5kg and <8 months = 100mg</li>
- ≥5 kg and ≥8months = 200mg (2x100mg pre-filled syringes).

\*Note: Ensure minimum interval of 6 months between Beyfortus doses.



#### Paeds medical risk conditions – RSV Immunisation

- Preterm birth <32 weeks gestational age</li>
- Haemodynamically significant congenital heart disease
- Significant immunosuppression, such as from malignancy, solid organ transplant
- Haematopoietic stem cell transplant
- Primary immune deficiency
- Chronic lung disease requiring ongoing oxygen or respiratory support
- Neurological conditions that impair respiratory function
- Cystic fibrosis with severe lung disease
- Weight for length <10th percentile</li>
- Trisomy 21 or another genetic condition that increases the risk of severe RSV disease.

#### What about in the southern half of WA?

- The RSV season is over for this year and won't recommence again for ~ 5 months
- Therefore, there is no benefit of giving nirsevimab to children now
  - However ATAGI is recommending ongoing maternal Abrysvo vaccination, stating:

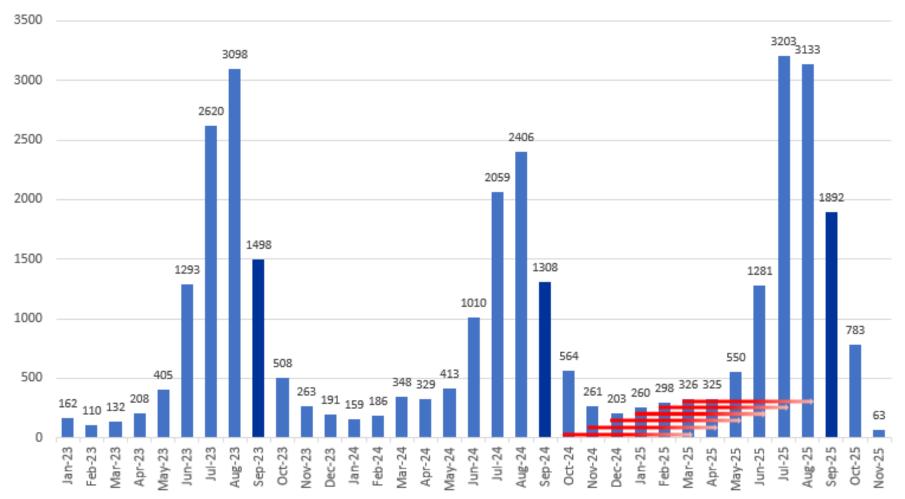
"RSV is a seasonal disease in most parts of Australia, but severe disease can occur outside of peak seasons as RSV circulation continues year-round.

Abrysvo can be given at any time of the year, regardless of when a pregnant woman is expected to give birth."

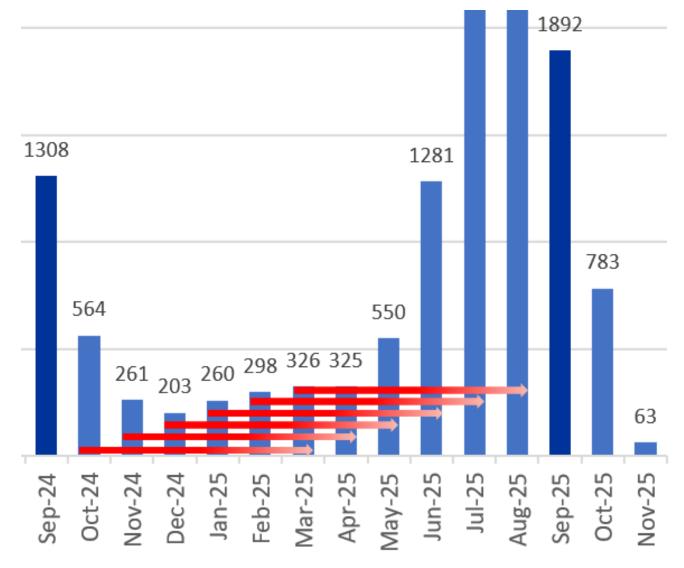


In areas of WA where RSV is seasonal, if an Abrysvo-vaccinated mum delivers during the summer would we expect protection to last through the peak of RSV season?

RSV Notifications by Month, WA 2023-2025 YTD



In areas of WA where RSV is seasonal, if an Abrysvo-vaccinated mum delivers during the summer would we expect protection to last through the peak of RSV season?



### What are possible solutions?...

There are several situations already where Beyfortus is recommend even if the mum has received Abrysvo:

- 1) Child with medical risk factors
- 2) Mum with certain underlying illness or treatments
- 3) Child born within 2 weeks of mum's immunisation date

Could possibly add another – child born too far in advance of peak RSV season



## Thank you and questions!