



Government of **Western Australia**  
Department of **Health**

# 2026 WA Health RSV Immunisation Program Information session

19 February 2026

Dr Paul Effler  
Senior Medical Advisor  
CDCD

# Conflict of Interest Disclaimer

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

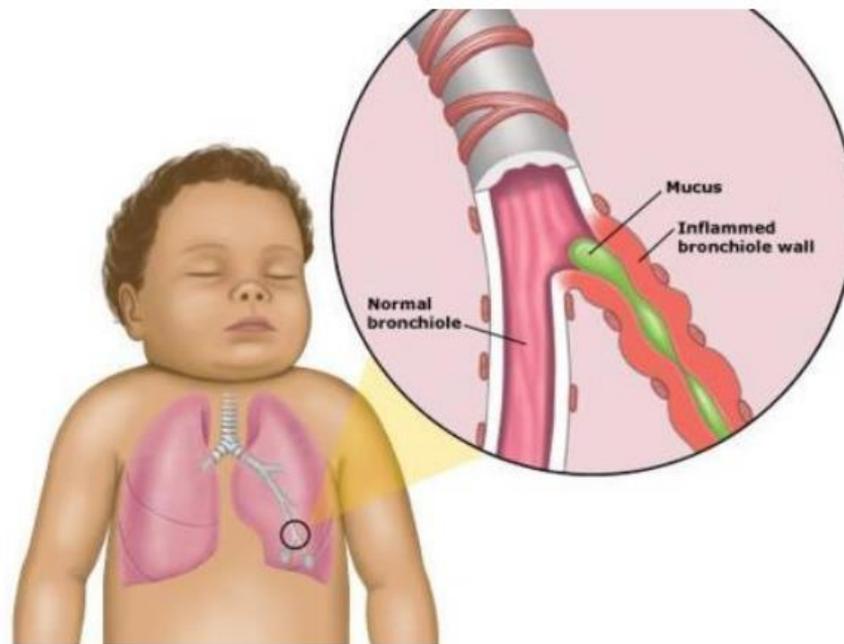
# Outline

## RSV in children –

- Quick facts
- WA 2024 and 2025 RSV Maternal and Infant Immunisation Program in review
- Improving the program in 2026

## RSV in adults

- Quick overview
- Arexvy



- RSV replicates in lower respiratory (bronchioles)
- Necrosis and sloughing of epithelium, oedema and increased mucous block small airways
- Leads to bronchiolitis and pneumonia
- Complete resolution can take 4-8 weeks

# RSV epidemiology

- RSV is the leading cause of infant hospitalisation in Australia
- 55-65% of all infants are infected in the first year of life
- In WA, approximately 1 in every 30 infants are hospitalised with RSV in the first year of life
- RSV infection early in life is associated with developing childhood asthma



› [Lancet](#). 2023 May 20;401(10389):1669-1680. doi: 10.1016/S0140-6736(23)00811-5.

Epub 2023 Apr 20.

# Respiratory syncytial virus infection during infancy and asthma during childhood in the USA (INSPIRE): a population-based, prospective birth cohort study

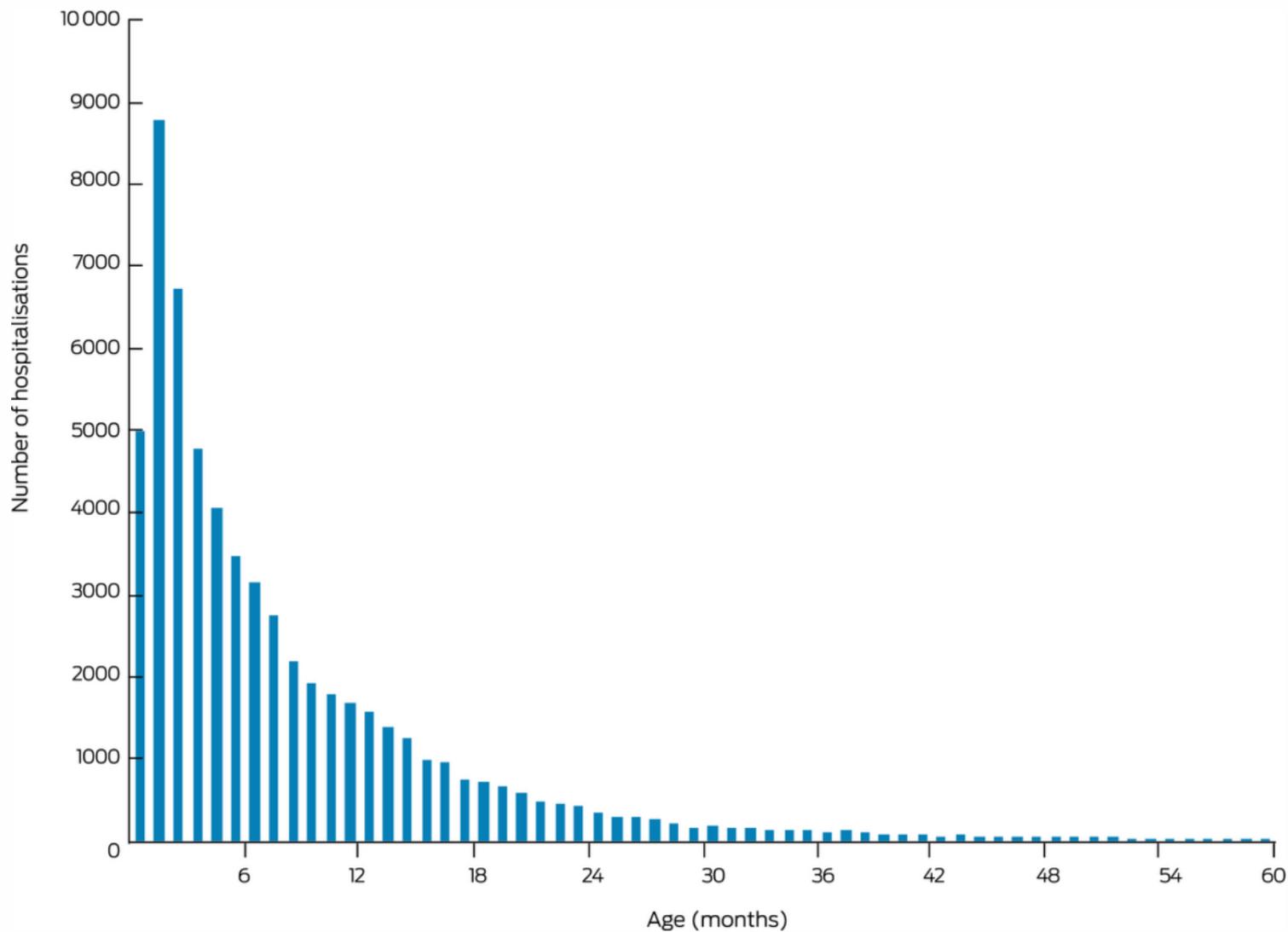
Christian Rosas-Salazar <sup>1</sup>, Tatiana Chirkova <sup>2</sup>, Tebeb Gebretsadik <sup>3</sup>, James D Chappell <sup>1</sup>, R Stokes Peebles Jr <sup>4</sup>, William D Dupont <sup>3</sup>, Samadhan J Jadhao <sup>2</sup>, Peter J Gergen <sup>5</sup>, Larry J Anderson <sup>2</sup>, Tina V Hartert <sup>6</sup>

## Abstract

**Background:** Early-life severe respiratory syncytial virus (RSV) infection has been associated with the onset of childhood wheezing illnesses. However, the relationship between RSV infection during infancy and the development of childhood asthma is unclear. We aimed to assess the association

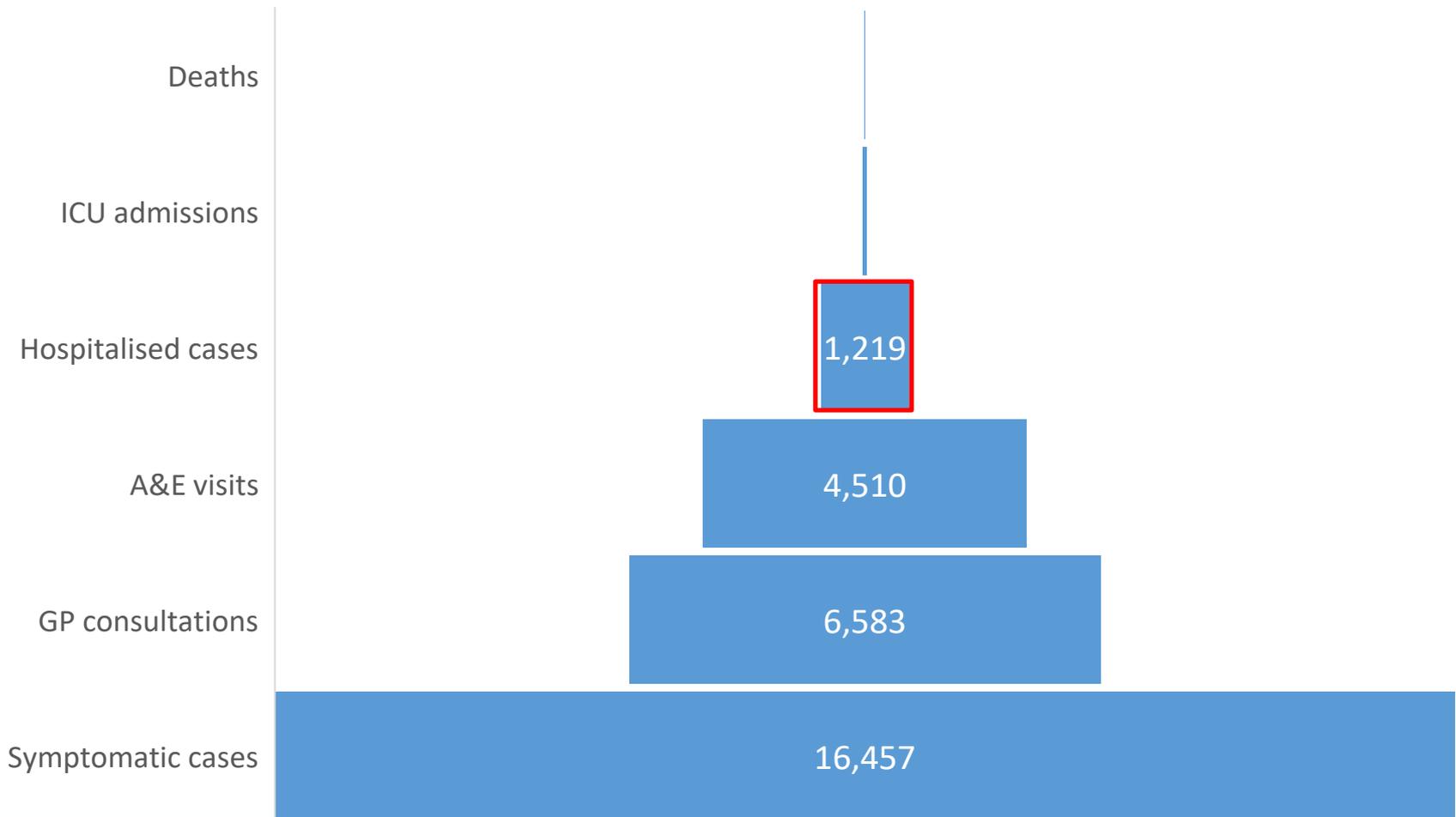
“Not being infected with RSV during infancy was associated with a 26% lower risk of 5-year current asthma than being infected with RSV during infancy.”

## Number of RSV-coded hospitalisations (principal diagnosis only) of children under 5 years of age, Australia, 2006–2015



# WA RSV infant burden of illness

(benchmarked off UK data)



# RSV Infant Immunisation Program 2024 – Recap

- Nirsevimab only program
- Delivered at birthing hospitals, GPs, community health, Aboriginal health services
- RSV season is 1 May to 30 Sep each year
- High coverage achieved in both the

catch-up cohort & newborn cohort

Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep



RSV season

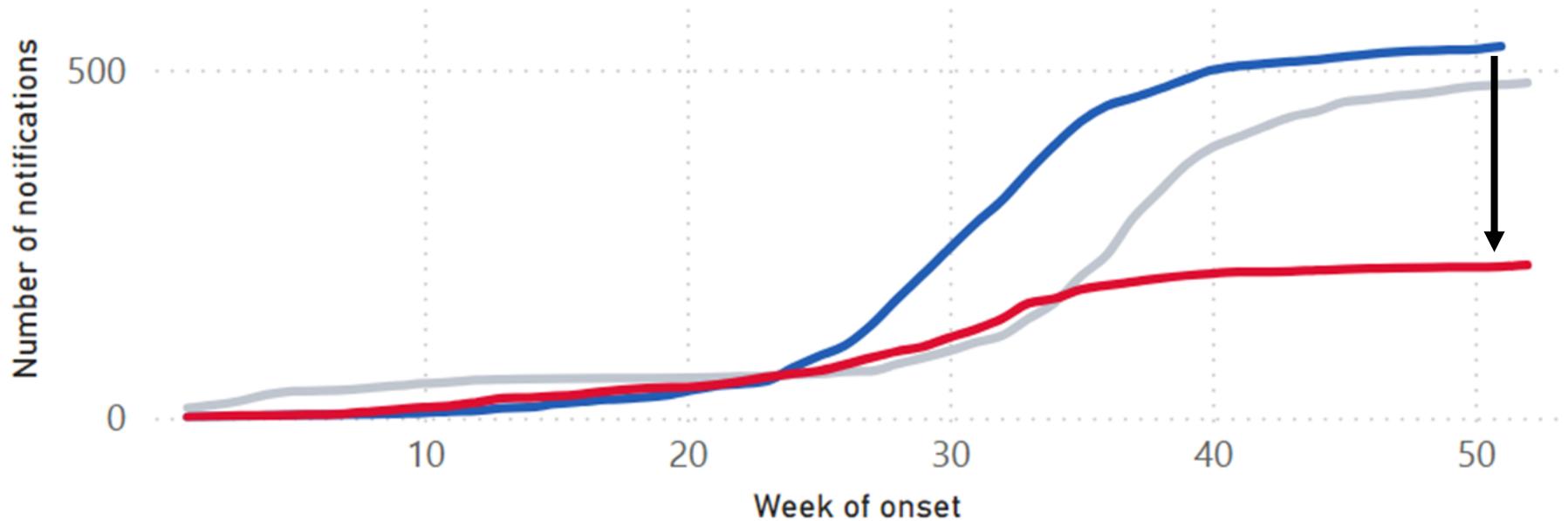
# RSV Infant Immunisation Program 2024 – Recap

- Remarkable impact
- PCH study showed Beyfortus is 88% effective at preventing infant RSV hospitalisation
- 505 – 676 fewer WA infants hospitalised with RSV (at least 57% reduction - and maybe even 65-70%)

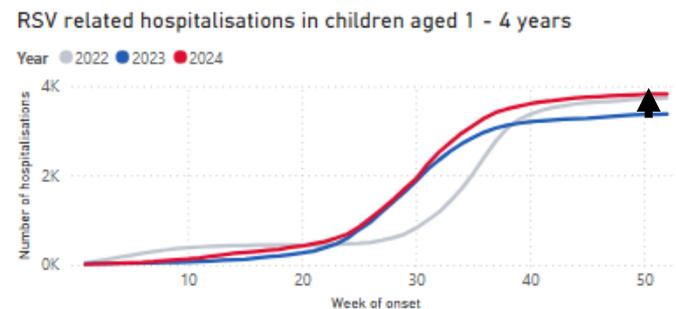
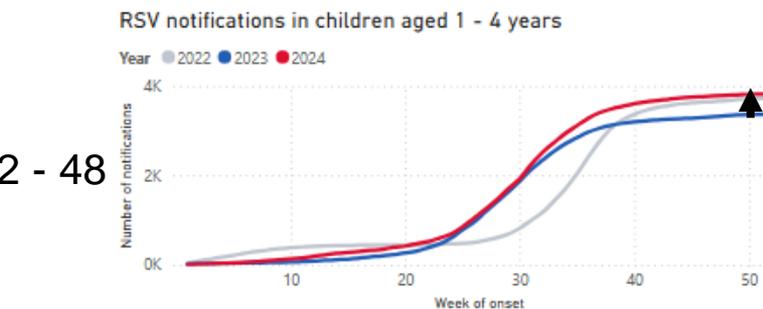
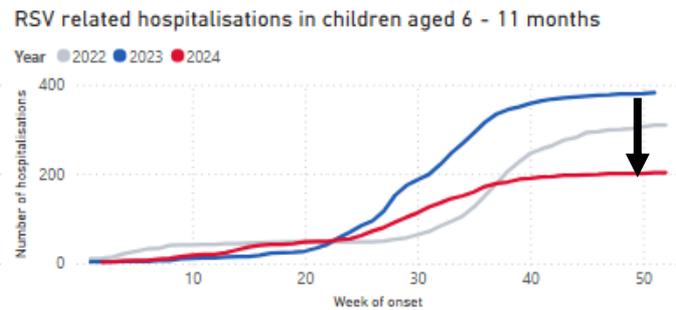
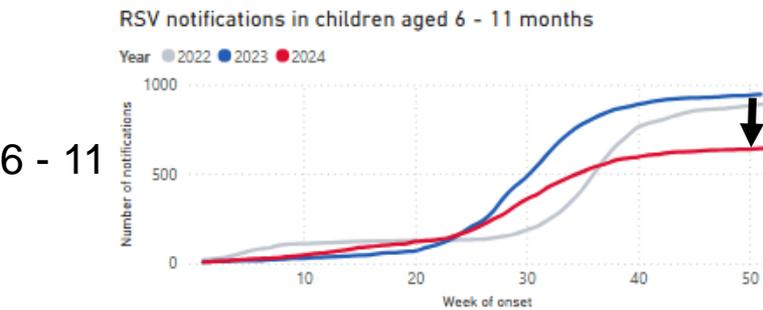
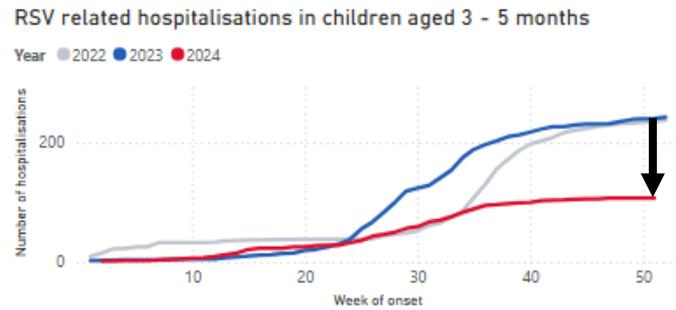
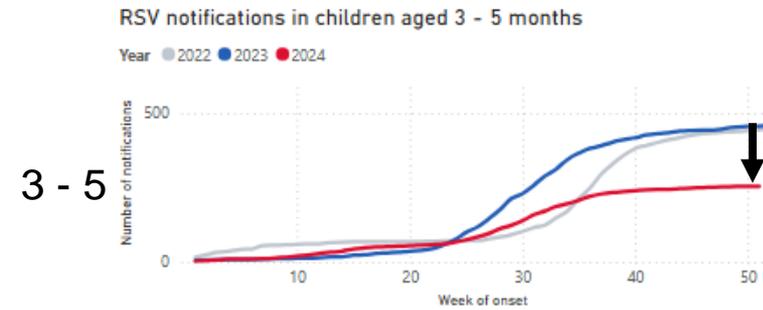
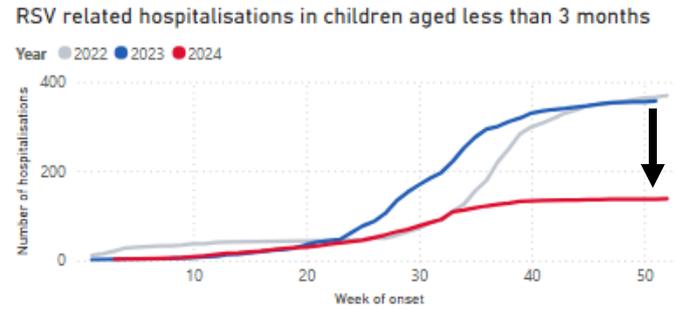
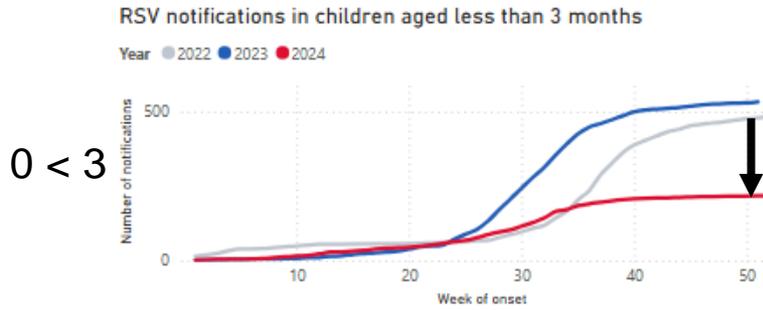
# 2024 Experience - Impact

## RSV notifications in children aged less than 3 months

Year ● 2022 ● 2023 ● 2024



# RSV Notifications



# RSV Hospitalisations

# RSV Infant Immunisation Program 2025

- Maternal Abrysvo RSV vaccine added to the National Immunisation Program in Feb
- Abrysvo is ideally administered from 28-36 weeks gestation
- Available at birthing hospitals, GPs, community health, Aboriginal health services, and pharmacies
- Nirsevimab also available to infants of unvaccinated mothers – same as 2024

**Now that we have 2 options for preventing  
infant RSV infections, we should do even  
better than last year... right?**

health.wa.gov.au

70

Now that we have 2 options for preventing infant RSV infections, we should do even better than last year... right?

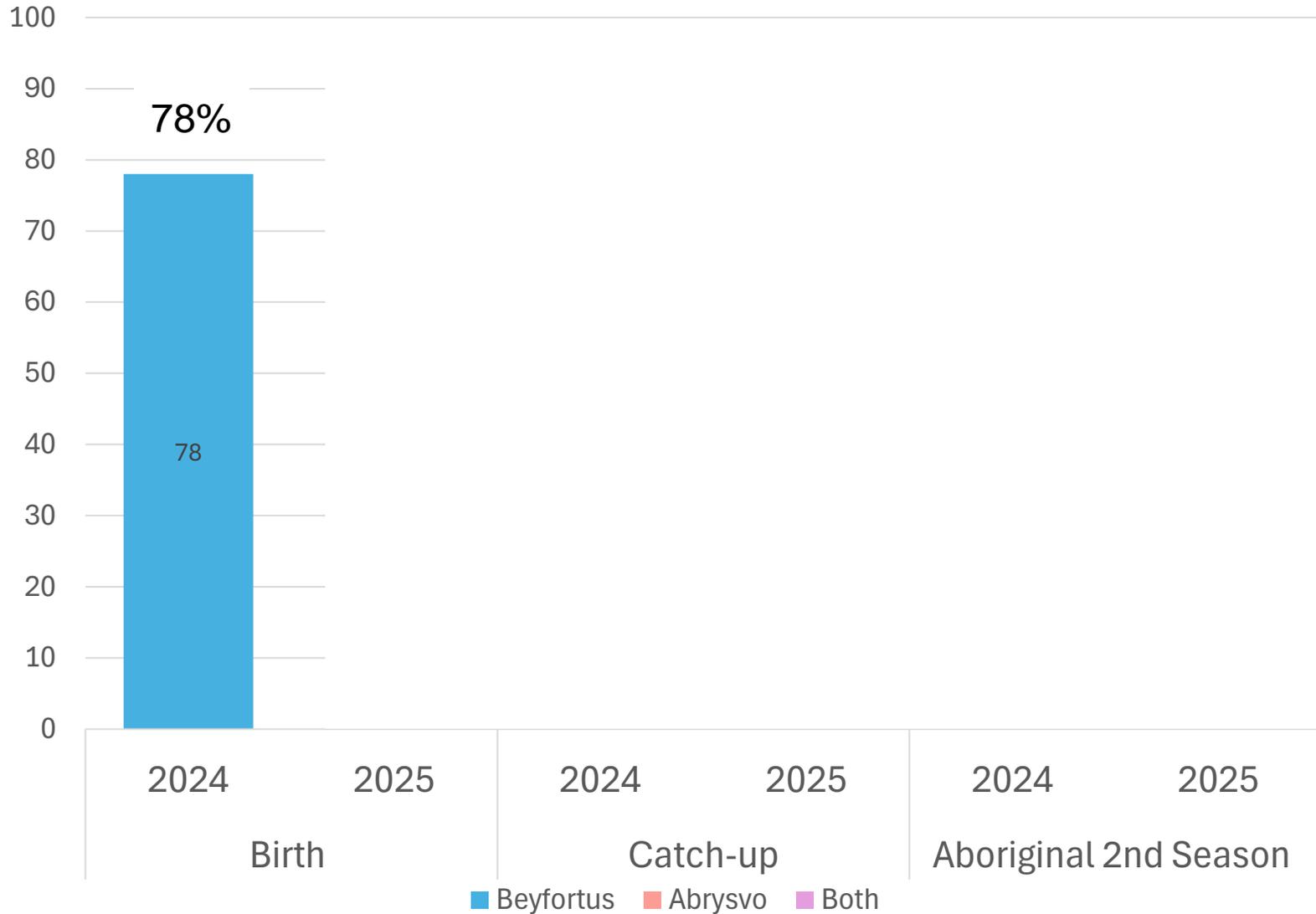
## Hopefully, but there are risks:

- Diffuse responsibility across multiple providers, now includes pharmacists
- Provider seeing infant might erroneously assume mother received Abrysvo
- Provider seeing infant might not know if mother received Beyfortus
- The catch-up cohort might be overlooked

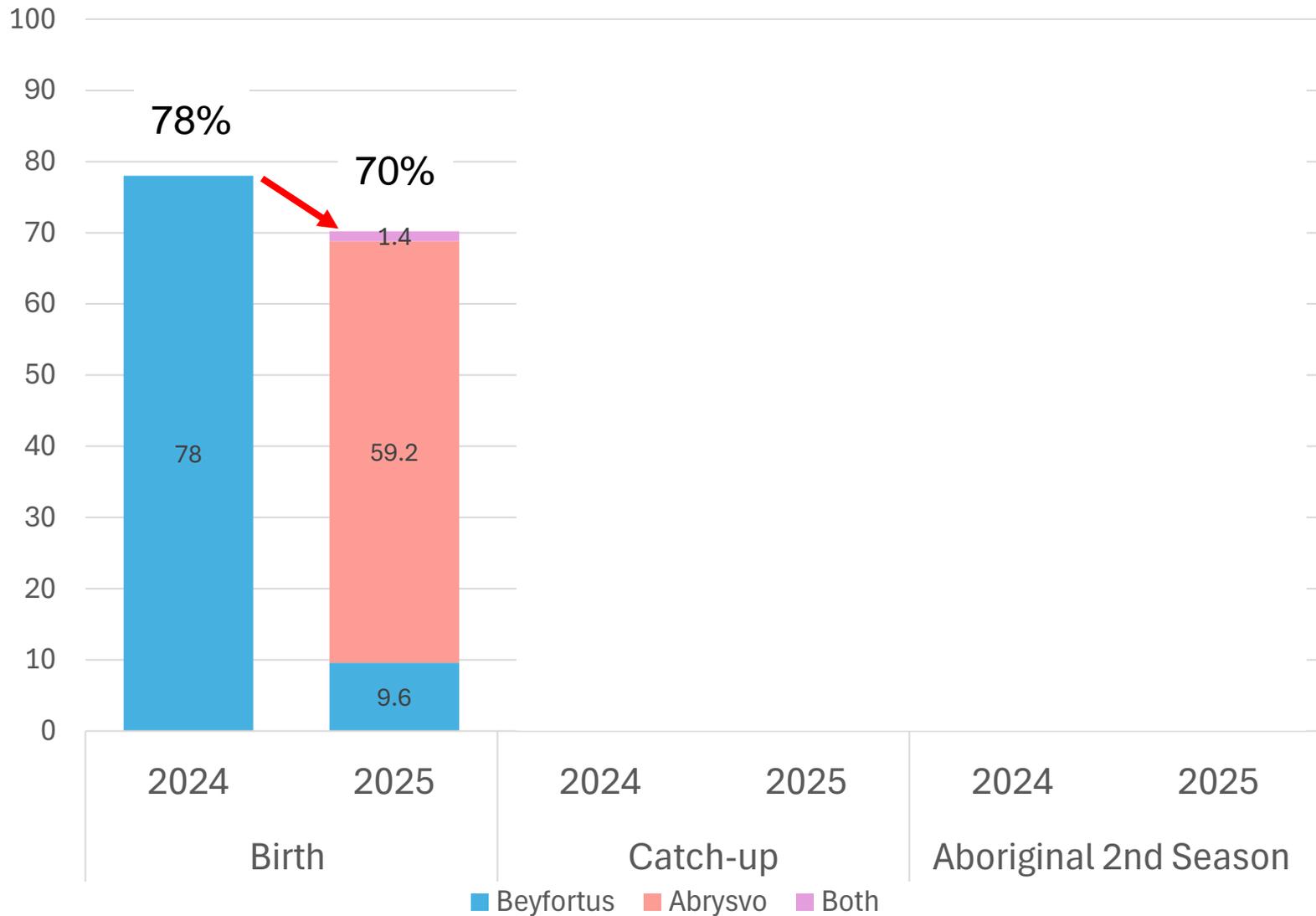
# **RSV Infant Immunisation Program 2025**

**Look at the data... How did we do?**

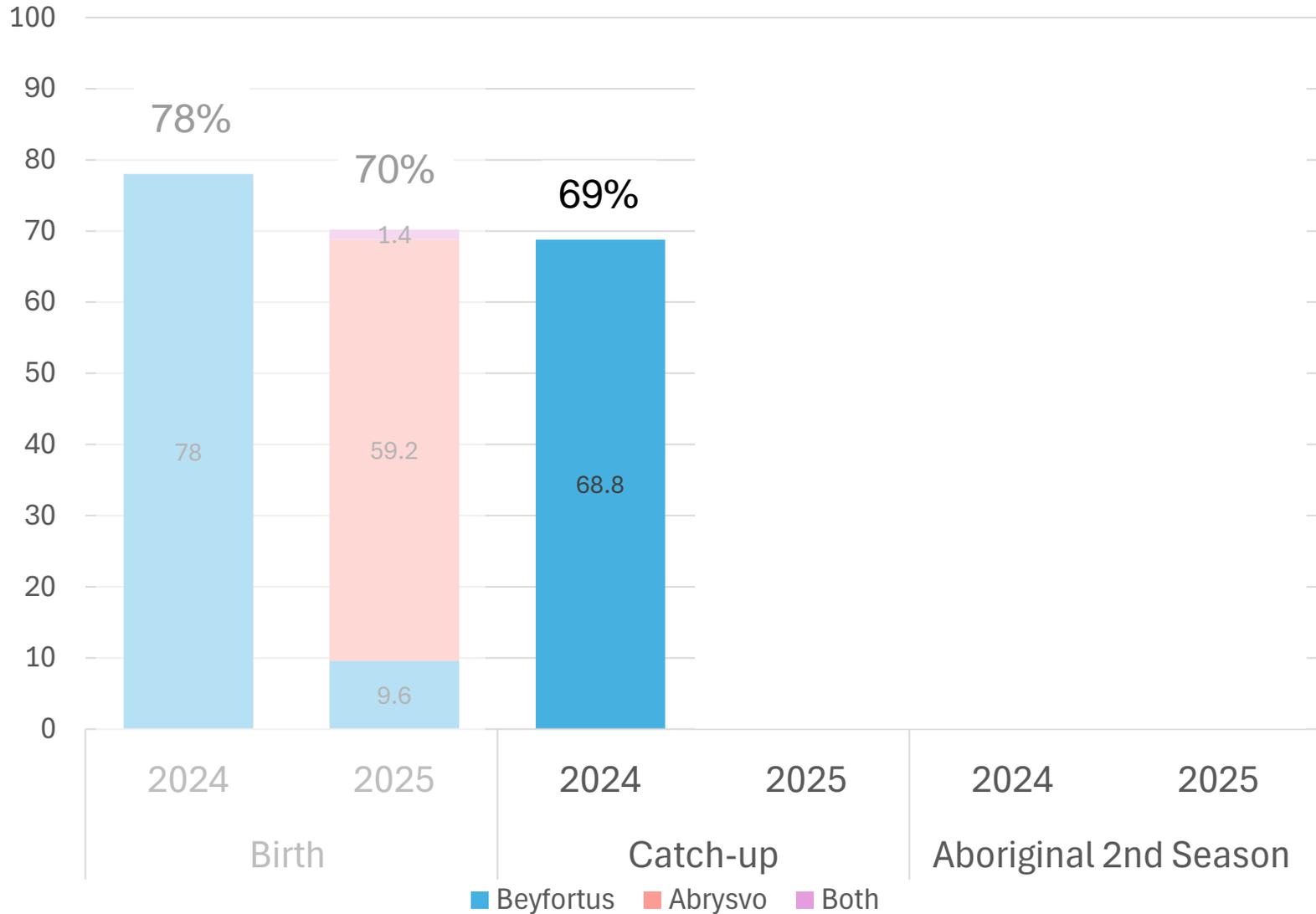
# Percent of cohort immunised against RSV 2024 vs 2025



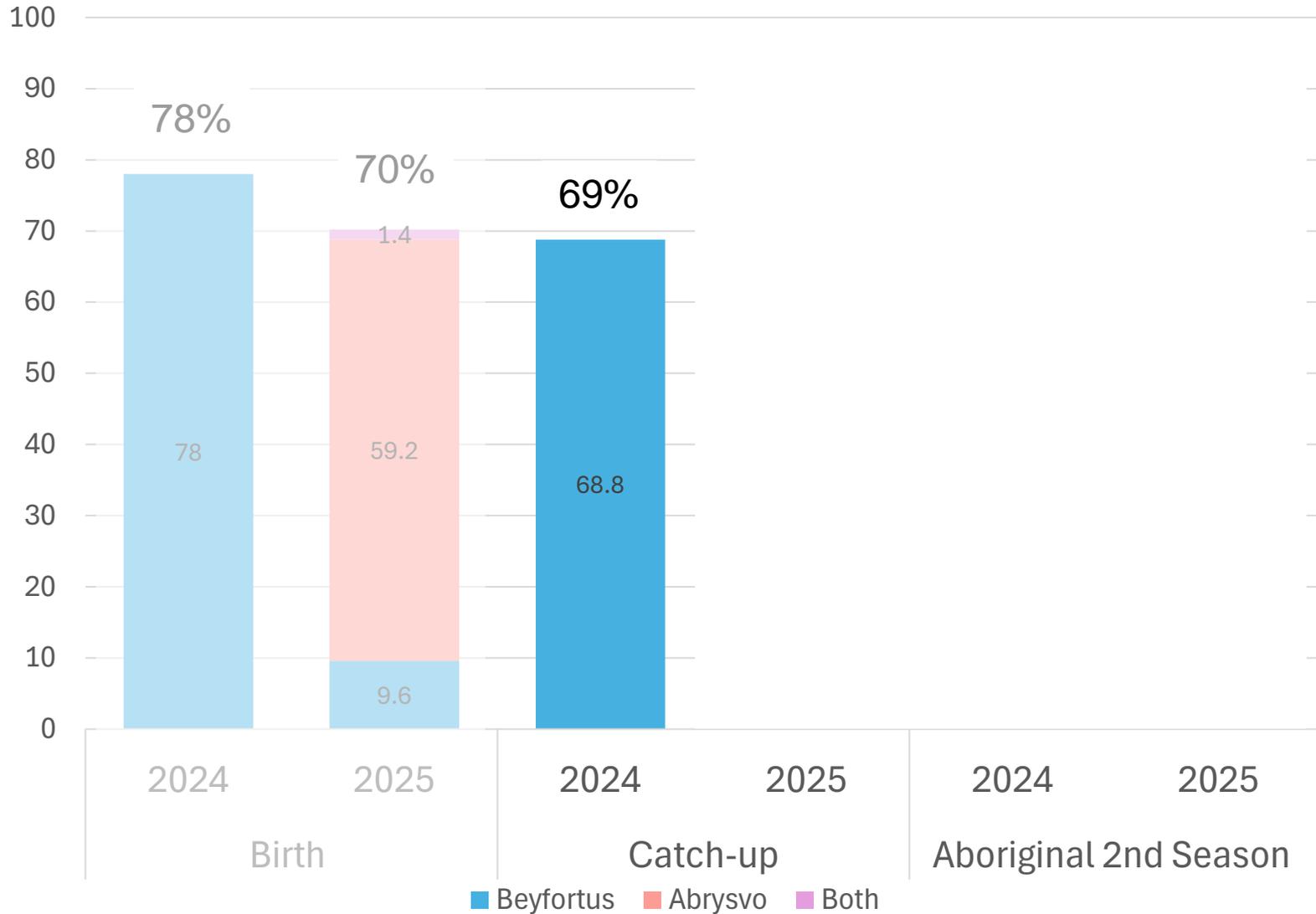
# Percent of cohort immunised against RSV 2024 vs 2025



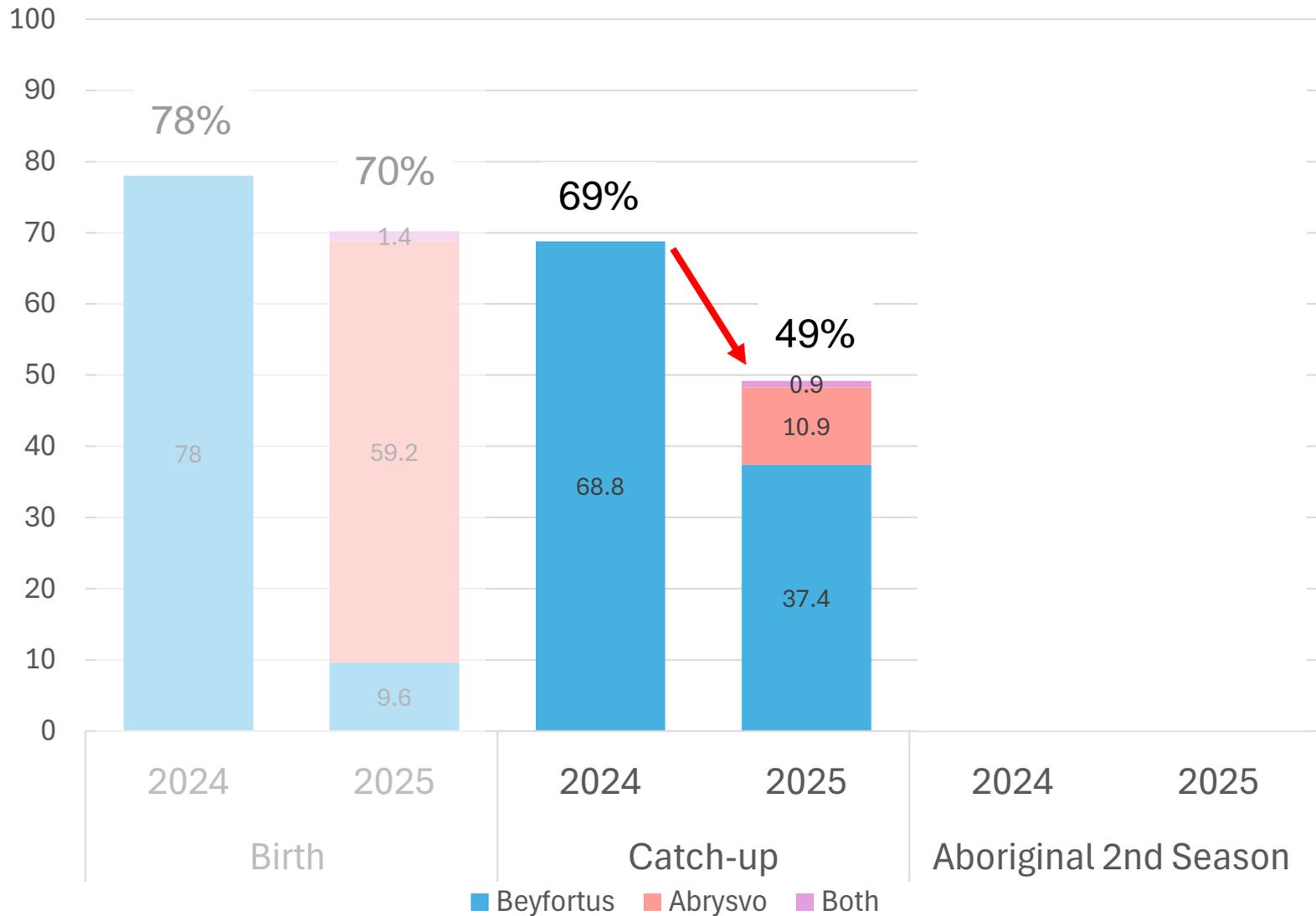
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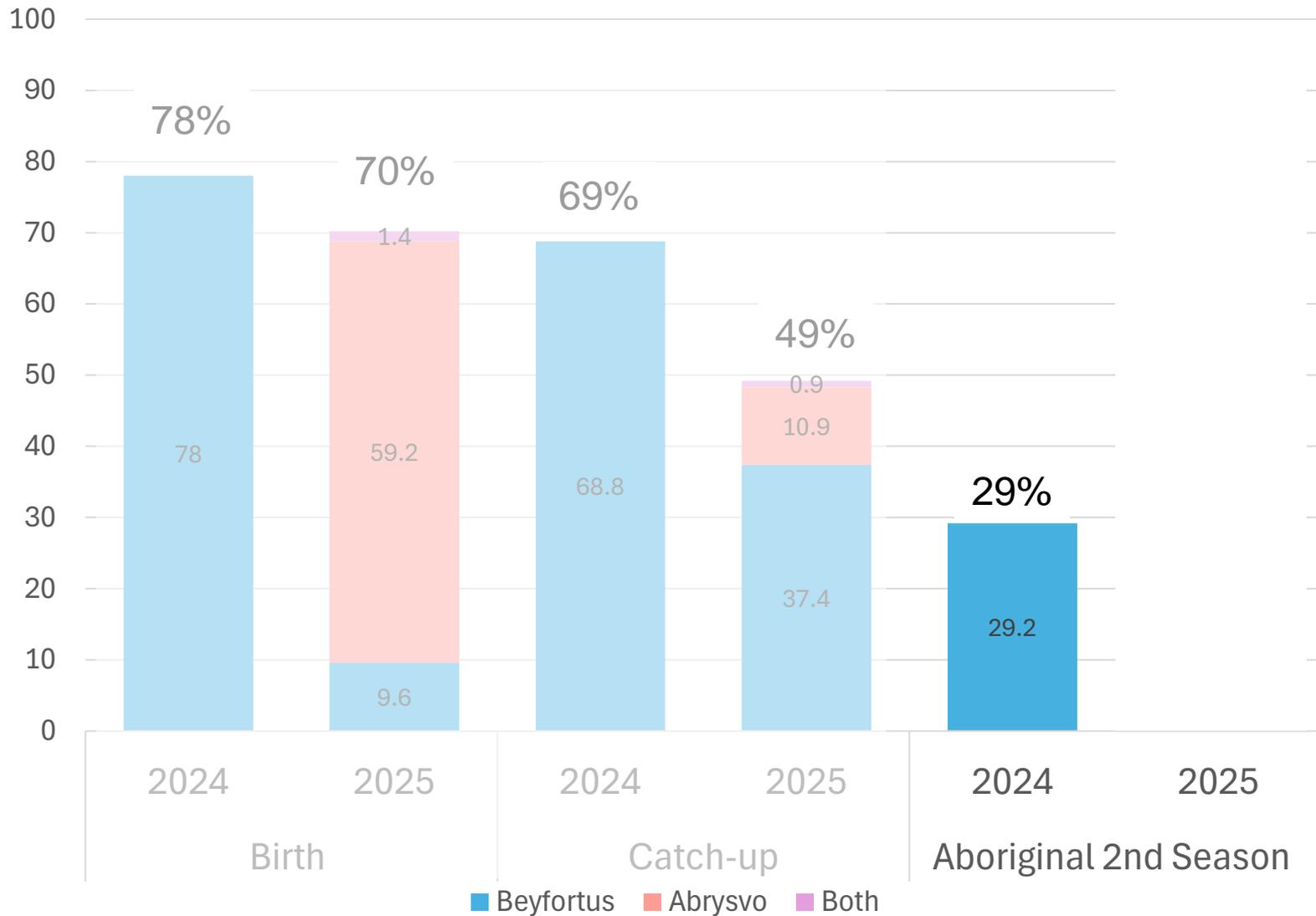
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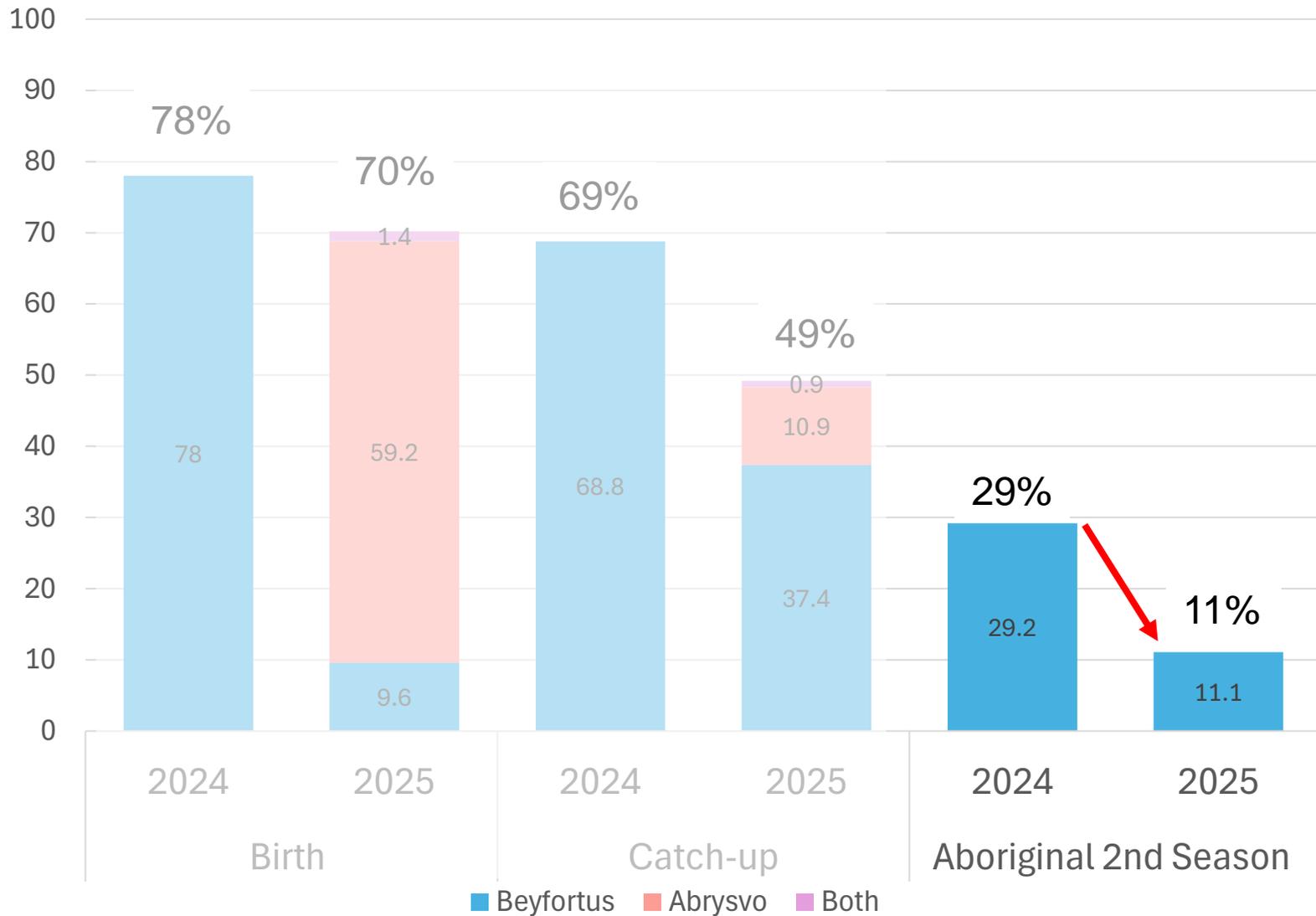
# Percent of cohort immunised against RSV 2024 vs 2025



# Percent of cohort immunised against RSV 2024 vs 2025



# Percent of cohort immunised against RSV 2024 vs 2025



# Reality check...

- None of the 13,500 infants born between 1 Oct 2024 and 1 Feb 2025

and

- None of the 2,660 Aboriginal children entering their second RSV season

had any hope of benefitting from the new maternal RSV vaccination program

- Yet all of them could have benefitted from receiving Beyfortus
- But we were less successful at immunising these cohorts than we were the year prior

# What about babies of unvaccinated mums in the birth cohort?

In 2024, 90% of the birth cohort who received nirsevimab received it at birth – this dropped to 59% in 2025

## 2024

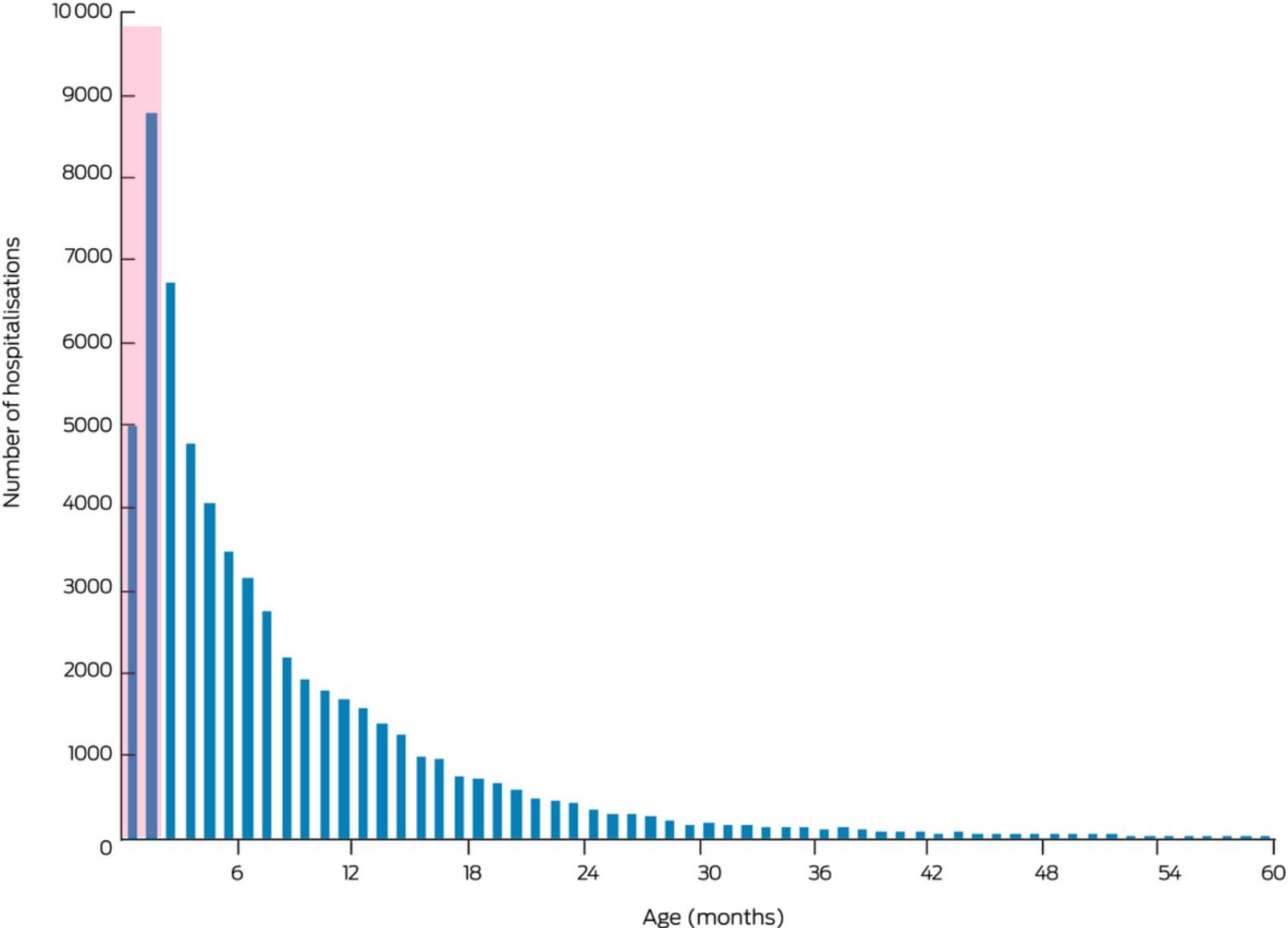
new born_2024		
Age at week immunised	Beyfortus	% of total
0	8,780	90%
1	254	3%
2	154	2%
3	73	1%
4	46	0%
5	33	0%
6	186	2%
7	79	1%
8	69	1%
9	29	0%
10	14	0%
11	18	0%
12	5	0%
13	6	0%
14	2	0%
15	4	0%
17	4	0%
18	1	0%
19	2	0%
20	1	0%
<b>Total</b>	<b>9,706</b>	<b>100.0%</b>

## 2025

new born_2025		
Age at week immunised	Beyfortus	% of total
0	1,256	59%
1	104	5%
2	74	3%
3	41	2%
4	27	1%
5	30	1%
6	239	11%
7	106	5%
8	92	4%
9	34	2%
10	25	1%
11	27	1%
12	15	1%
13	9	0%
14	7	0%
15	5	0%
16	14	1%
17	16	1%
18	15	1%
19	5	0%
20	7	0%
21	4	0%
22	3	0%
23	1	0%
<b>Total</b>	<b>2,142</b>	<b>100%</b>

} 25%

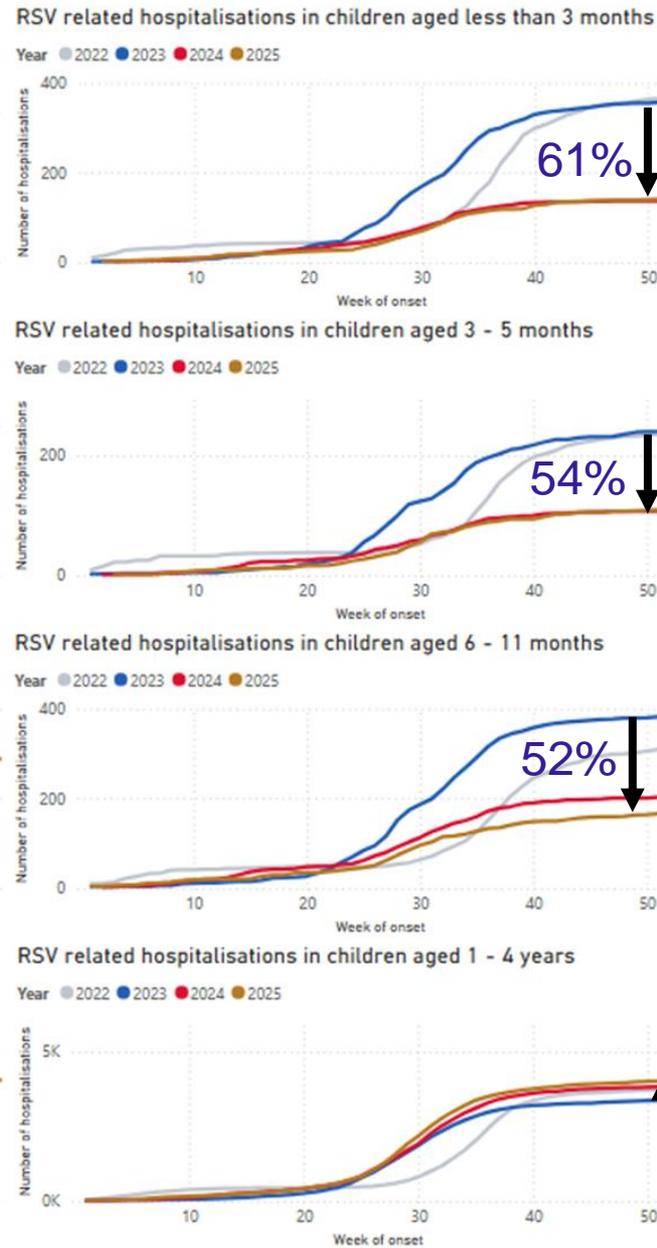
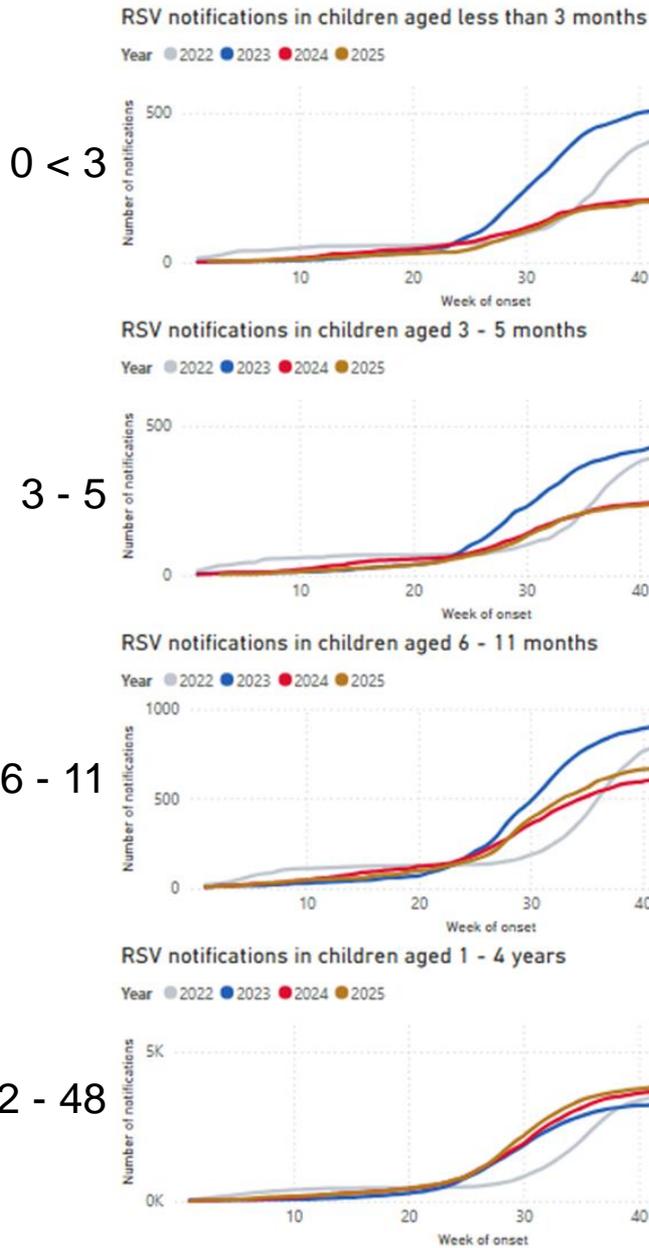
# Number of RSV-coded hospitalisations of children < 5 years of age, Australia, 2006–2015



**So did we fail in 2025?**

**Far from it!**

# RSV Notifications



0 < 3

3 - 5

6 - 11

12 - 48

# RSV Hospitalisations

**A short but relevant détour before we discuss how we can protect even more children in 2026...**

# Nirsevimab vs RSVpreF Vaccine for Respiratory Syncytial Virus–Related Hospitalization in Newborns



## Nirsevimab vs RSVpreF Vaccine for Respiratory Syncytial Virus–Related Hospitalization in Newborns

Marie-Joelle Jabagi, PharmD, PhD; Marion Bertrand, MSc; Amélie Gabet, PhD; Eiphane Kolla, MD, PhD; Valérie Olié, PhD; Mahmoud Zureik, MD, PhD

# Methods

- Population-based cohort study used data from the French National Health Data System.
- Maternal vaccination with RSVpreF vaccine occurred during 32 to 36 weeks' gestation between September 1 and December 31, 2024.
- Passive infant immunization with nirsevimab occurred prior to hospital discharge.
- Infants were matched 1:1 by maternity ward discharge date, sex, gestational age, and region.

## Nirsevimab vs RSVpreF Vaccine for Respiratory Syncytial Virus–Related Hospitalization in Newborns

Marie-Joelle Jabagi, PharmD, PhD; Marion Bertrand, MSc; Amélie Gabet, PhD; Eiphane Kolla, MD, PhD; Valérie Olié, PhD; Mahmoud Zureik, MD, PhD

# Methods

- Primary outcome was hospitalization for RSV-associated lower respiratory tract infection.
- Secondary outcomes included admission to the PICU, admission to high-dependency unit, ventilator support, and oxygen therapy.
- 21,280 per group
- Median follow-up of 84 days (IQR, 70-99 days).

# Results

Compared with the RSVpreF vaccine, passive infant immunization with nirsevimab was associated with a lower risk of:

- **Hospitalization** for RSV-associated lower respiratory tract infection (adjusted HR, 0.74 [95% CI, 0.61 to 0.88]).
- **PICU admission** (adjusted HR, 0.58 [95% CI, 0.42 to 0.80]),
- **Ventilator support** (adjusted HR, 0.57 [95% CI, 0.40 to 0.81]),
- **Oxygen therapy** (adjusted HR, 0.56 [95% CI, 0.38 to 0.81]).

The results were consistent across subgroups and in the sensitivity analyses.

## Nirsevimab vs RSVpreF Vaccine for Respiratory Syncytial Virus-Related Hospitalization in Newborns

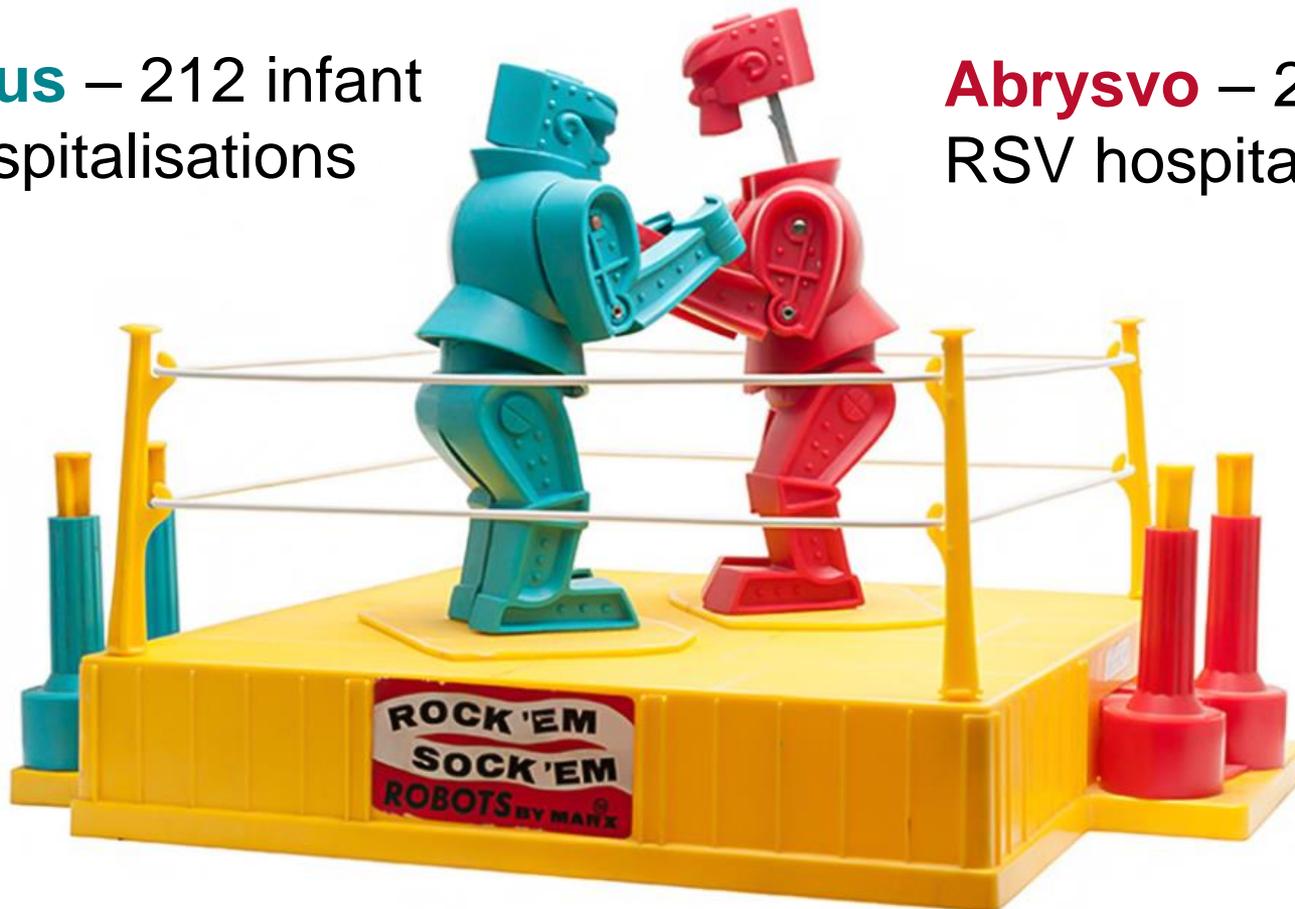
Marie-Joelle Jabagi, PharmD, PhD; Marion Bertrand, MSc; Amélie Gabet, PhD; Epiphane Kolla, MD, PhD; Valérie Olié, PhD; Mahmoud Zureik, MD, PhD

# Perspective

21,280 infants in each cohort

**Beyfortus** – 212 infant RSV hospitalisations

**Abrysvo** – 269 infant RSV hospitalisations

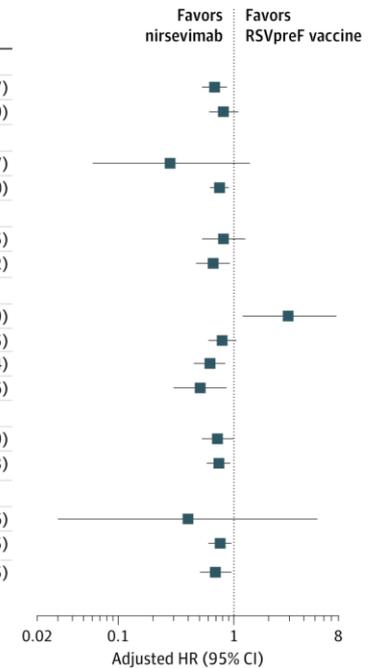


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# Another key finding

Subgroup analysis	No./total (%)		Follow-up, median (IQR)	Between-group difference (95% CI), %	HR <sup>a</sup> (95% CI)	Adjusted HR <sup>b</sup> (95% CI)
	Nirsevimab	RSVpreF vaccine				
<b>Sex</b>						
Male	122/10998 (1.1)	165/10998 (1.5)	84 (70 to 99)	-0.4 (-0.7 to -0.1)	0.74 (0.58 to 0.93)	0.68 (0.53 to 0.87)
Female	90/10282 (0.9)	104/10282 (1.0)	84 (70 to 100)	-0.1 (-0.4 to 0.1)	0.86 (0.65 to 1.15)	0.81 (0.61 to 1.09)
<b>Gestational age, wk</b>						
Preterm birth (<37)	3/278 (1.1)	6/278 (2.2)	87 (70 to 102)	-1.1 (-2.8 to 0.6)	0.50 (0.13 to 2.00)	0.28 (0.06 to 1.37)
Term birth (≥37)	209/21002 (1.0)	263/21002 (1.3)	84 (70 to 99)	-0.3 (-0.5 to -0.1)	0.79 (0.66 to 0.95)	0.75 (0.62 to 0.90)
<b>French Deprivation Index<sup>c</sup></b>						
Least deprived (Q1 and Q2)	44/4493 (1.0)	50/4493 (1.1)	87 (71 to 101)	-0.1 (-0.6 to 0.3)	0.88 (0.59 to 1.32)	0.81 (0.53 to 1.25)
Most deprived (Q3, Q4, and Q5)	67/7132 (0.9)	95/7132 (1.3)	85 (70 to 98)	-0.4 (-0.7 to 0)	0.70 (0.52 to 0.96)	0.66 (0.47 to 0.92)
<b>Time since cohort entry, d</b>						
0-7	15/21279 (0.1)	5/21279 (<0.1)	7 (7 to 7)	0 (0 to 0.1)	3.03 (1.09 to 8.33)	2.94 (1.19 to 7.69)
8-30	97/21252 (0.4)	116/21252 (0.5)	22 (22 to 22)	-0.1 (-0.2 to 0)	0.83 (0.64 to 1.10)	0.79 (0.60 to 1.05)
31-60	73/21035 (0.3)	109/21035 (0.5)	29 (29 to 29)	-0.2 (-0.3 to -0.1)	0.67 (0.50 to 0.90)	0.62 (0.45 to 0.84)
>60 (maximum of 148)	26/19849 (0.1)	39/19849 (0.2)	25 (12 to 40)	-0.1 (-0.2 to 0)	0.67 (0.41 to 1.10)	0.51 (0.30 to 0.86)
<b>Time between RSVpreF vaccine and inclusion, wk</b>						
<5	83/7311 (1.1)	102/7311 (1.4)	88 (72 to 105)	-0.3 (-0.6 to 0)	0.81 (0.61 to 1.09)	0.72 (0.53 to 0.99)
≥5	129/13969 (0.9)	167/13969 (1.2)	81 (69 to 95)	-0.3 (-0.5 to 0)	0.77 (0.61 to 0.96)	0.74 (0.58 to 0.93)
<b>Description of period of RSV circulation intensity</b>						
Lower (Oct 1-Nov 14)	1/3827 (<0.1)	2/3827 (0.1)	9 (4 to 17)	0 (-0.1 to 0.1)	0.50 (0.05 to 5.56)	0.40 (0.03 to 5.26)
Higher (Nov 15-Jan 5)	132/21274 (0.6)	174/21274 (0.8)	26 (15 to 37)	-0.2 (-0.4 to 0)	0.76 (0.61 to 0.95)	0.76 (0.60 to 0.95)
Lower (Jan 6-Feb 28)	78/20960 (0.4)	93/20960 (0.5)	53 (53 to 53)	-0.1 (-0.2 to 0.1)	0.84 (0.62 to 1.14)	0.69 (0.51 to 0.95)



<https://jamanetwork.com/journals/jama/fullarticle/2843212>

**Subgroup analysis**

Sex

Male

Female

Gestational age, wk

Preterm birth (<37)

Term birth (≥37)

French Deprivation Index<sup>c</sup>

Least deprived (Q1 and Q2)

Most deprived (Q3, Q4, and Q5)

Time since cohort entry, d

0-7

8-30

31-60

>60 (maximum of 148)

Time between RSVpreF vaccine and inclusion, wk

<5

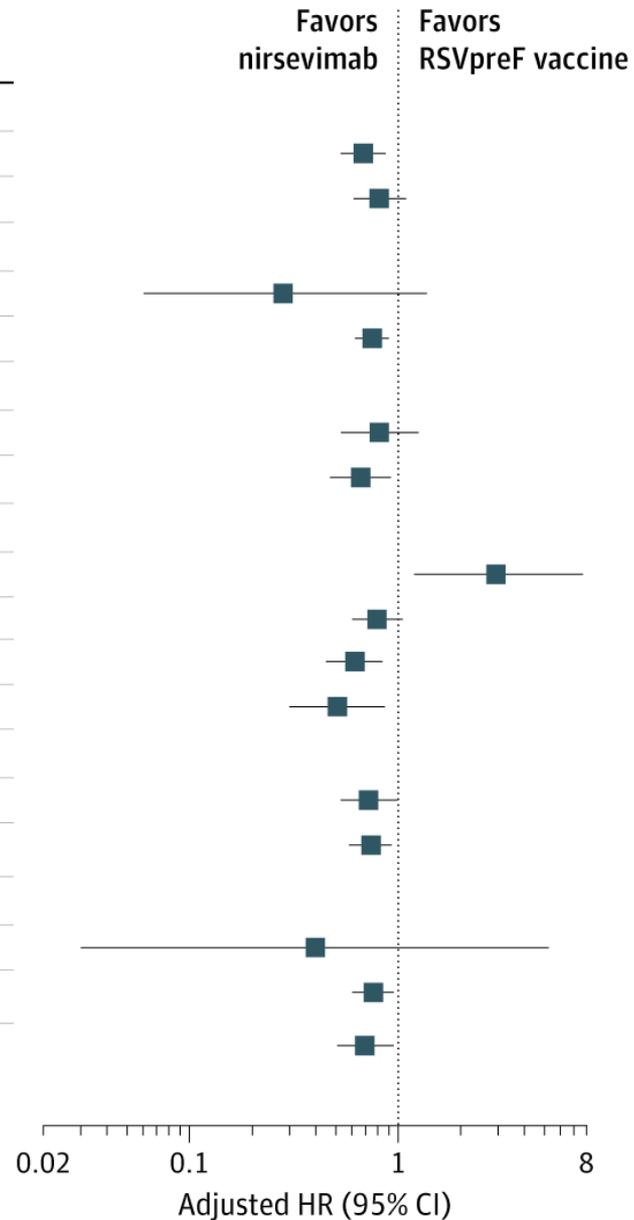
≥5

Description of period of RSV circulation intensity

Lower (Oct 1-Nov 14)

Higher (Nov 15-Jan 5)

Lower (Jan 6-Feb 28)



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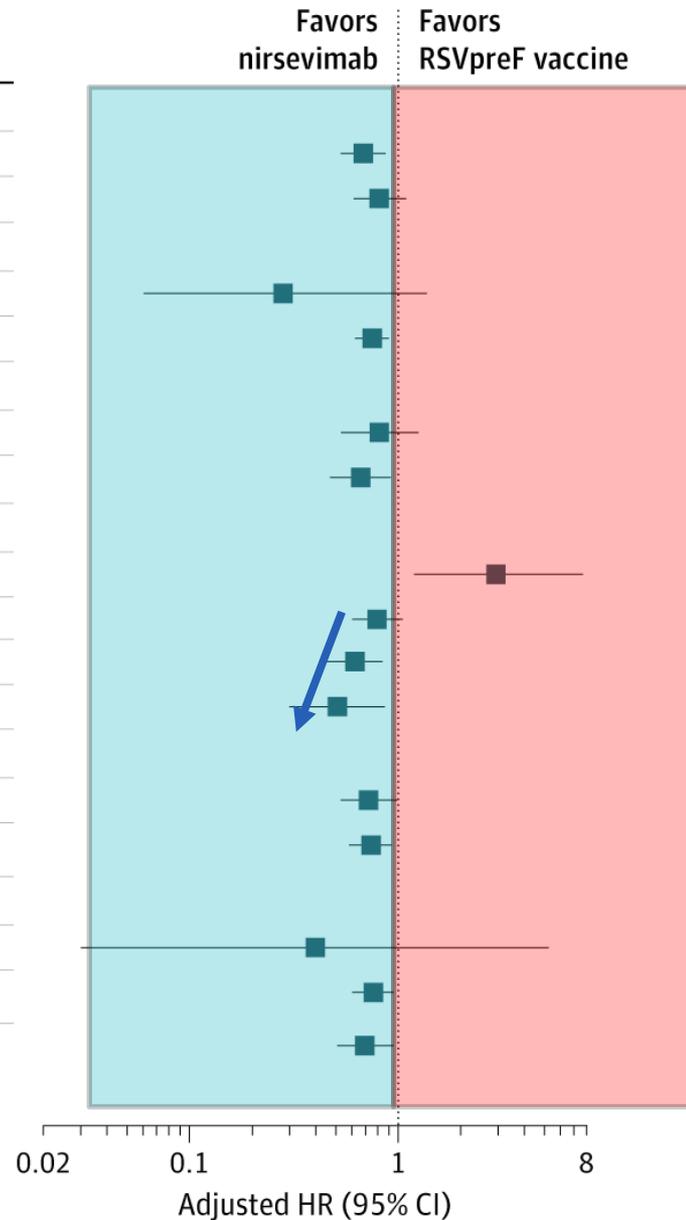
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## Nirsevimab vs RSVpreF Vaccine for Respiratory Syncytial Virus–Related Hospitalization in Newborns

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# Study Take Aways

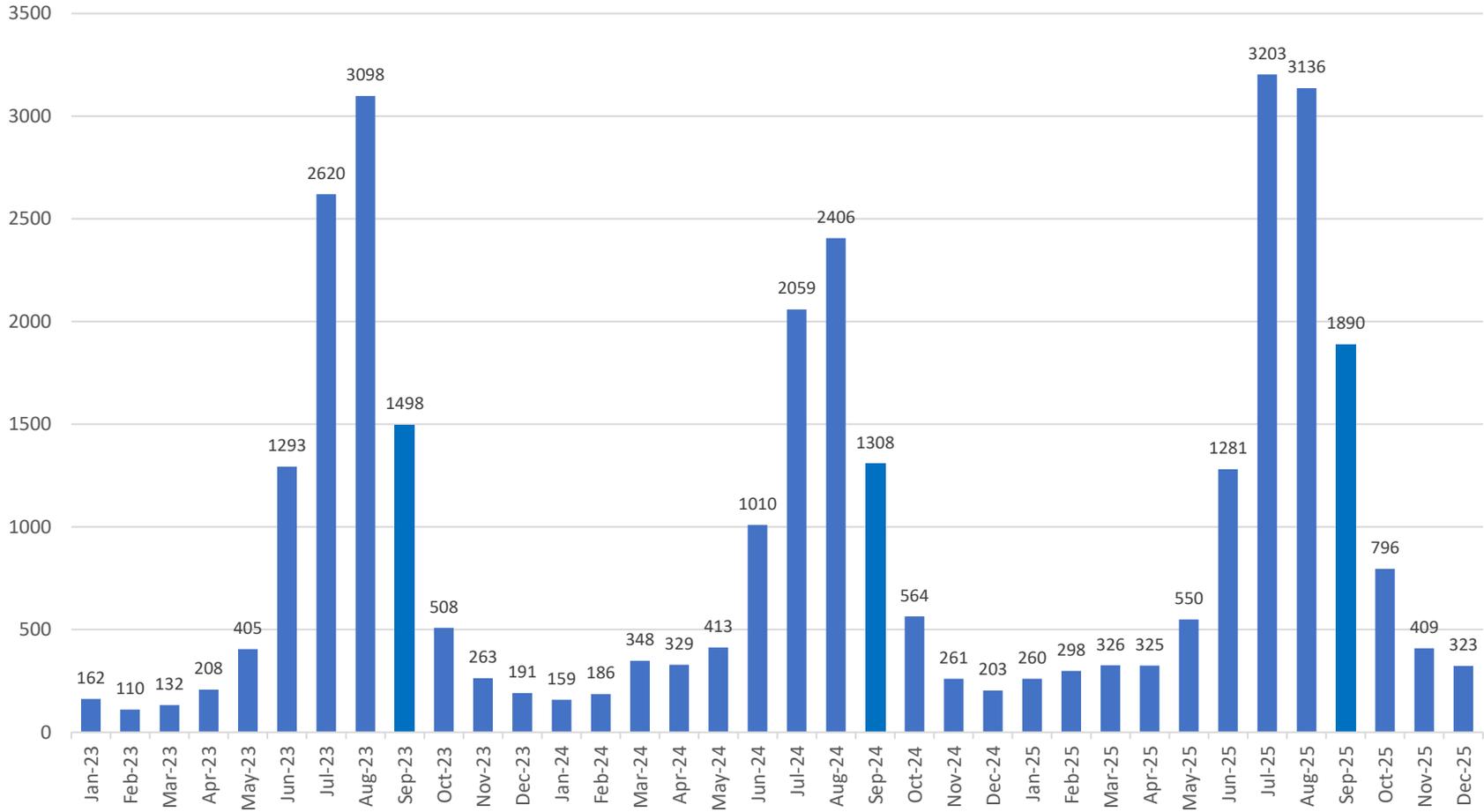
- One country
- One RSV season
- In this setting Beyfortus performed slightly better
- But both products work well
- Protection at birth is important
- **There is every reason to immunise infants not protected by maternal RSV vaccination with Beyfortus**



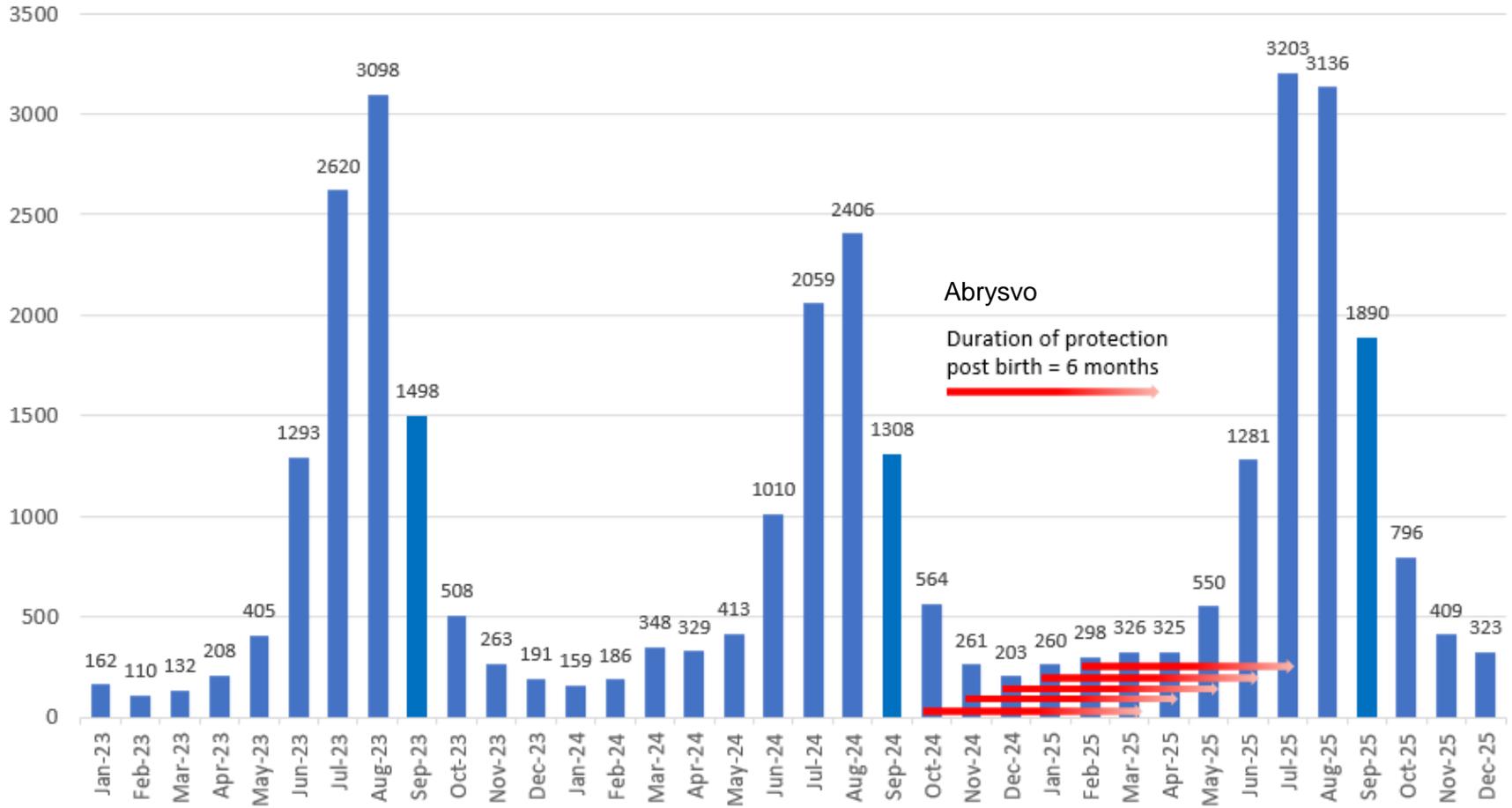
# How could an infant not be adequately protected by maternal RSV vaccination throughout RSV season?

- Mum did not receive Abrysvo
- Mum received Abrysvo within 2 weeks of delivery
- Mum had an immunocompromising condition
- Mum had a medical treatment that lowers antibodies
- Infant has a serious medical condition
- **Infant was born well before peak of RSV season**

## RSV Notifications by Month, WA 2023-2025

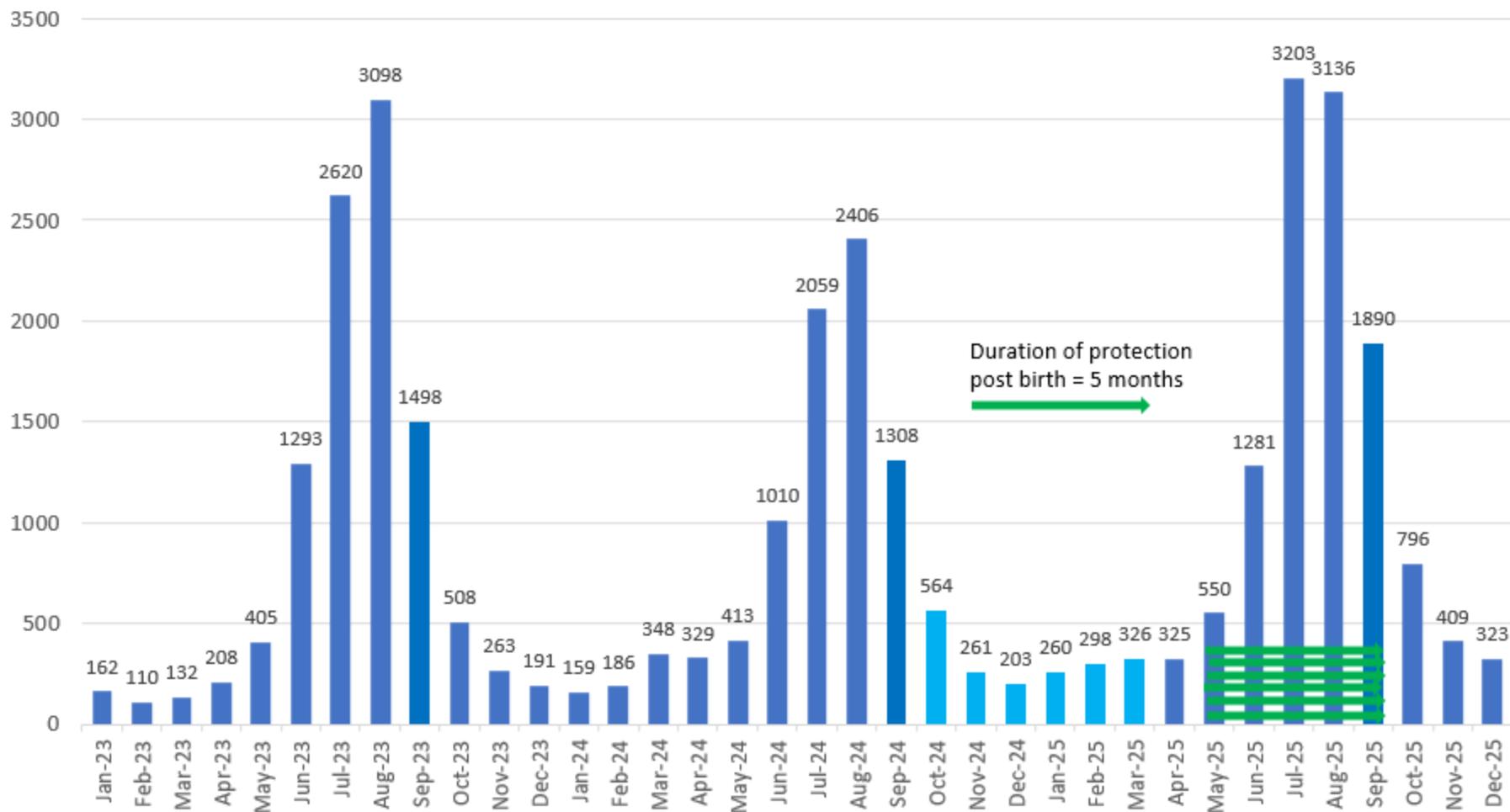


## RSV Notifications by Month, WA 2023-2025



# How can we address waning protection?

RSV Notifications by Month, WA 2023-2025



# Is it safe to administer Beyfortus to babies born to mothers who received Abrysvo?

Yes. This has been studied and there was no increase in adverse reactions among infants born to Abrysvo vaccinated mothers who subsequently got Beyfortus than the Beyfortus only cohort.

For infants who have risk factors for severe RSV disease (i.e. medically frail) we currently **recommend** giving Beyfortus even if the Mum received Abrysvo while pregnant.



**How we can improve our program to protect WA infants and young children from RSV in 2026?**

# Three strategies to improve in 2026?

1. Promote Abrysvo among pregnant women - especially those who will deliver April through September.
2. Make sure providers and parents understand that even in the era of maternal RSV vaccination there are still lots of children that will benefit from Beyfortus – i.e.
  - All newborns of unvaccinated mothers
  - All medically at-risk newborns regardless of mum's vaccination status
  - All infants born Oct through March
  - All at-risk children entering their second RSV season including Aboriginal children
3. During RSV season, ensure that unvaccinated mums who want their newborn to get nirsevimab can get it before hospital discharge.

## At the end of the day...

- We need to remind ourselves of what a privilege it is to be in a position to prevent >80% of admissions due to the leading cause of infant hospitalisation in Australia...
- And do all we can as health care professionals to make that possibility a reality in WA.

# Adult RSV Immunisation

- Two RSV vaccines registered for adults in Australia.
- They are different formulations and are registered for use in specific population groups.
- Abrysvo registered for use in pregnant women and individuals  $\geq 60$  years.
- Arexvy is registered for use in adults aged  $\geq 60$  years and adults 50–59 years who are at increased risk for RSV disease (not pregnant women).
- Neither RSV vaccine should be given to infants or children.

# Which Adults are recommended to get an RSV Immunisation?

A single dose of RSV vaccine is recommended for

- all adults aged  $\geq 75$  years.
- all Aboriginal and Torres Strait Islander adults aged  $\geq 60$  years.
- adults aged  $\geq 60$  years with risk factors for severe RSV disease.
- Adults aged 60–74 years who do not have a risk factor for severe RSV disease can consider a single dose of RSV vaccine.
- Adults aged 50–59 years who have a risk factor for severe RSV disease can consider a single dose of Arexvy.

## Adults aged $\geq 50$ years with which medical conditions are at increased risk of severe RSV disease?

- Cardiac disease
- Chronic respiratory conditions.
- Immunocompromising conditions
- Chronic metabolic disorders
- Chronic kidney disease
- Chronic neurological conditions
- Chronic liver disease
- Obesity

<https://immunisationhandbook.health.gov.au/recommendations/adults-aged-50-59-years-who-have-medical-conditions-that-increase-their-risk-of-severe-rsv-disease-can-consider-rsv-vaccination>

# Adult RSV immunisation timing

- RSV vaccine may be given at any time of the year but, where possible, should be offered before the start of the RSV season.
- Adults recommended to receive an RSV vaccine, who have previously had an RSV infection, can receive it once they are recovered.

# Adults – co-administration of RSV vaccine

- Older adults can receive RSV vaccines at the same time as other vaccines, such as COVID-19, influenza, zoster and pneumococcal vaccines.
- However, co-administration studies on RSV and influenza vaccines have shown slightly lower immune responses to certain strains contained in the RSV vaccine and influenza vaccines.
- The clinical significance of these decreased immune responses is uncertain.
- The likelihood of local and systemic adverse events may also increase with co-administration (~10% higher).
- The benefits of giving the vaccines all during the same visit may outweigh such concerns.

# Arexvy

- It is an adjuvanted RSV vaccine.
- Not surprisingly then, its reactogenic.
- Among trial participants receiving Arexvy pain was reported by:
  - 61% of participants aged  $\geq 60$  years (compared with 9% who received placebo)
  - 75% of participants aged 50–59 years (compared with 14% who received placebo).
- Fatigue was reported by
  - 34% of participants aged  $\geq 60$  years (compared with 16% who received placebo) and
  - 36% of participants aged 50-59 years (compared with 19% who received placebo).

# Arexvy is effective

- In a large clinical trial, adults aged  $\geq 60$  years who received Arexvy were 83% less likely to have RSV-associated lower respiratory tract disease.
- Vaccine efficacy against **severe disease** after 1 dose of Arexvy was 94% during the 1st complete RSV season.
- Vaccine efficacy was 79% through 2 complete RSV seasons with an efficacy of 64% was shown during the 2nd season alone against severe disease.

# Adult RSV Immunisation with Arexvy

- Effective vaccine
- Protection lasts more than one RSV season
- Reactogenic vaccine

But it's not registered for pregnant women and it's important that it is not given to them.

From a program implementation perspective, it's rather unfortunate that the two registered adult RSV vaccines both start with "A" and have three syllables.

# Adult RSV Immunisation with Arexvy



# Summary

- 2025 RSV maternal and infant RSV immunisation program was a major success.
- In 2026 we can do even better by:
  1. Continuing to promote maternal RSV vaccination
  2. Improving access to Beyfortus at maternity hospitals
  3. Increasing Beyfortus coverage in those who will benefit.
- In WA Beyfortus eligibility now includes all children born 1 Oct – 31 March regardless of mum's vaccination status.
- Adult vaccination programs are coming! Stay tuned.

**Congratulations  
&  
Thank you!**