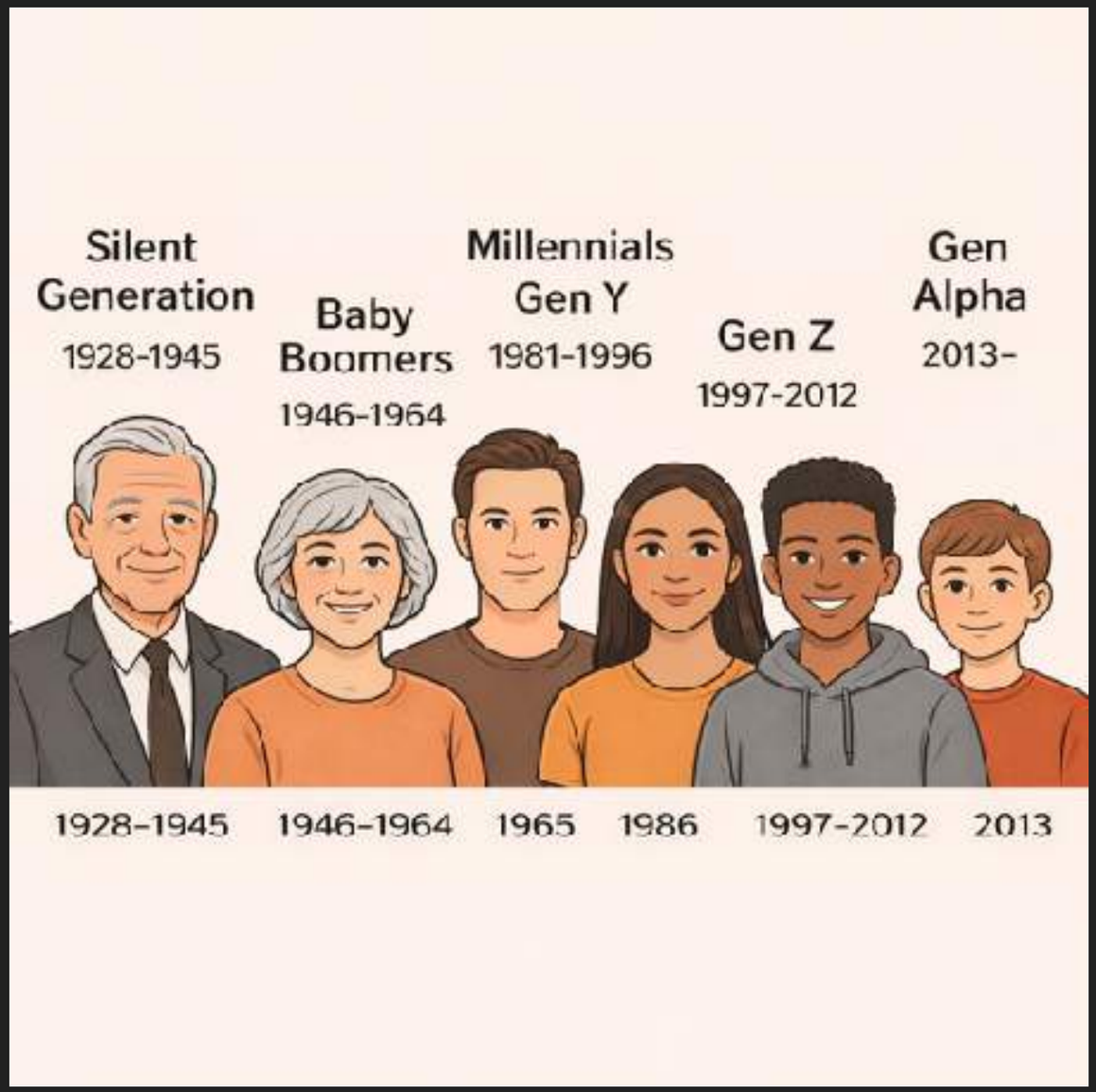
DR RYAD JOOMYE

20 YEARS LATER

AGENDA

- Generations and behaviour patterns
- Silent neurotoxin
- AI risks vs opportunity
- Infant mortality rates



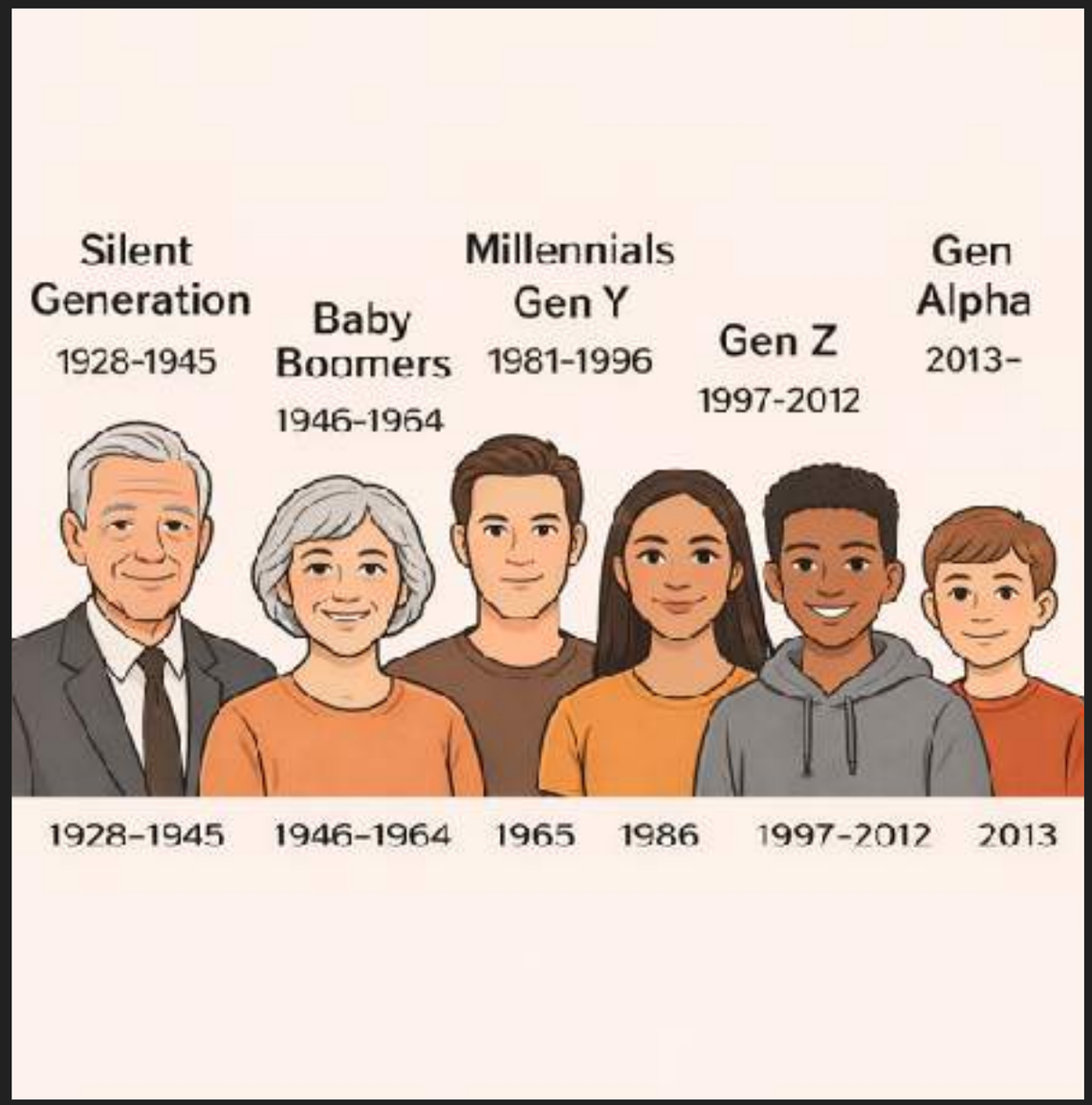
20 YEARS LATER

BABY BOOMERS

- 60-80 years old
- Strong work ethic
- Prefer face-to-face communication
- Tech-skeptic

GENERATION X

- 45-60 years old
- The “forgotten middle child”
- Good memory of pre-digital era
- Internet = basic necessity



20 YEARS LATER

MILLENIALS (GEN Y)

- 30-45 ans
- Grew up with early computers, dial-up internet, MSN Messenger, CDs
- Adaptable to technology
- Prefer work–life balance
- Value experiences (travel, cafés) more than material things

20 YEARS LATER

GEN Z

- 15-30 ans
- First truly digital native generation.
- Grew up with smartphones
- Social capital
- Independent learners

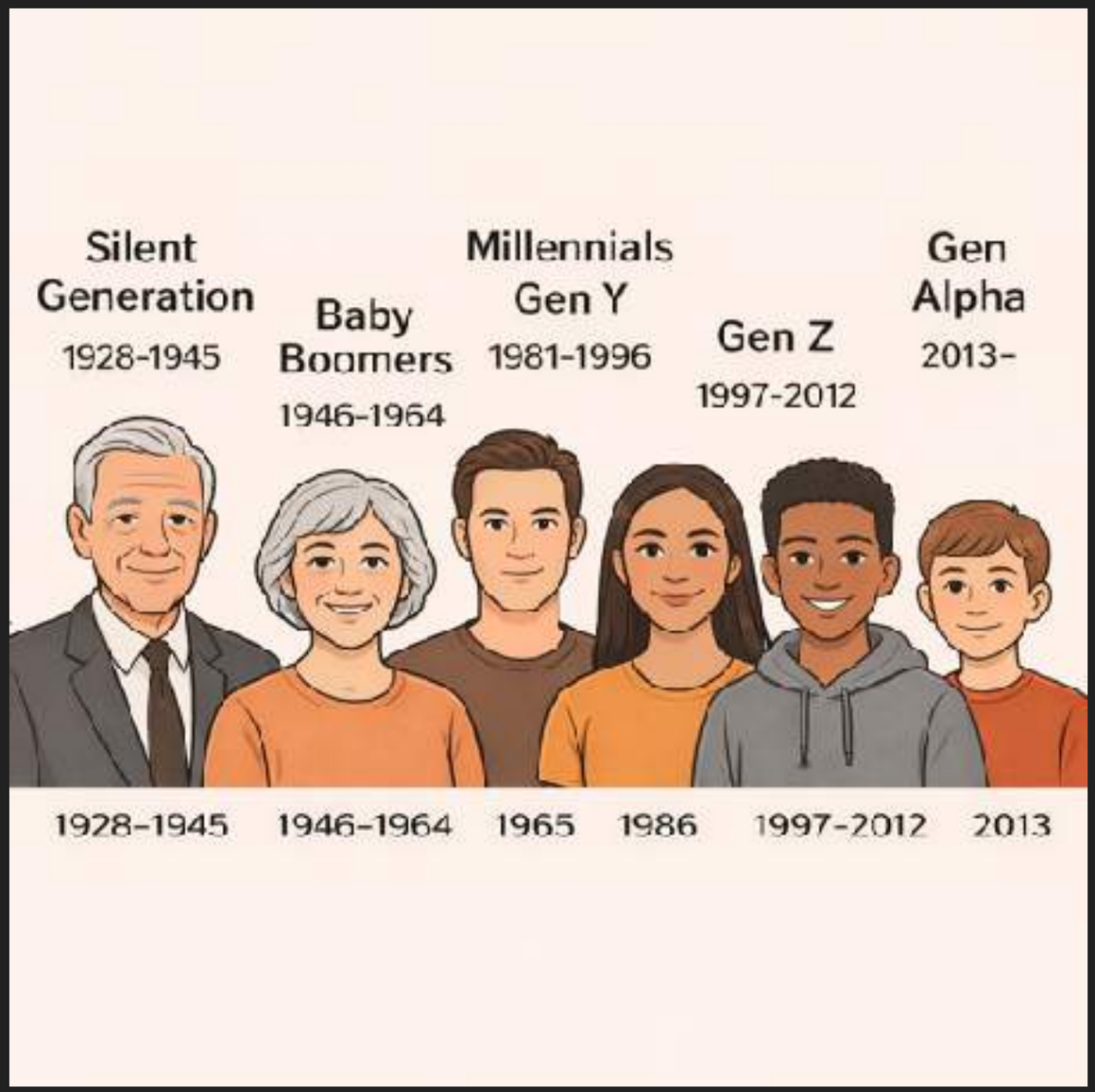
20 YEARS LATER

GENERATION ALPHA

- 0 -12 ans
- Entirely born into an touchscreen / AI
- Very fast learners but attention spans
- Aware of global issues from a young age
- Supposedly the most educated generation in history ???

GENERATIONS

- Behaviour pattern
- Now in 2026
  - Mothers : GenZ
  - Kids : Gen Alpha
  - Born 2026 = Gen Beta



GEN Z , ALPHA – IMPACT OF DIGITALISATION

- No clue about life before internet
- Instant gratification.
- Digital identity. Likes and followers > real world
- Low frustration tolerance : Effort is optional, sacrifice is meaningless

20 YEARS LATER

GEN Z , ALPHA

- Maternal age ↑, Fertility ↓, No children
- CS ↑, BF ↓
- Home food ↓ , Gym ↑
- Cognitive consequences
- Enfant roi. Entitled. Blame culture.

20 YEARS LATER

SILENT NEUROTOXIN

- ADHD-like symptoms
- Autistic-like symptoms
- Emotional dysregulation
- Insomnia
- Addiction patterns
- Sedentary, eating disorders

20 YEARS LATER

SCREEN = SILENT NEUROTOXIN

	Normal	Screen
Stimulation	Eye contact	Passive
Facial expression	Learn emotions	Low EQ
Emotional feedback	Responsive	
Turn taking		Instant gratification

20 YEARS LATER

"COVID BABIES COHORT"

- Born in 2020. Parents work for home.
- Digital babysitters
- ADHD and autistic features.
- Enfant roi
- Sleep disturbances

WHAT DOCTORS SHOULD DO

- Assess
  - Calculate and note screentime (include background TV)
  - Vocabulary,
  - Attention span,
  - Sleep
- Aggressive screen reduction
  - Identify the weak link
  - withdrawal symptoms
  - Need a real detox program
  - parent to take 2 weeks leave

WHAT DOCTORS SHOULD DO

- Re introduce
  - Play with child
  - Conversation and reading
  - Social interaction
  - Sports (team)
- Sleeping : melatonin ?
- Nutrition : ↓ sugars, ↓ vit C

20 YEARS LATER

GUIDELINES

		USA	UK = WHO
0-18 months	Videocalls only	0	0
18-24 months	Only educational	1h	1h
2-5 years	Education Interactive	1h week day 3h weekend day	1h
5-12 years	Recreational allowed	2h	2h

Source : NHS and American Academy of Child and Adolescent Psychiatry

GUIDELINES (FRANCE)

0-3 ans	Proscrit		
3-6 ans	Deconseille et exceptionelle	Adulte	Contenu educatif
6-9 ans	Limite et encadre	Adulte	Pas d’écran personnel Pas d’accès d’internet seul
9-12 ans	Modere et encadre	Adulte si internet	Pas de réseau sociaux Pas d’IA generative
12 - 15ans	Autonomie avec controle parental	Adulte si internet	Pas de reseau sociaux

Source : Ministère de l’education nationale, de l’enseignement supérieur et de la recherche

COMBINATION WHO-UK-USA-FRANCE

	18mo	3 ans	6 ans	9 ans	12 ans	15 ans
Time		<1h wk day <3h we day		<2h		
Videocalls + high quality	✅					
Educational (with adult)		✅				
Recreational (with adult)			✅			
Alone (without internet)				✅		
Internet (parental control)					✅	
Social media						✅

20 YEARS LATER

PARADIGM SHIFT. TIMING => CONTENT

Digital Ecosystems, Children, and Adolescents: Policy Statement

Tiffany Munzer, MD, FAAP,[1] Joanna Parga-Belinkie, MD, FAAP,[2] Libby Matile Milkovich, MD, FAAP,[3] Suzy Tomopoulos, MD, FAAP,[4] Taiwo Ajumobi, DO,[5] Corinn Cross, MD, FAAP,[6] Roslyn Gerwin, DO,[7] Sheri Madigan, PhD, R. Psych,[8,9] and the Council on Communications and Media

PEDIATRICS Volume 157, Issue 2, February 2026:e2025075320

AAP – FEB 2026

- No universal time threshold in literature. (Not EBM)
- Cannot deny digital (r)evolution.
- Most consistent relationships : language delays and sleep disturbances
- Content - content - content

AAP – FEB 2026

Education - HQ	Commercial - LQ
Interactive	Just viewing
Time limit. 1 episode only	Endless scroll, autoplay
20-30 min	Short -> feeds algorythm
Allows offline	Online only
Learning (maths, language, ..)	Fast paced
Invites parents/caregivers	Distraction - Ads
Age specific	Difficult to exit

AAP – FEB 2026 (RECO FOR DR'S)

- 5 C's
  - Child's strength
  - Content
  - Calming tool
  - Crowding out
  - Communication kids-parents
- Rules at home
  - Screen free zones (bedroom, dining)
  - Screen free time (2h before bed)
  - Screen together
  - No background TV

AGE RECOMMENDATIONS

- When to get a phone ?
  - Teen digital literacy. LQ vs HQ
  - Truthful towards use
  - Parents master parental control apps
  - Phone ready questionnaire
- Social media account (legal)
  - Australia 16
  - Norway 13-15
  - EU 16
  - APP 13

AAP FEB 2026 – POLICY MAKERS

- Invest in 3rd spaces (libraries, green space, community areas, sport arenas)
- Parental leave
- Restrict long hours
- and more

AI

THE FINAL BLOW ?

20 YEARS LATER

AI THE FINAL BLOW ?

	BEFORE AI	AFTER AI
Neural effort	Thinking	Answering
Attention span	15 min	5 min
Memory	Useful	Outsourced
Language - writing	Essential	Pointless

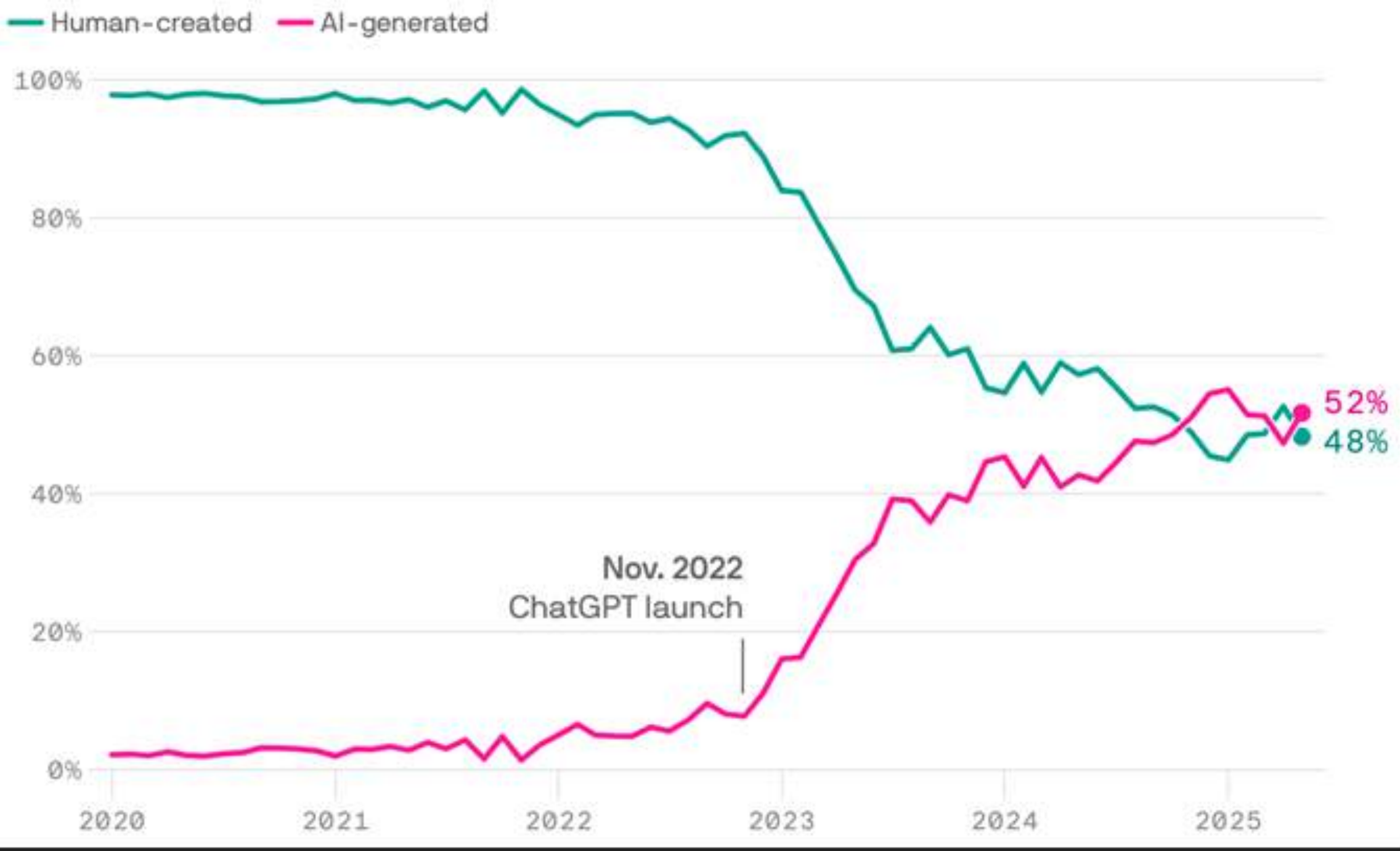
20 YEARS LATER

AI HALLUCINATIONS

- AI predicts what sounds correct
- Predicting leads to inventing
- Natural consequence - Not bug
- Fluent, coherent, and entirely false
- Cannot fact check - stay critical

Share of articles that were written by humans or generated by AI

Monthly, January 2020 to May 2025; Based on a sample of 65,000 English-language articles published online



AI WITH CHILDREN

- AI used after thinking, not before
- Teach children to ask:
  - “How do I know this is true?”
  - “What could be wrong?”
- Adult mediation is essential
  - Supervise children
  - Supervise interns/young Dr’s
  - Supervise AI

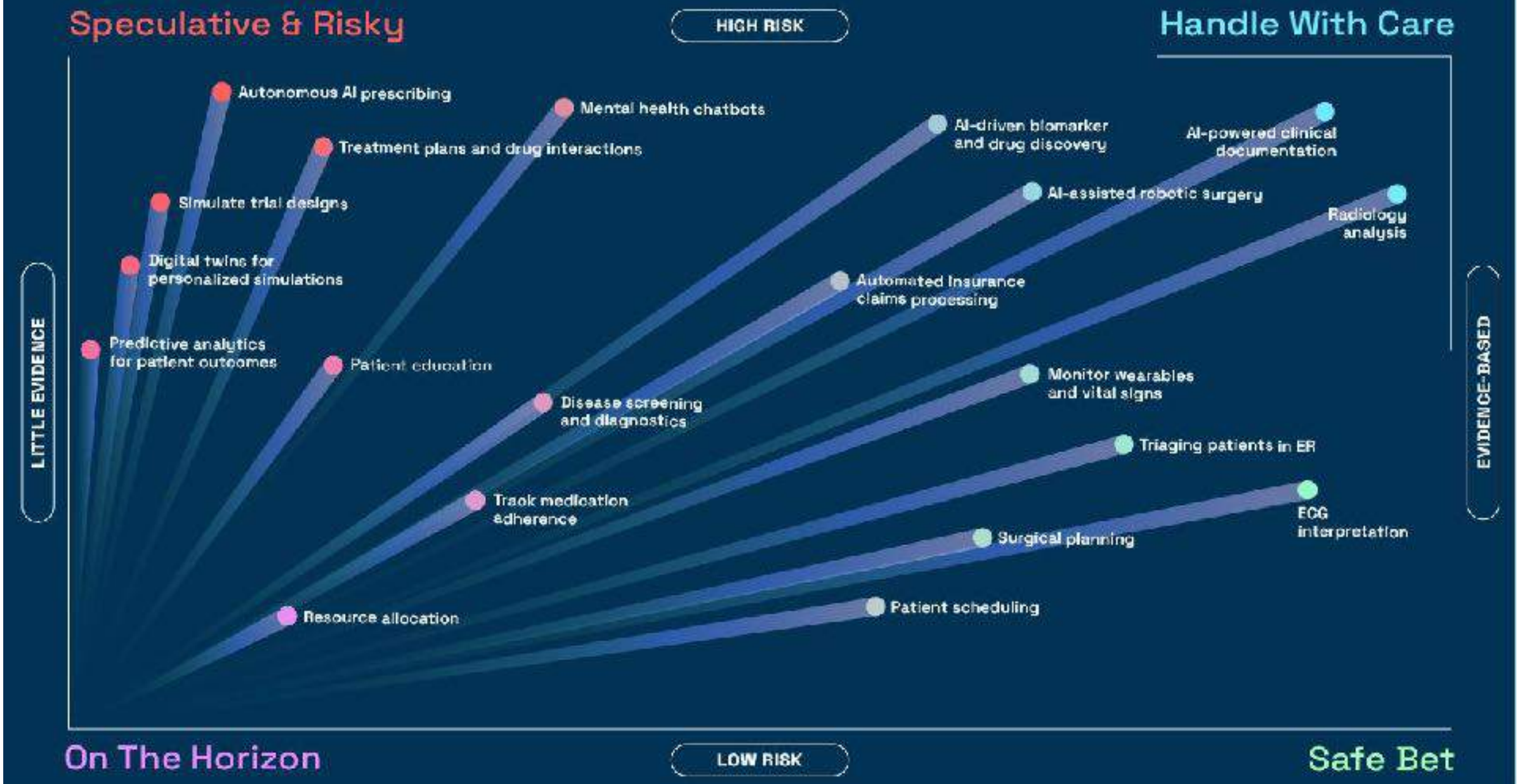
AI FOR DOCTORS

It gives an edge !

Navigating AI Use Cases in Healthcare

THE MEDICAL FUTURIST

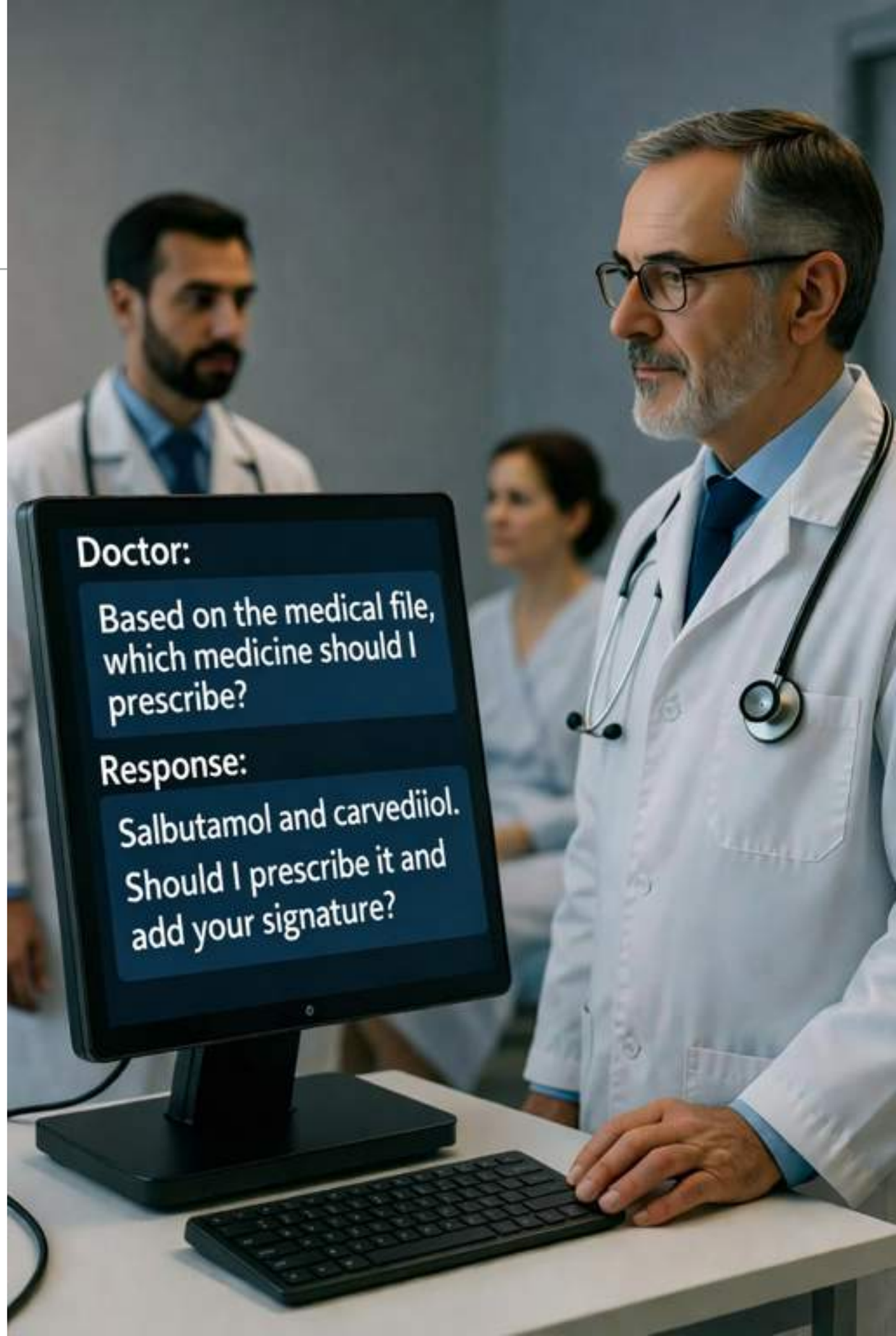
FROM HYPE TO EVIDENCE,
FROM SPECULATION TO SAFE BETS



20 YEARS LATER

AI FOR DOCTORS

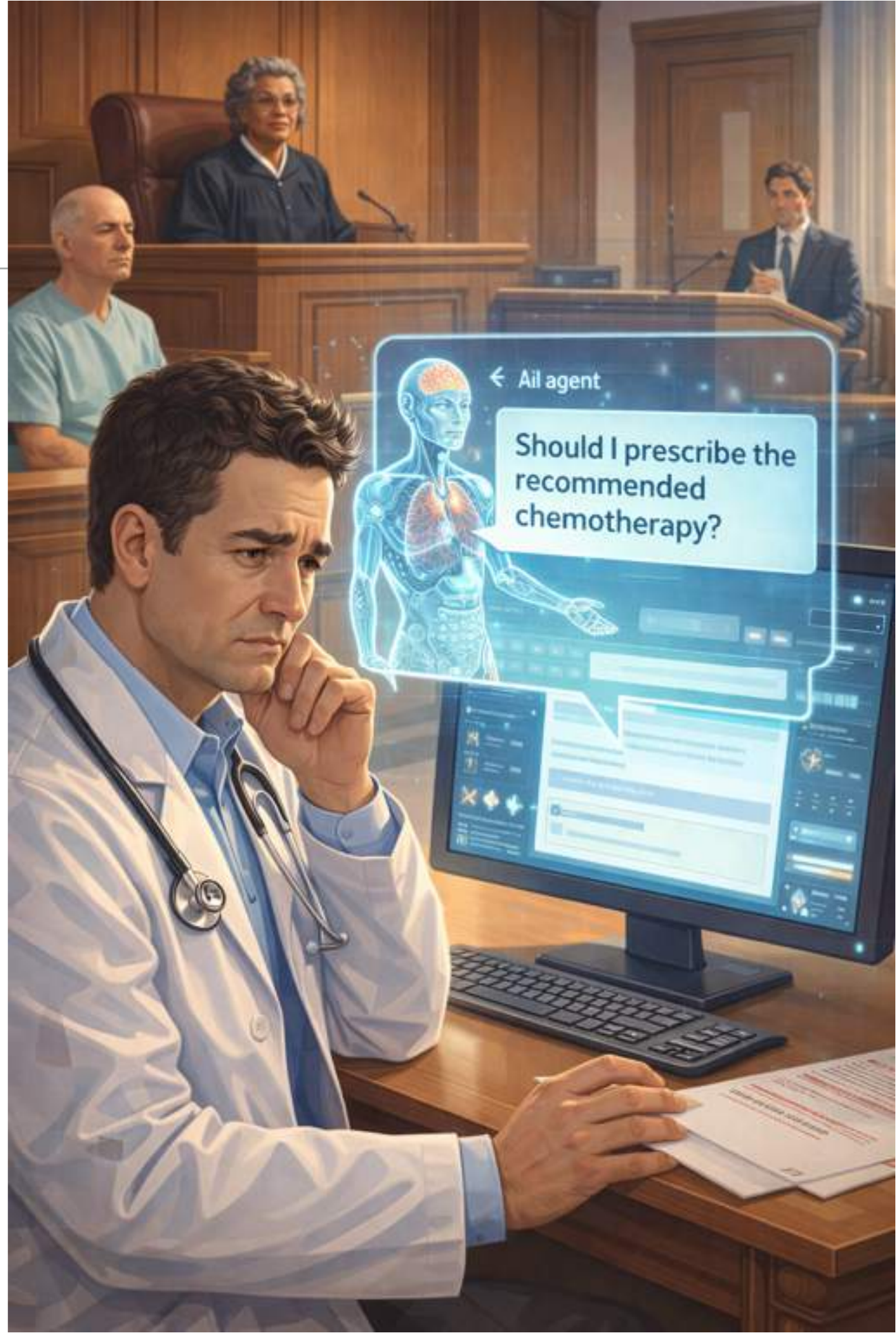
- Avoid the complete loop.
- Automate : Yes but not by AI
- Keep control. Manual entry for medicine



20 YEARS LATER

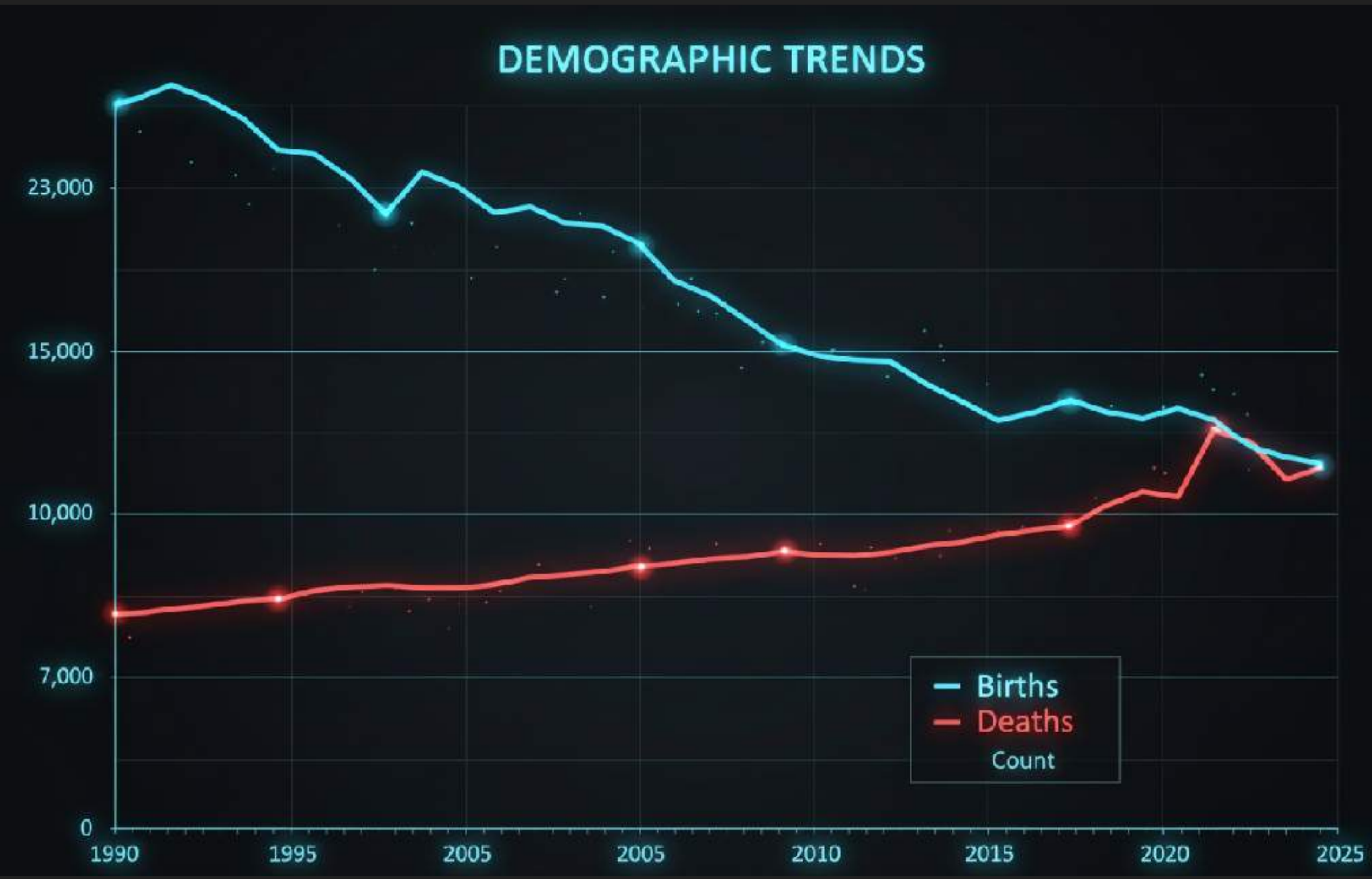
AI FOR DOCTORS = LIABILITIES

- AI assisted thinking ✅👍
- AI Hallucinations ➡️ Medical errors
- Data Protection. Look for
  - GDPR-complaint (General Data)
  - HIPAA - compliant (Health Data)
  - Anonymise the input
- Check sources and read abstracts
  Perplexity AI - research mode - 3 min



AGENDA

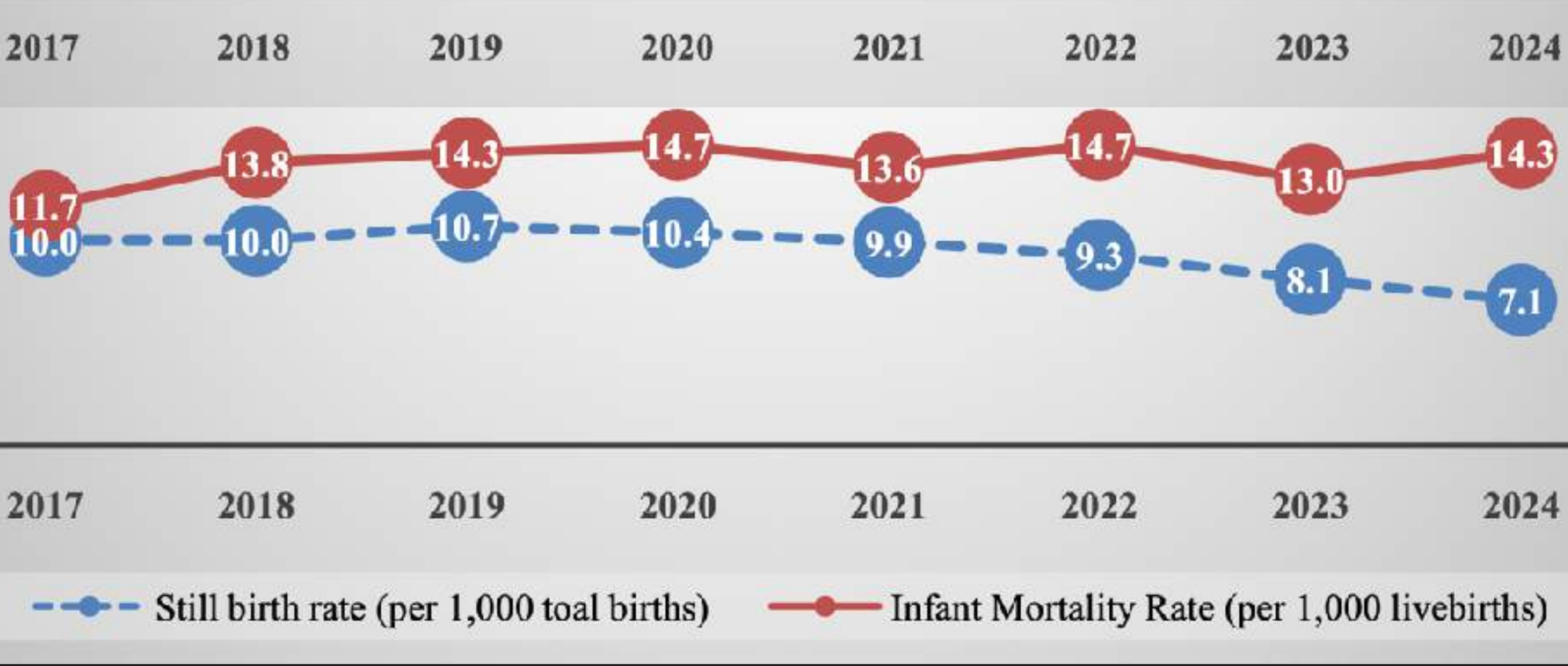
- Generations and behaviour patters
- Silent neurotoxin
- AI risks vs opportunity
- Decreasing infant mortality rates



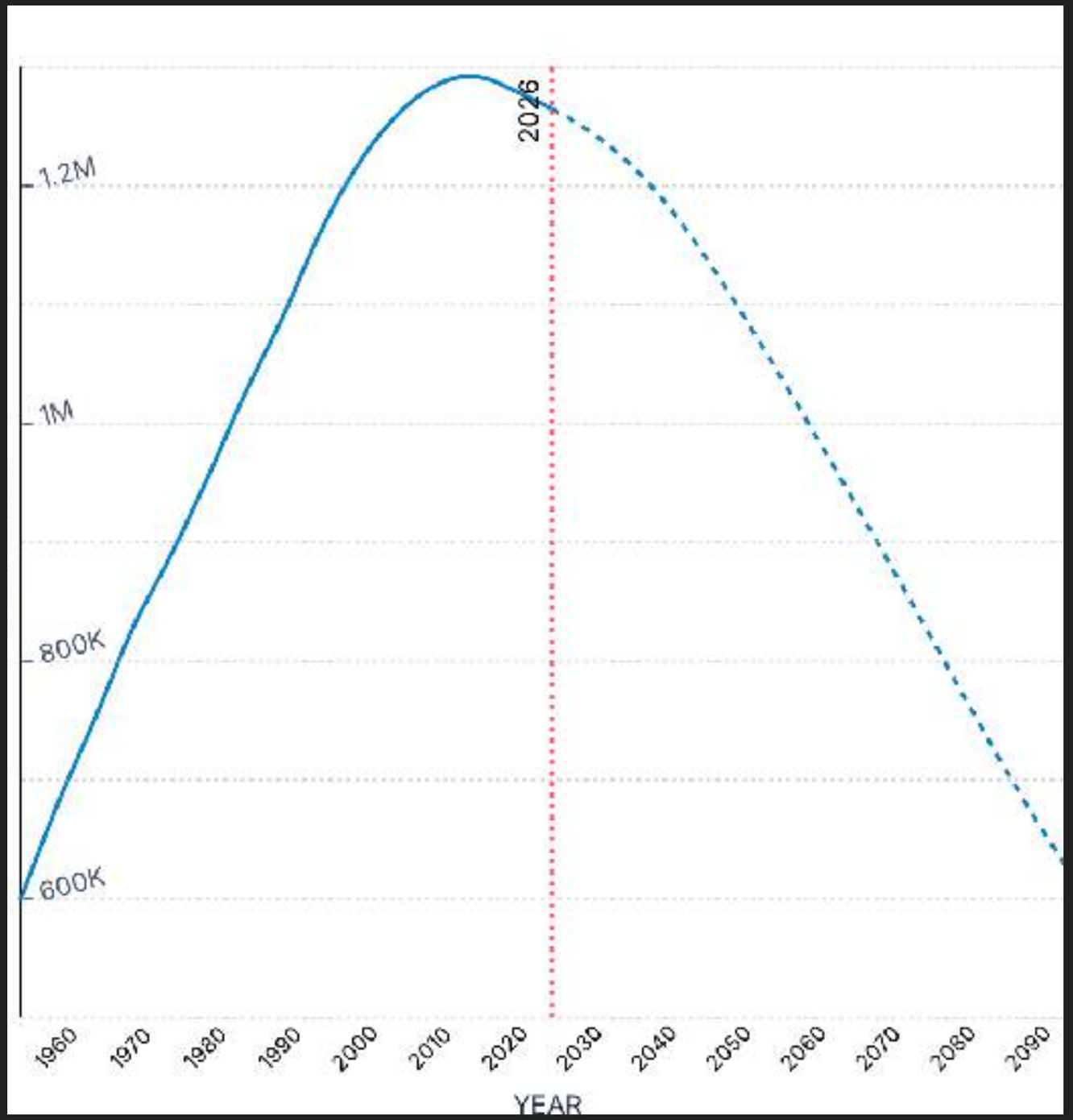
Source : World Population Prospects UN

ISLAND OF MAURITIUS
Under five mortality rate (per 10,000 livebirths)
(2017-2024)

Source : Health Statistics Mauritius 2024



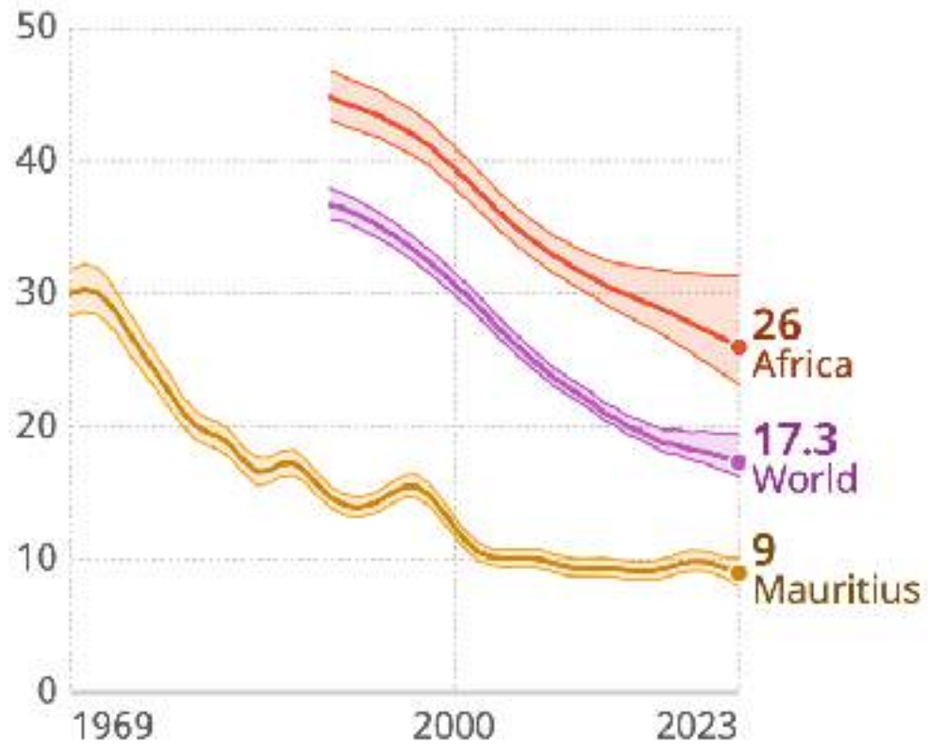
DEMOGRAPHICS



Source : WHO

In Mauritius, the **neonatal mortality rate (per 1000 live births)** has **improved by ▾ 21 deaths per 1000 live births** from 30 [28 - 32] in 1969 to **9** [8 - 10] in 2023.

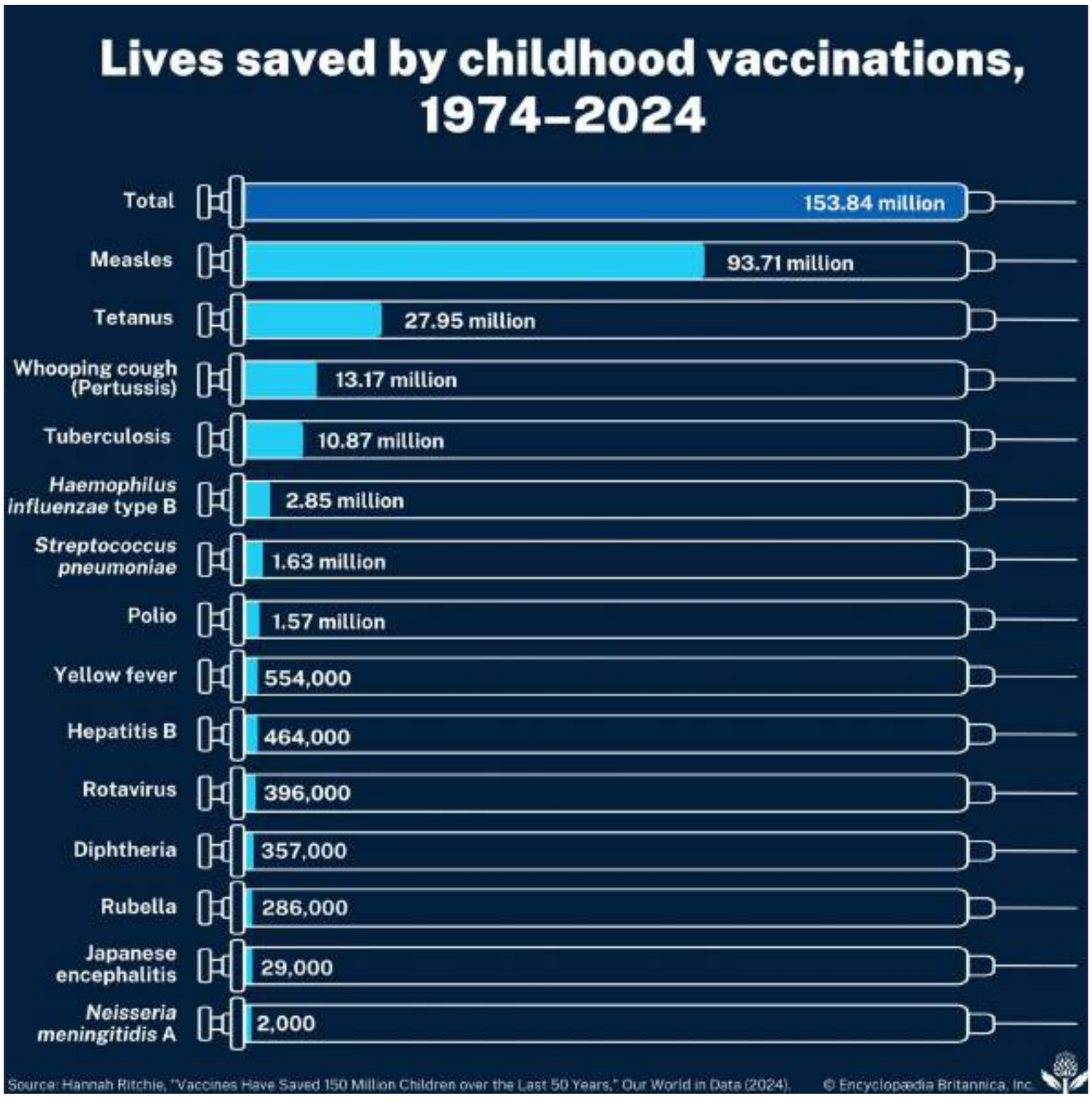
1969 – 2023



Source : WHO

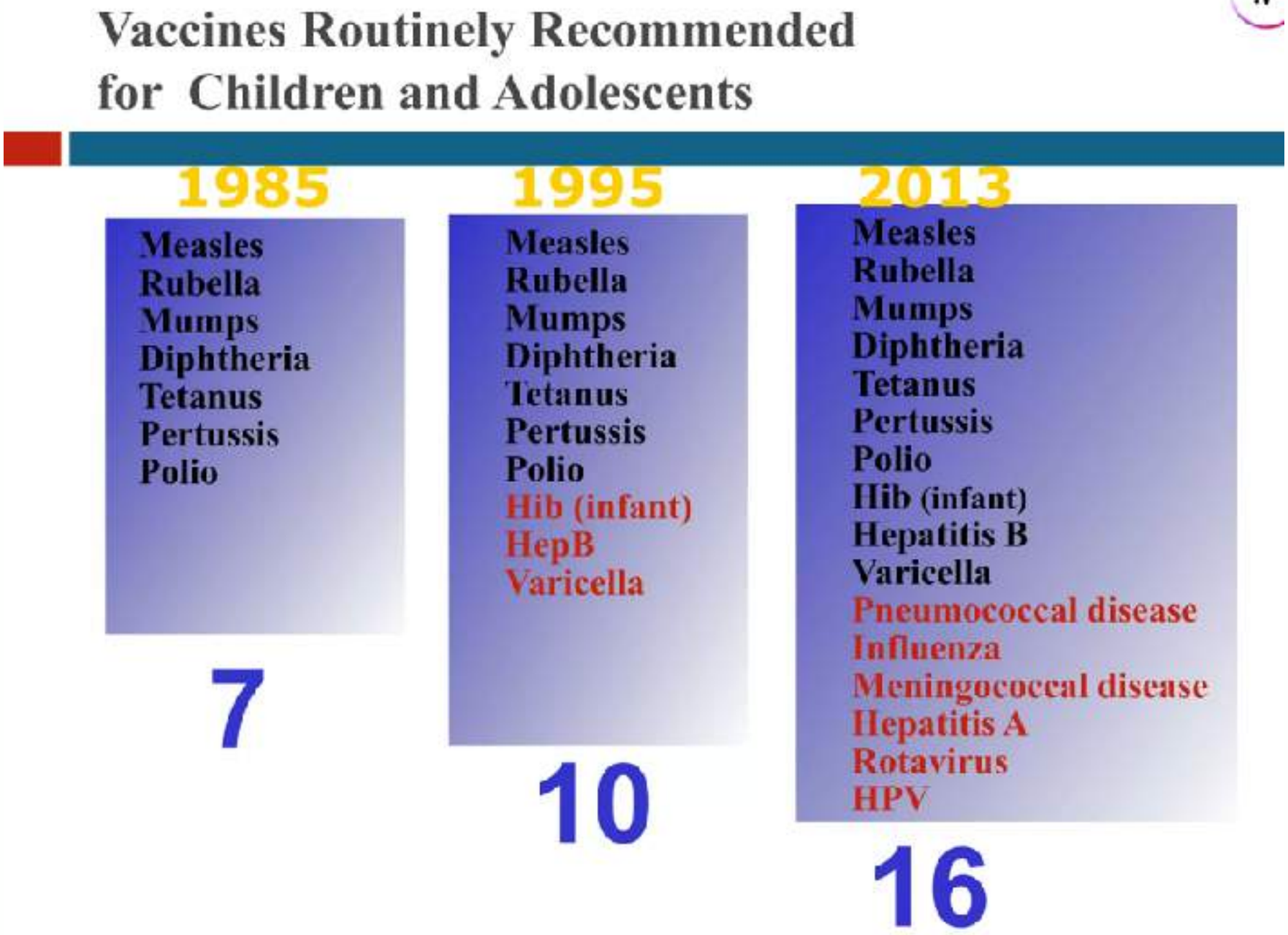
VACCINES

- Saves lives
-



VACCINES

- Saves lives
- More and more



20 YEARS LATER

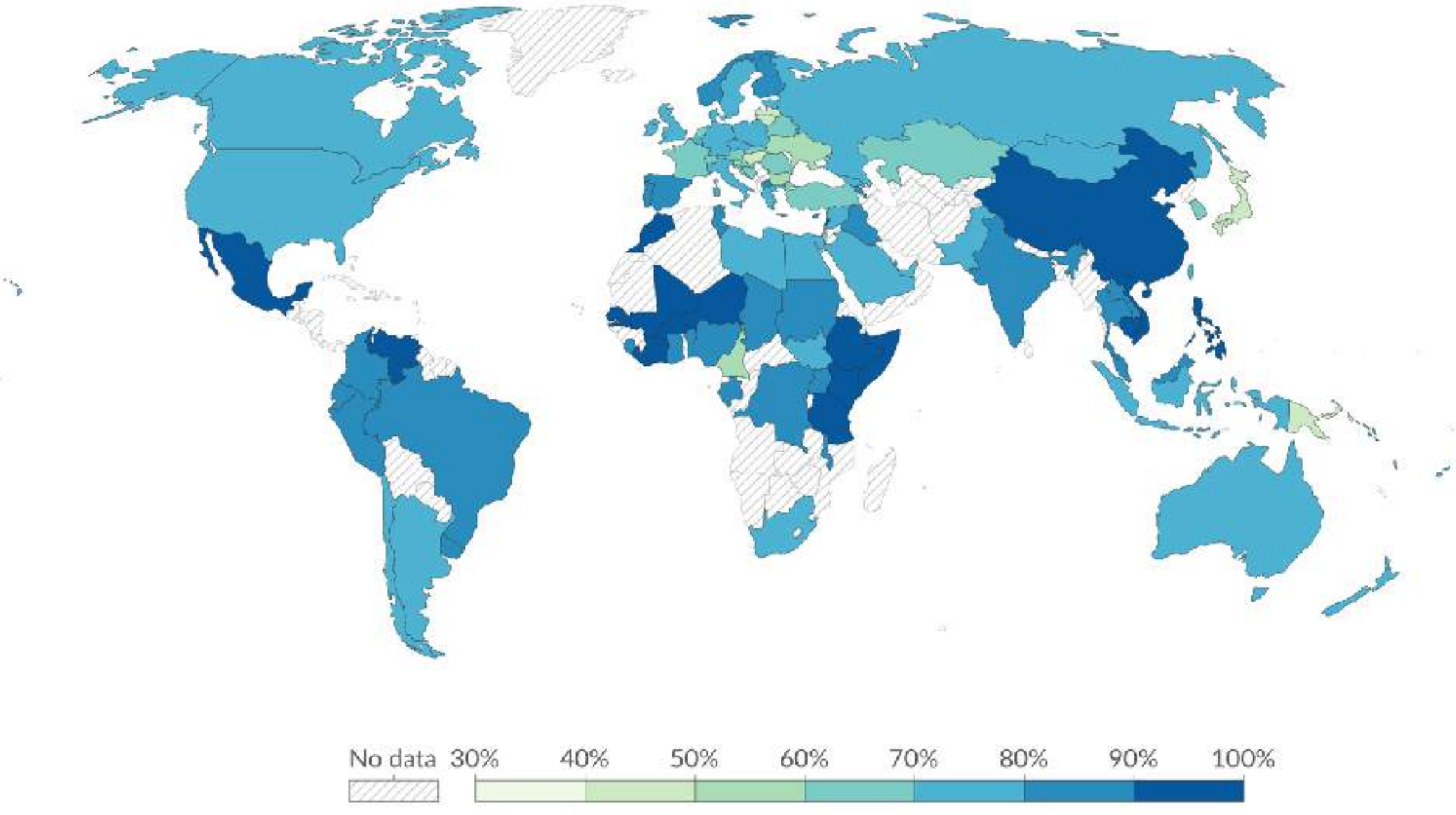
VACCINES

- Saves lives
- Anti-vax includes needle freak

Share who agree vaccines are important for children, 2025

Our World in Data

The share of respondents who said they 'strongly agree' or 'tend to agree' with the statement vaccines are important for children.



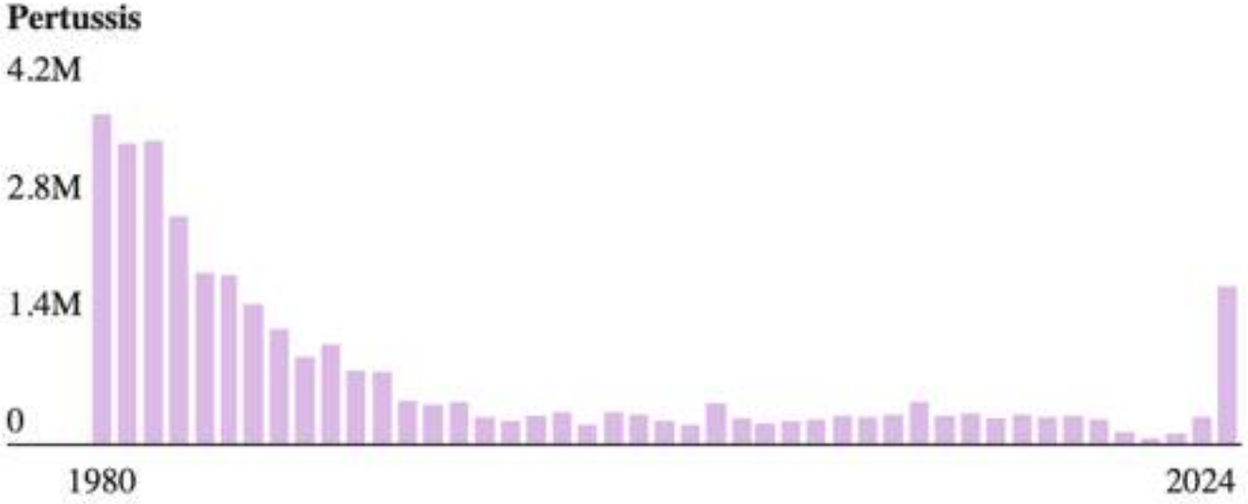
Data source: Vaccine Confidence Project (2025)

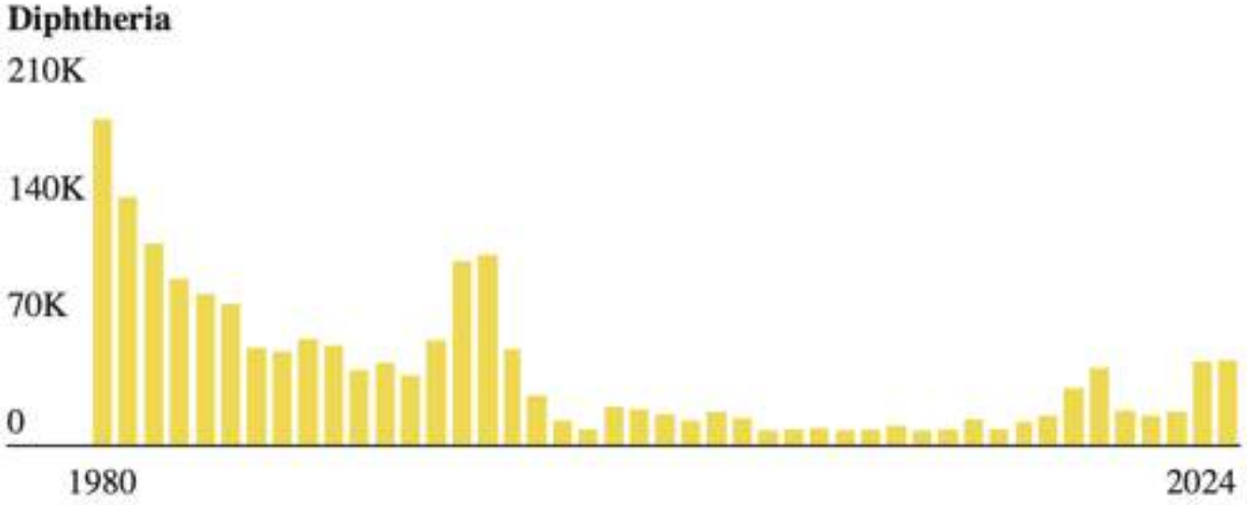
OurWorldinData.org/vaccination | CC BY

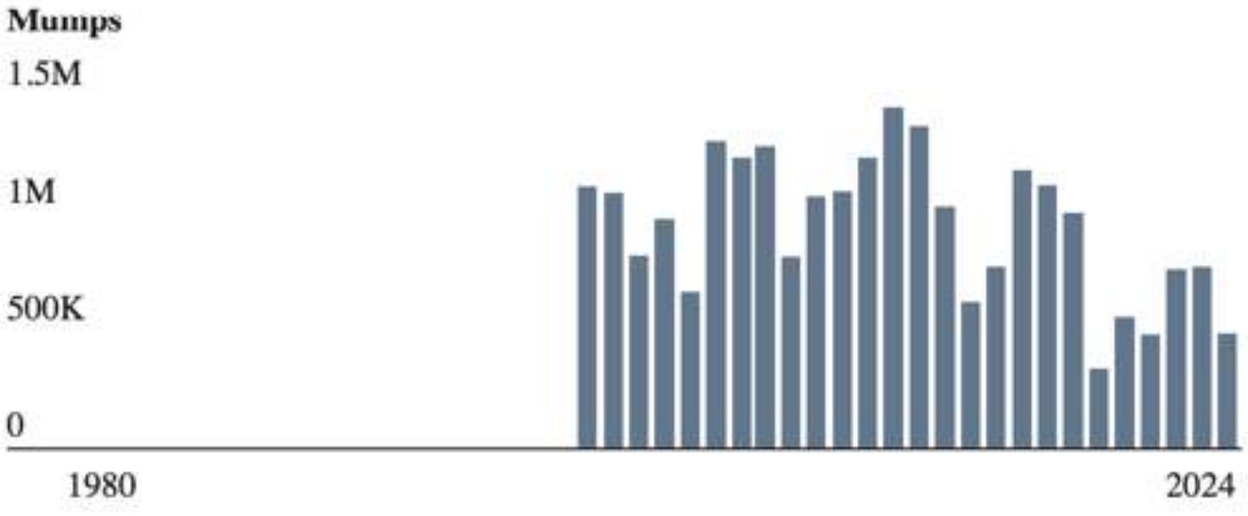
20 YEARS LATER

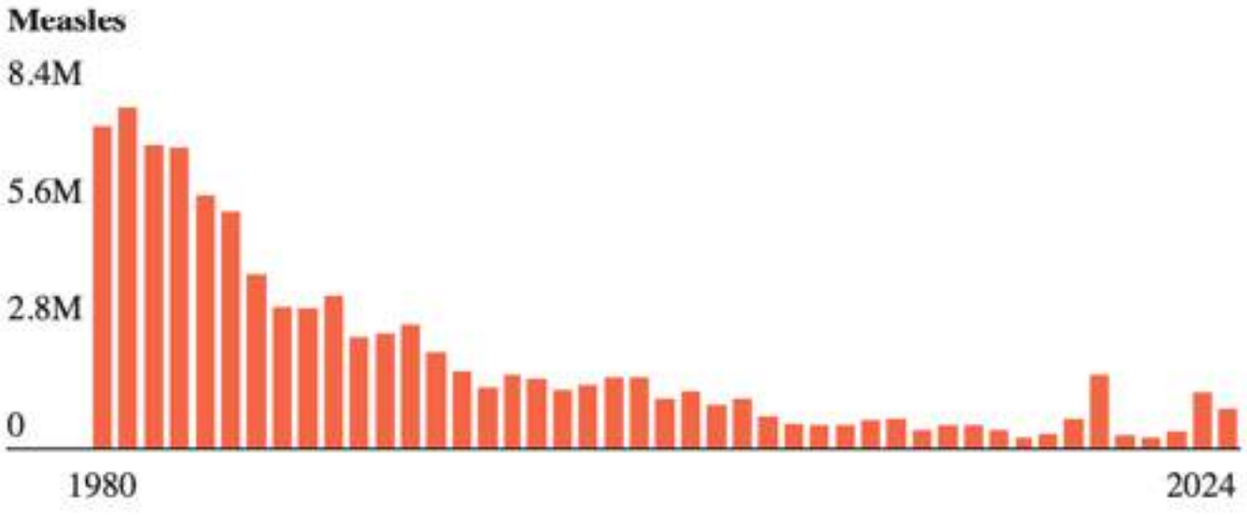
Vaccine-Preventable Disease Cases, Worldwide 1980–2024

Outbreaks of vaccine-preventable diseases have dropped significantly over the past four decades





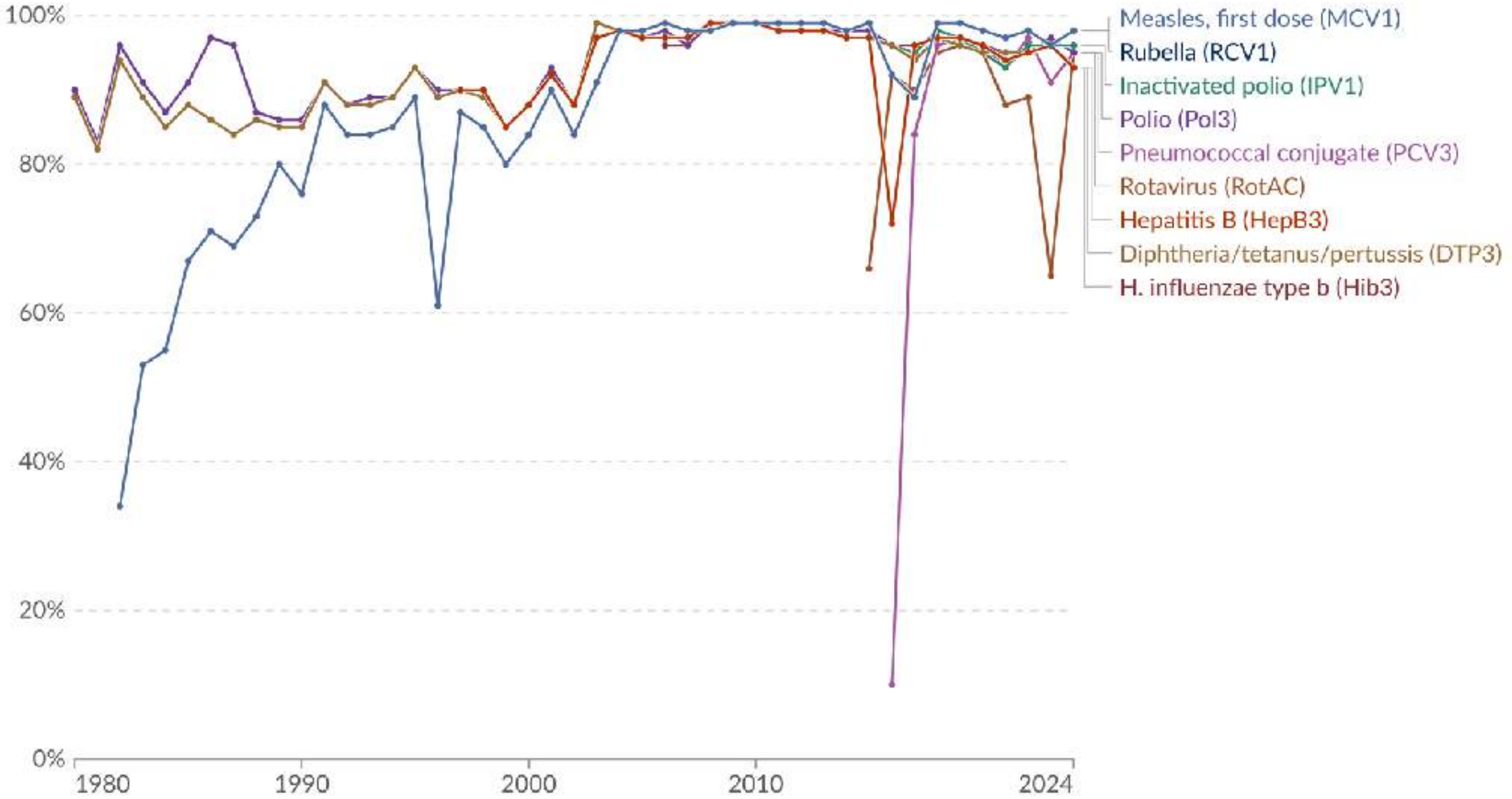




Share of children vaccinated, by vaccine, Mauritius

Our World in Data

Share of one-year-olds who have been vaccinated against a disease or a pathogen.



Data source: WHO & UNICEF (2025); UN, World Population Prospects (2024)

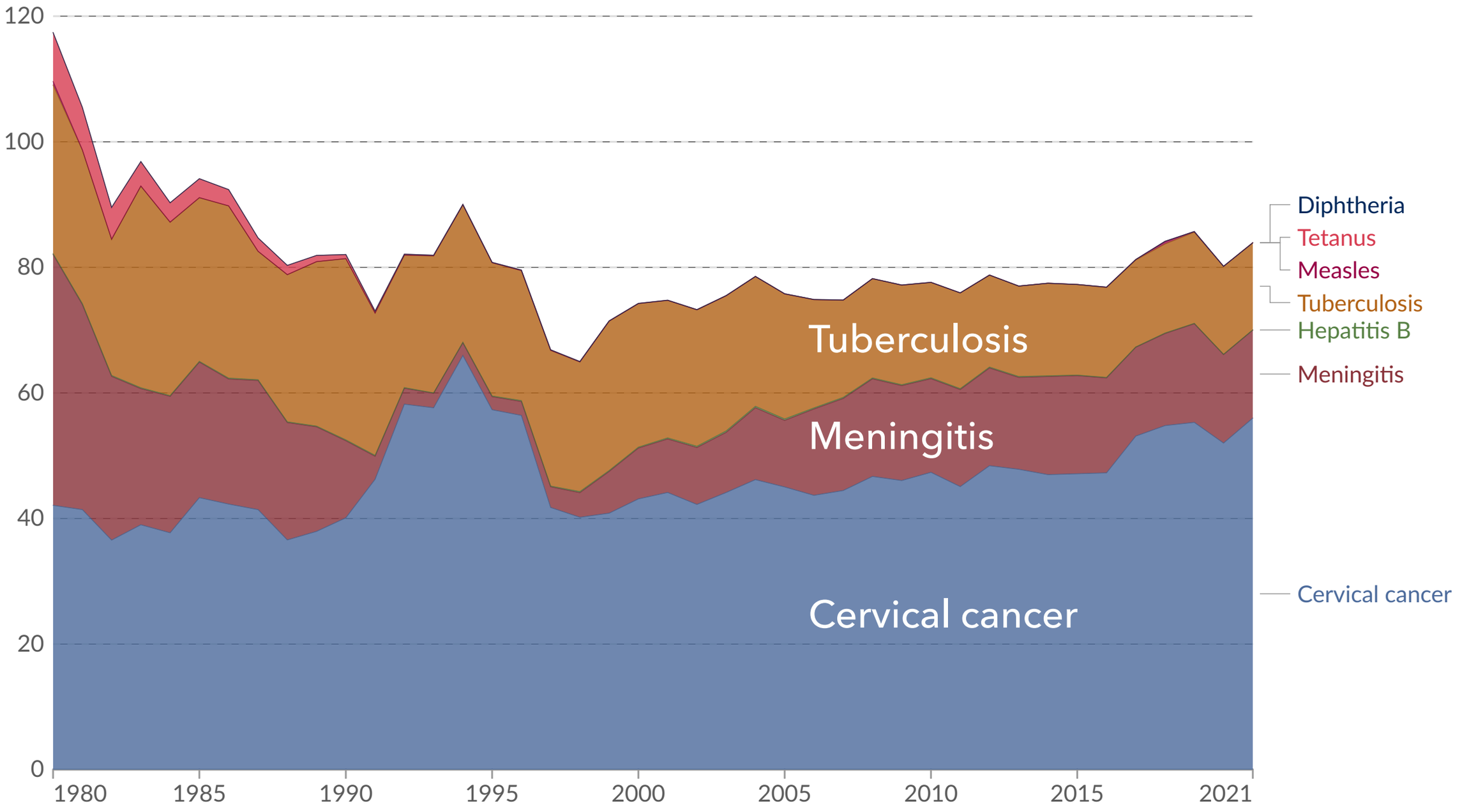
OurWorldinData.org/vaccination | CC BY

Note: This includes diphtheria[1], pertussis[2] and tetanus[3] (3rd dose), measles[4] (1st dose), hepatitis B[5] (3rd dose), polio[6] (3rd dose), Haemophilus influenzae b (3rd dose), rubella[7] (1st dose), rotavirus[8] (final dose), pneumococcal conjugate (3rd dose), and inactivated polio[9] (first dose).

Deaths caused by vaccine-preventable diseases, Mauritius

Our World in Data

The estimated annual number of deaths caused by several vaccine-preventable diseases, based on statistical modeling. Estimates come with wide uncertainties, especially for countries with poor vital registration[1].



Data source: IHME, Global Burden of Disease (2024)

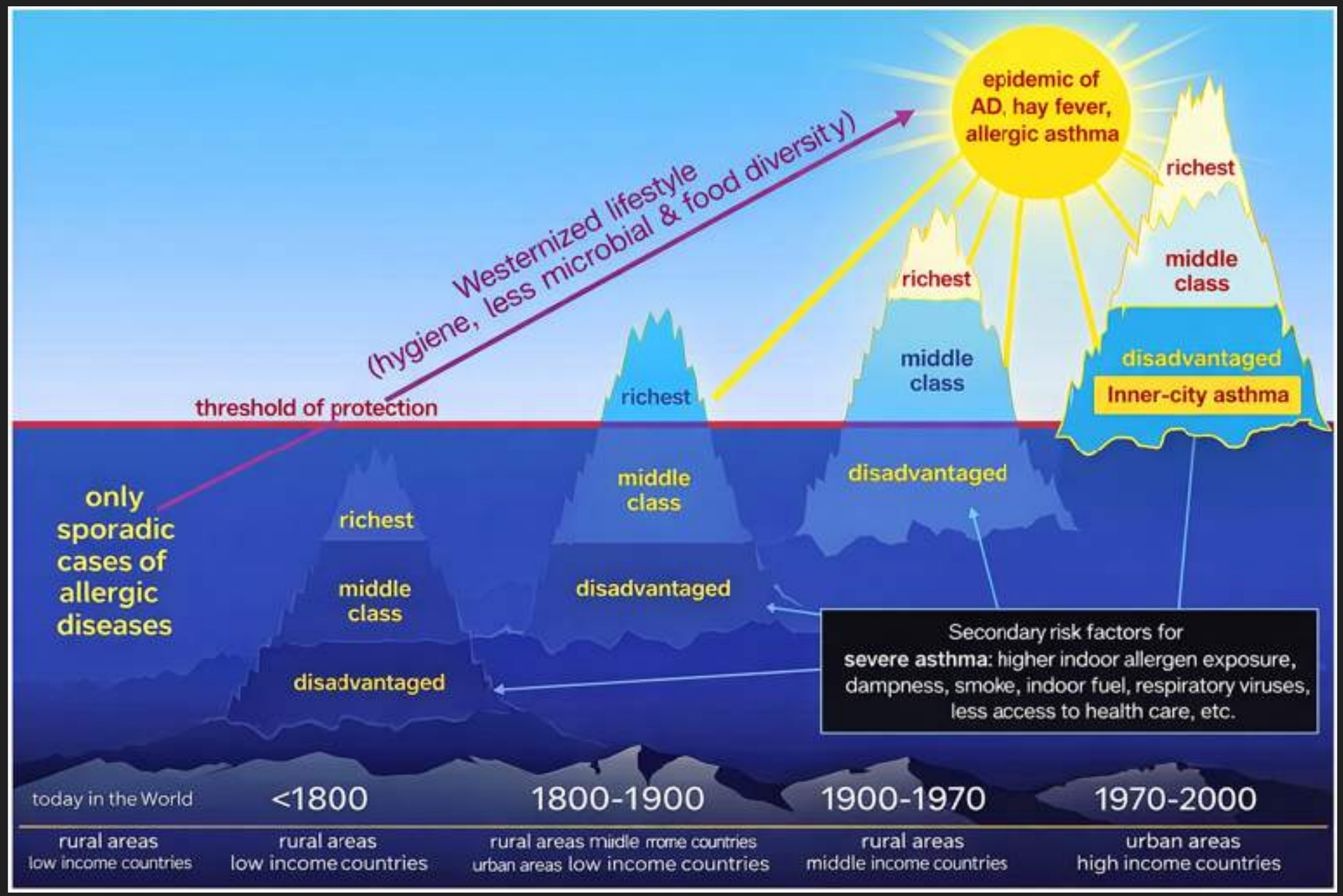
OurWorldinData.org/vaccination | CC BY

1. Civil Registration and Vital Statistics system A Civil Registration and Vital Statistics system (CRVS) is an administrative system in a country that manages information on births, marriages, deaths and divorces. It generates and stores 'vital records' and legal documents such as birth certificates and death certificates.

You can read more about how deaths are registered around the world in our article: How are causes of death registered around the world?

20 YEARS LATER

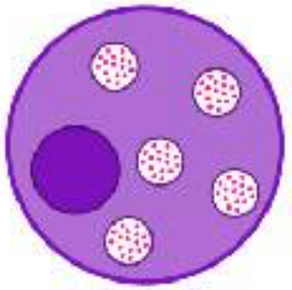
ALLERGIES




Basophil


Basophil activated

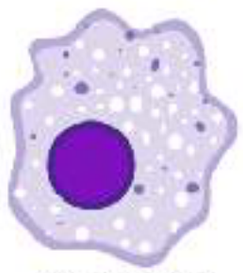

Basophil degranulation


Mast cell

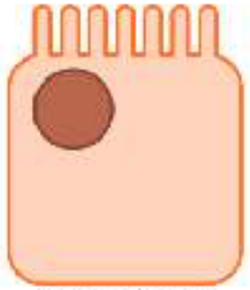

Mast cell degranulation


Lungs and airways


Lungs and airways 2

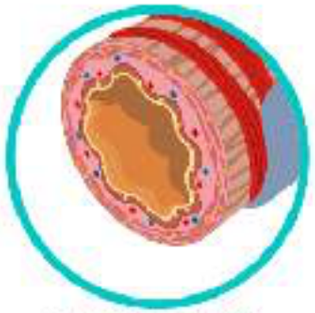

Macrophage

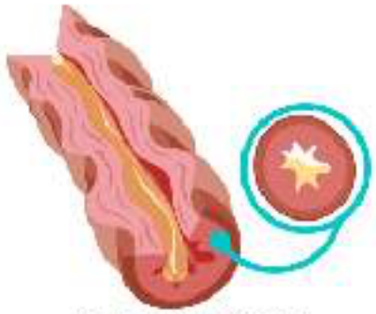

Blood vessel cell

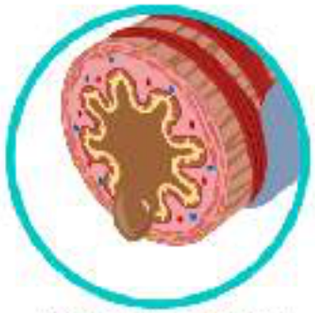

Epithelial cell


Heredity

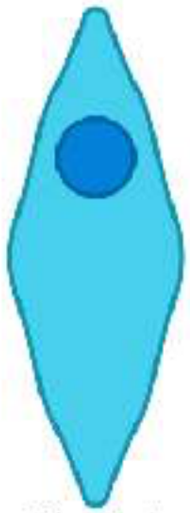

Normal airway


Normal airway 2

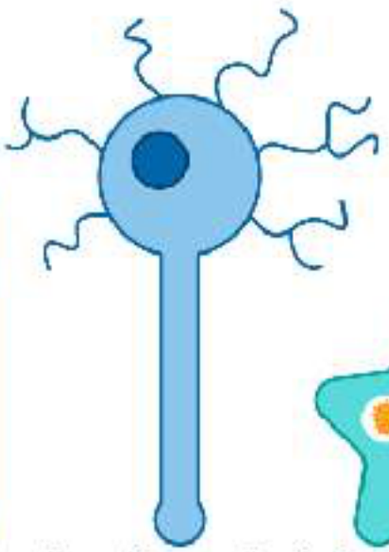

Asthmatic airway


Asthmatic airway 2


Human fetus


Fibroblast


Lymph node cell

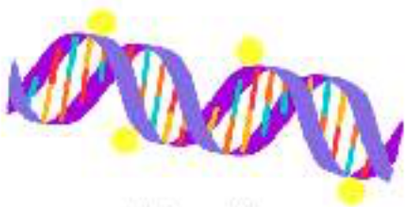

Nerve cell


Antigen-presenting cell


B cell receptor


Receptor FcεRI


CD63


Epigenetics


Neutrophil cell

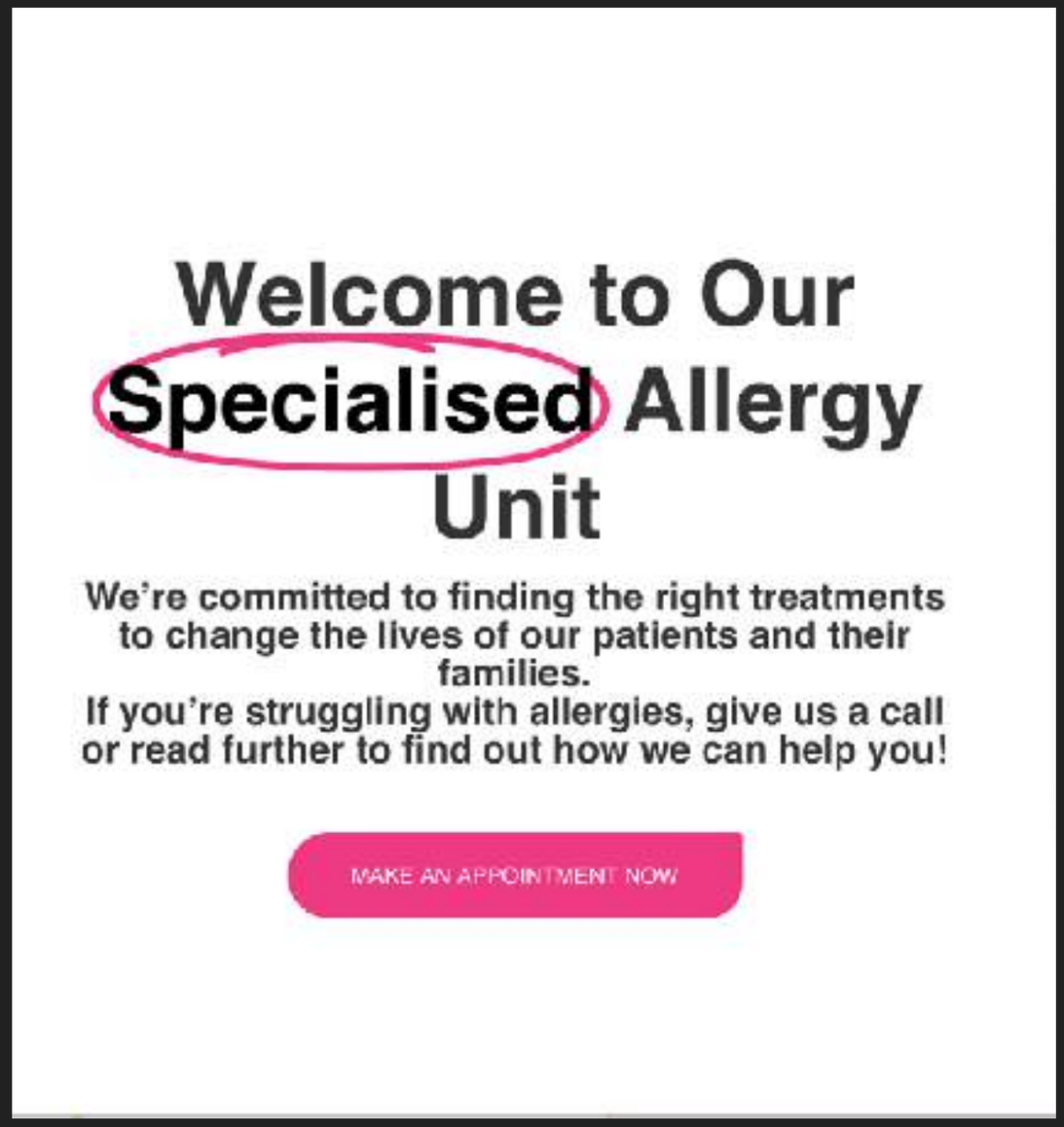

B cell


Eosinophil


Plasma cell

ALLERGIES

- Increasing trend.
- Allergollogy : very specialised
- LEAP and EAT study
- Weaning



20 YEARS LATER

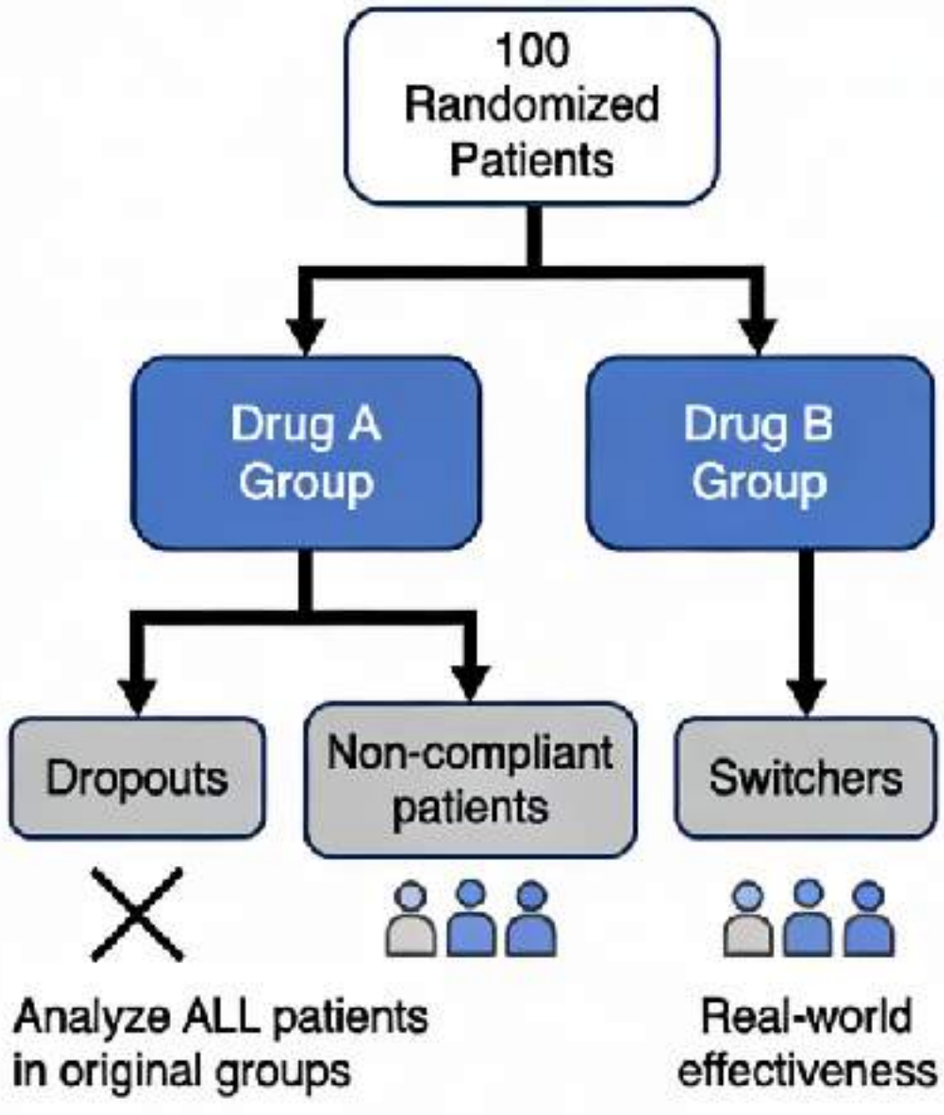
LEAP STUDY : GIVING "PEANUT" TO BABIES —> PEANUT ALLERGIES AT 5 YEARS

4-11 months babies	834 ➡️ 640 included	
Allergic already (Skin Prick test)	542 (-) No allergy	98 (+) Allergic

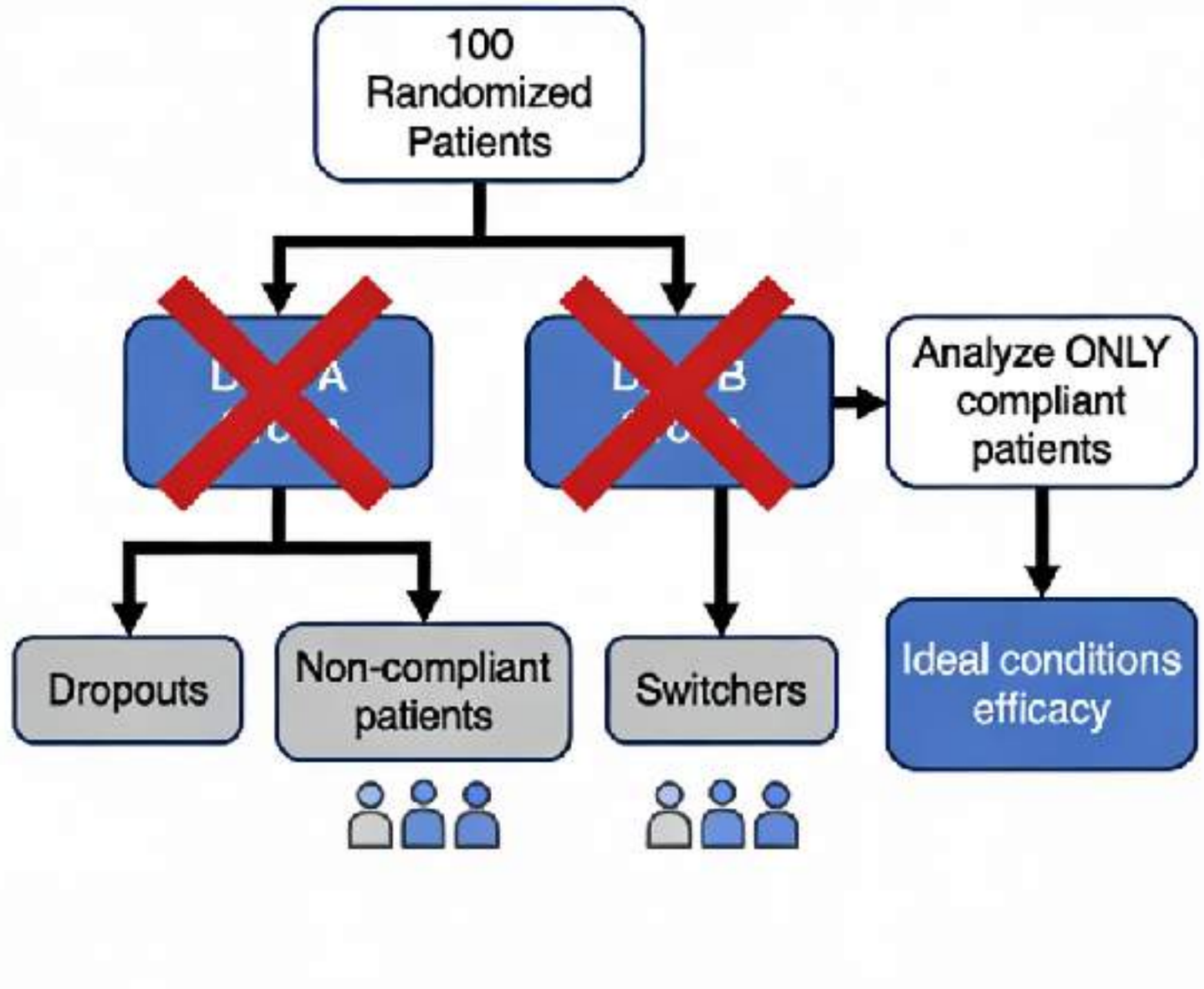
Peanut Avoidance vs Consumption	270 A	272 C	51A	47C
Intention to treat analysis (p<0.05)	14% Allergic	2%	36% Allergic	11%
Per protocol analysis (p<0.05)	14% Allergic	0.4%	34% Allergic	0.0%

N Engl J Med 372;9 nejm.org Feb 26, 2015

ITT - Intention to Treat



PP - Per-Protocol



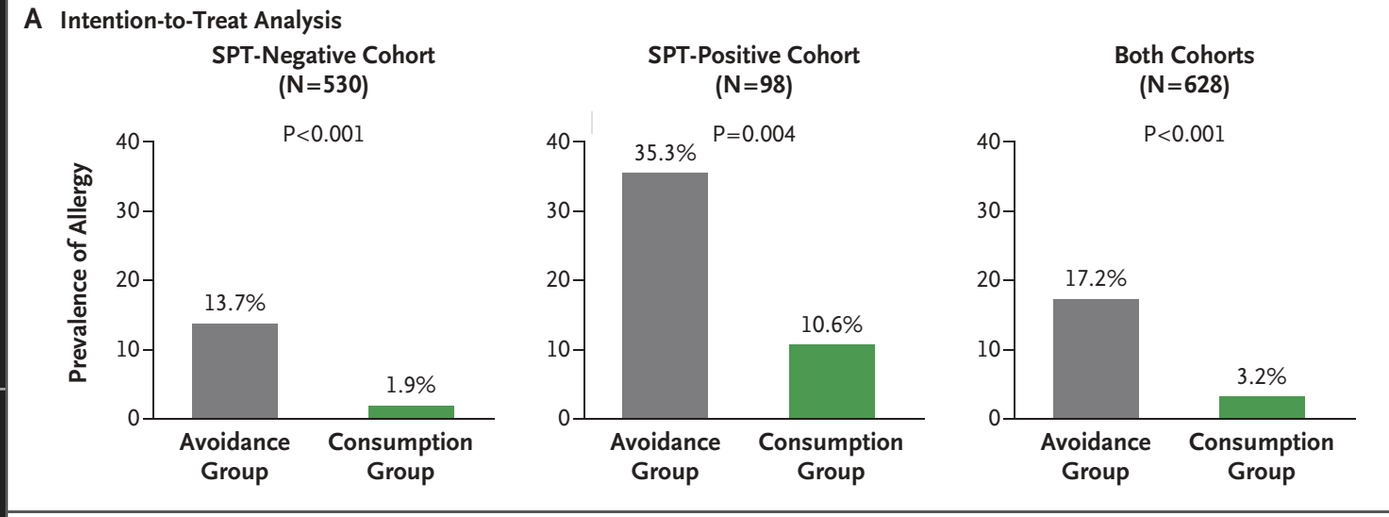
ITT = Gold standard for superiority trials | PP = Important for non-inferiority trials

20 YEARS LATER

LEAP STUDY

- INTENTION-TO-TREAT (ITT)
  - "ONCE RANDOMISED = ALWAYS ANALYSED"
  - Even if non complaint or switched

- PER PROTOCOL ANALYSIS
  - "ONLY THOSE WHO FOLLOWED THE PLAN"
  - Complaint to protocol
  - Shows ideal / best-case efficacy



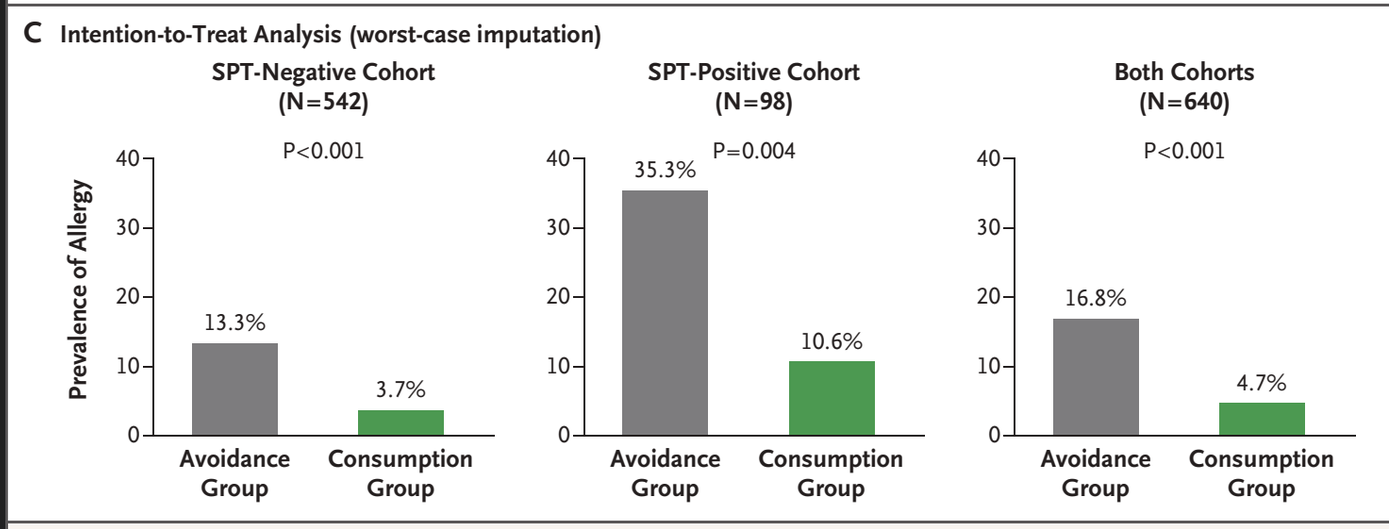


Figure 2. Primary Outcome.

The prevalence of peanut allergy at 60 months of age is shown among participants who had a negative result on the skin-prick test at baseline, among those who had a positive result at baseline, and in both groups combined, in the intention-to-treat analysis (Panel A) and the per-protocol analysis (Panel B). Among the 640 participants who underwent randomization, peanut-allergy status was determined by means of an oral food challenge in 617 (96.4%) and by means of a diagnostic algorithm in 11 (1.7%). Peanut allergy could not be evaluated with the use of the diagnostic algorithm in 2 participants (0.3%). A total of 10 participants (1.6%) voluntarily withdrew or were lost to follow-up. The worst-case imputation analysis (Panel C) assumes that participants with missing data in the peanut-consumption group would have been allergic to peanuts and that participants with missing data in the peanut-avoidance group would have been nonallergic. P values are based on chi-square analyses.

20 YEARS LATER

EAT STUDY : GIVING ALLERGENS TO BABIES —> ALLERGIES AT 1-3 YEARS

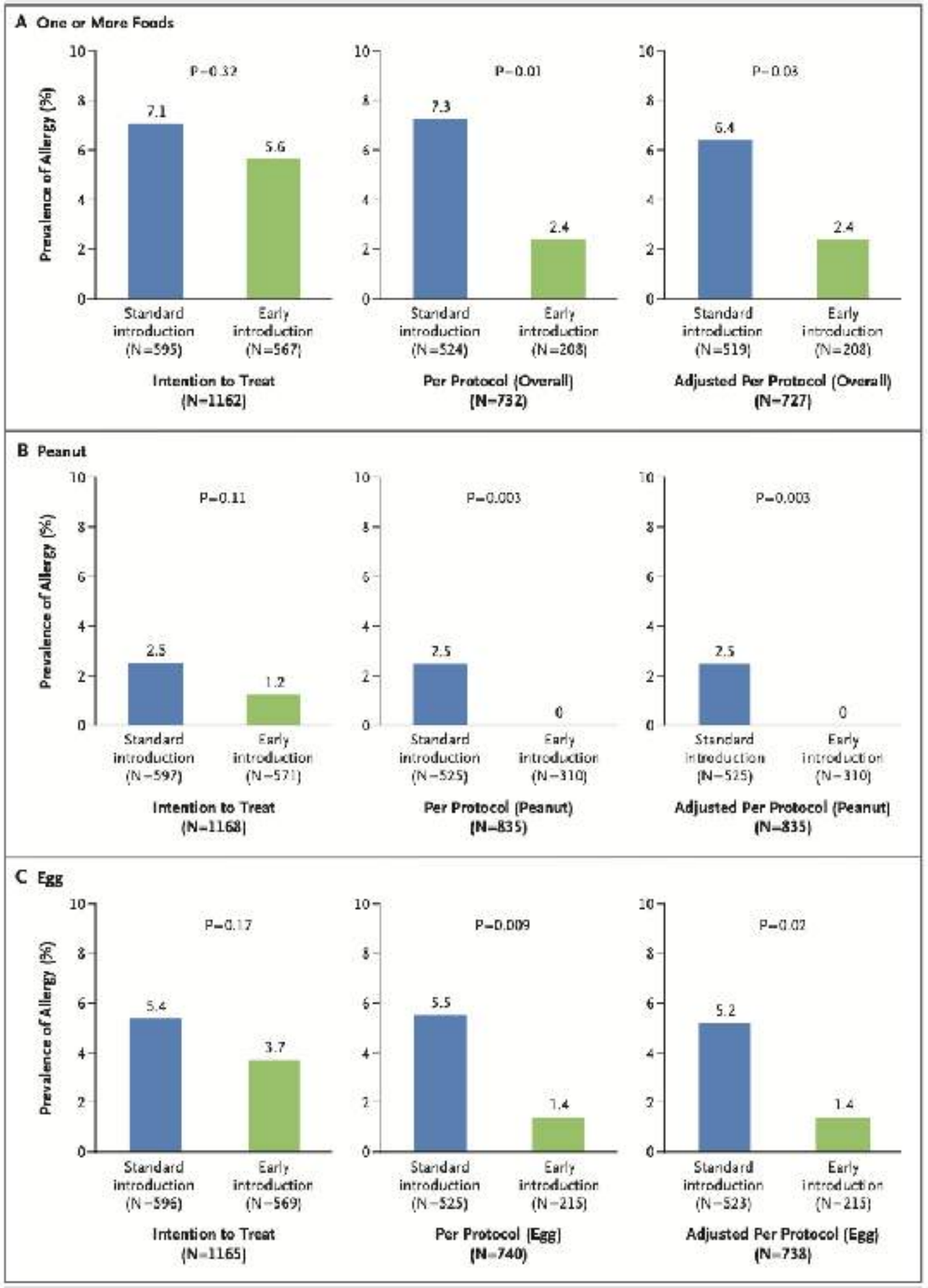
3 months old + EBF	Early introduction	Classic
Allergens introduction	3 months (n=595)	> 6 months (n=567)
1 or more food (p=0.01 in PPA)	2.4%	7.3%
Peanut (p=0.03 in PPA)	0%	2.5%
Egg (p=0.009 in PPA)	1.4%	5.5%

N Engl J Med 374;18 nejm.org May 5, 2016

20 YEARS LATER

EAT STUDY

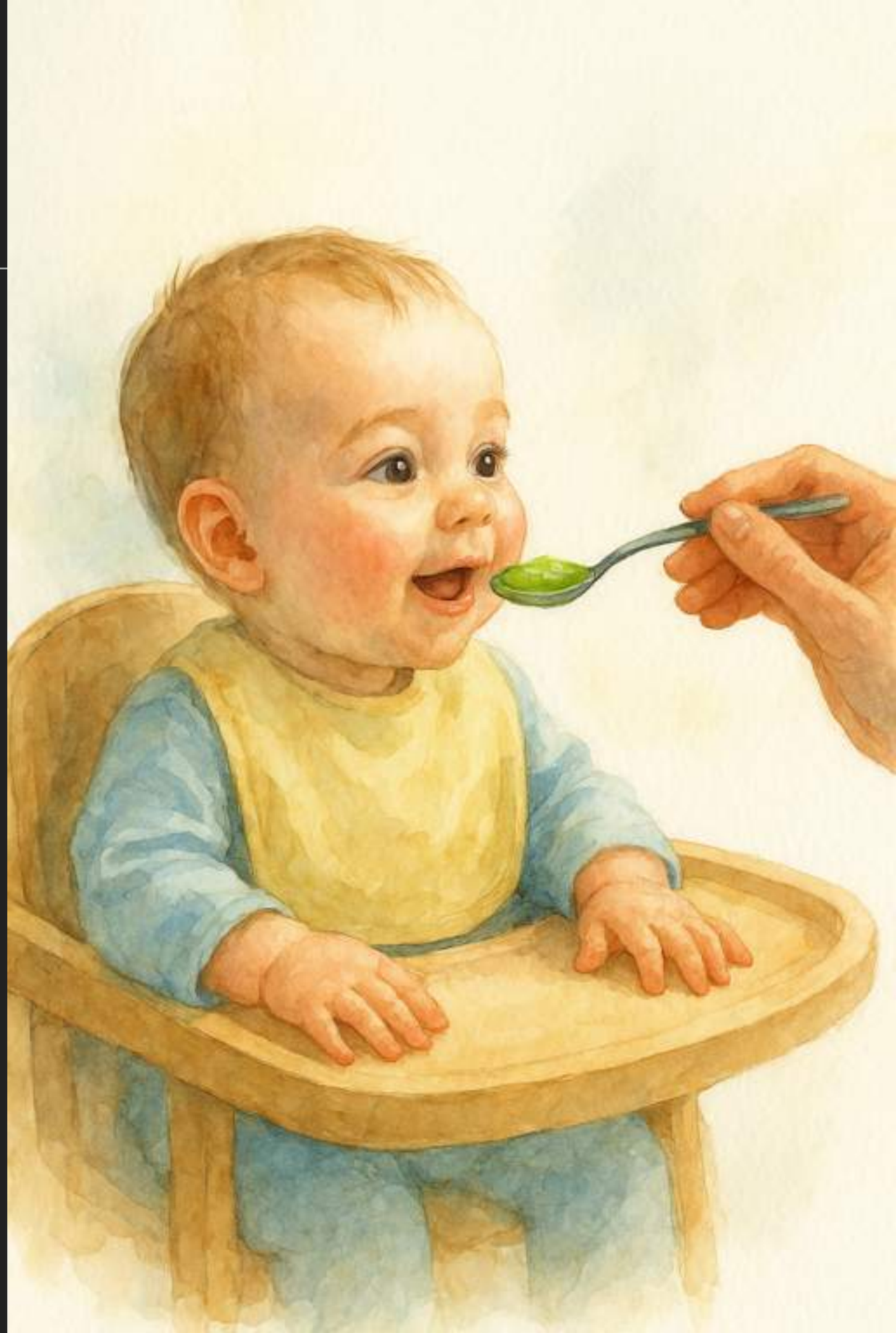
- PPA : Early introduction PREVENTS allergy !
- ITT : p > 0.05
- 3 months : too early ??
- More CS rate on early introduction cohort



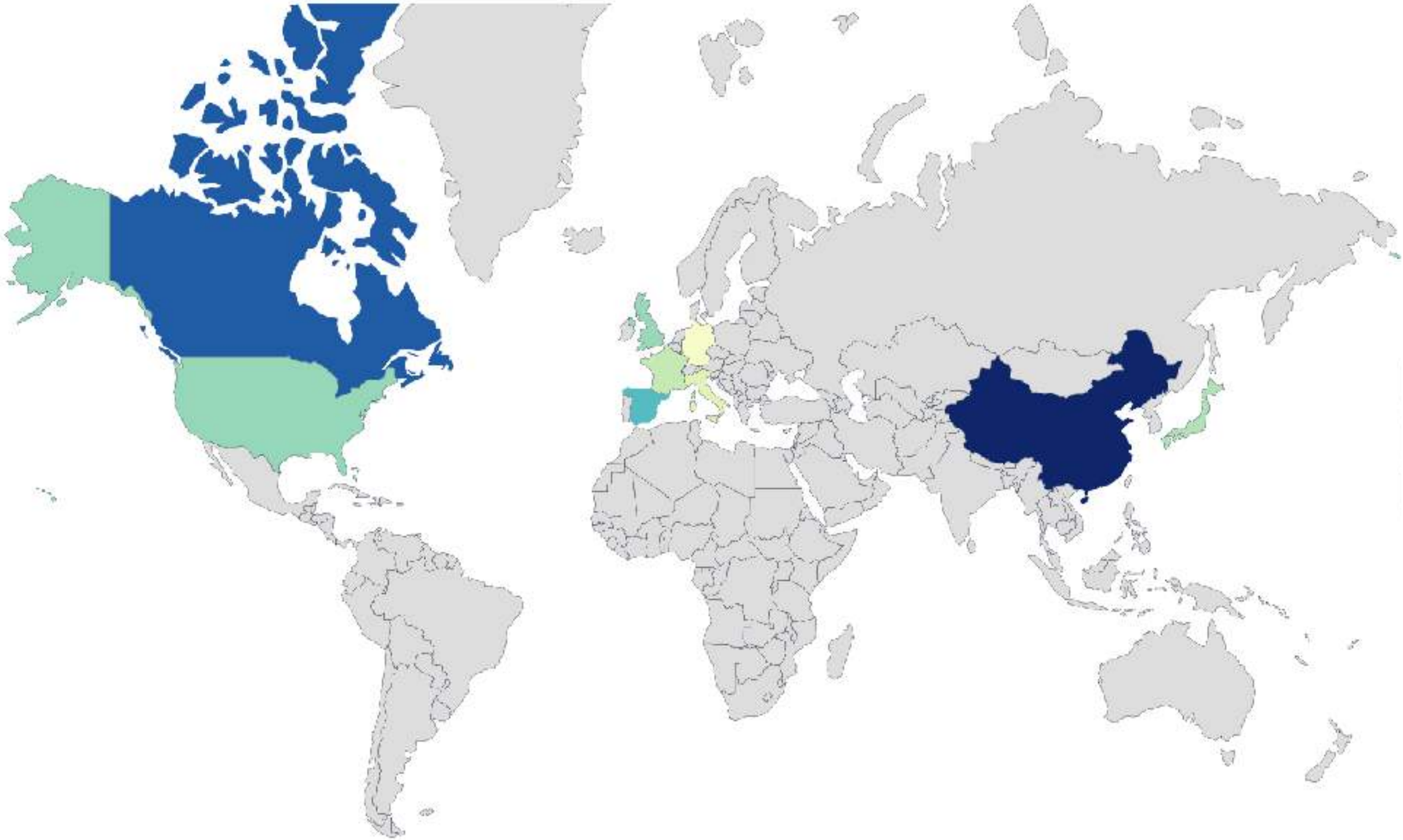
20 YEARS LATER

AGE OF ONSET OF WEANING

- 4-6 months vs 6 months
- WHO : 6 months
- USA/UK : 6 months flexible
- ESPGHAN : 4-6 months
- Germany : 5 months (readiness)
- France : 4 months



Allergy Rates by Country 2026



Canada/China : 6 months (WHO)
USA/UK : 6 mo flexible
Germany : 5 months (readiness)
France : 4 months

Sources

1. Global Prevalence of Pediatric and Adult IGE-Mediated Food Allergies Results: From the Assess FA Study - Science Direct
2. Oral Abstracts / Ann Allergy Asthma Immunol 131 (2023) S39S13

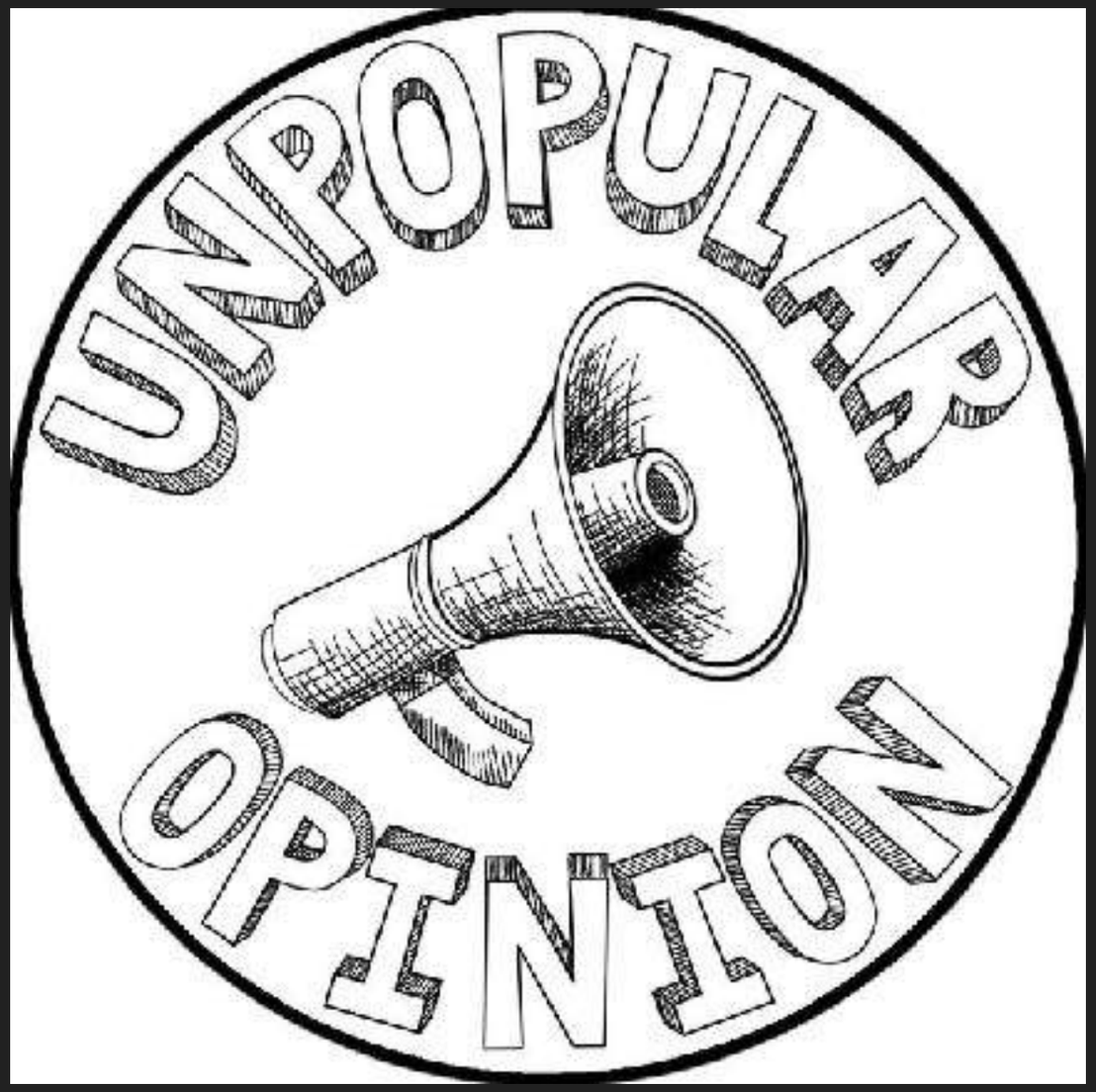
WEANING : 4 OR 6 MONTHS

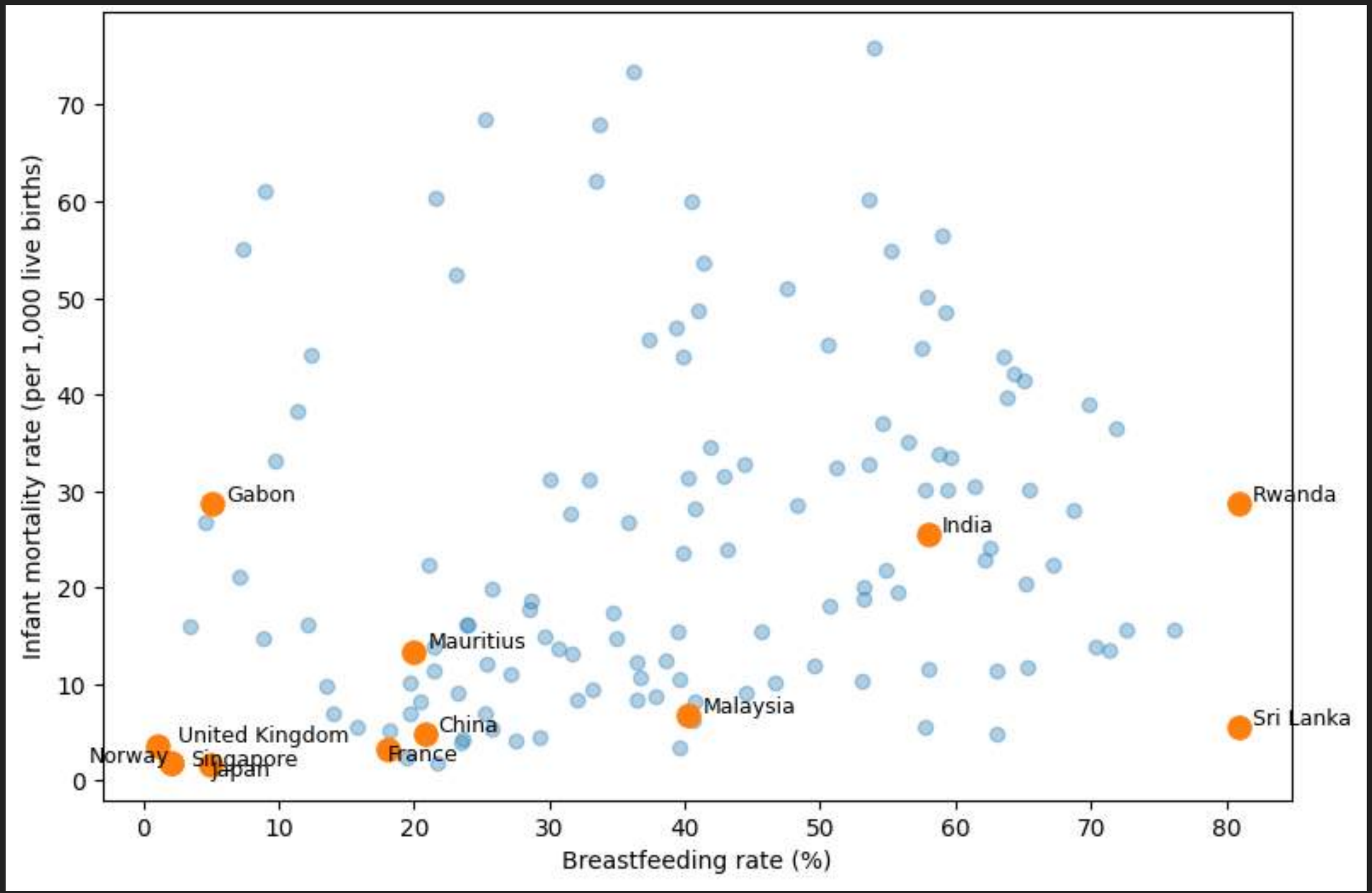
4 MONTHS	6 MONTHS
ESPGHAN	WHO
Less allergies	Less malnutrition
Less sweet tooth	Less AGE
Fights obesity	Fights underweight
~~Adult milk~~	Adult milk allowed > 6 months

20 YEARS LATER

BREASTFEEDING

- MY UNPOPULAR FACT
- BF vs IMR





Source : World Population Prospects UN, Mauritius Health Statistics, WHO, UNICEF, ChatGPT

20 YEARS LATER

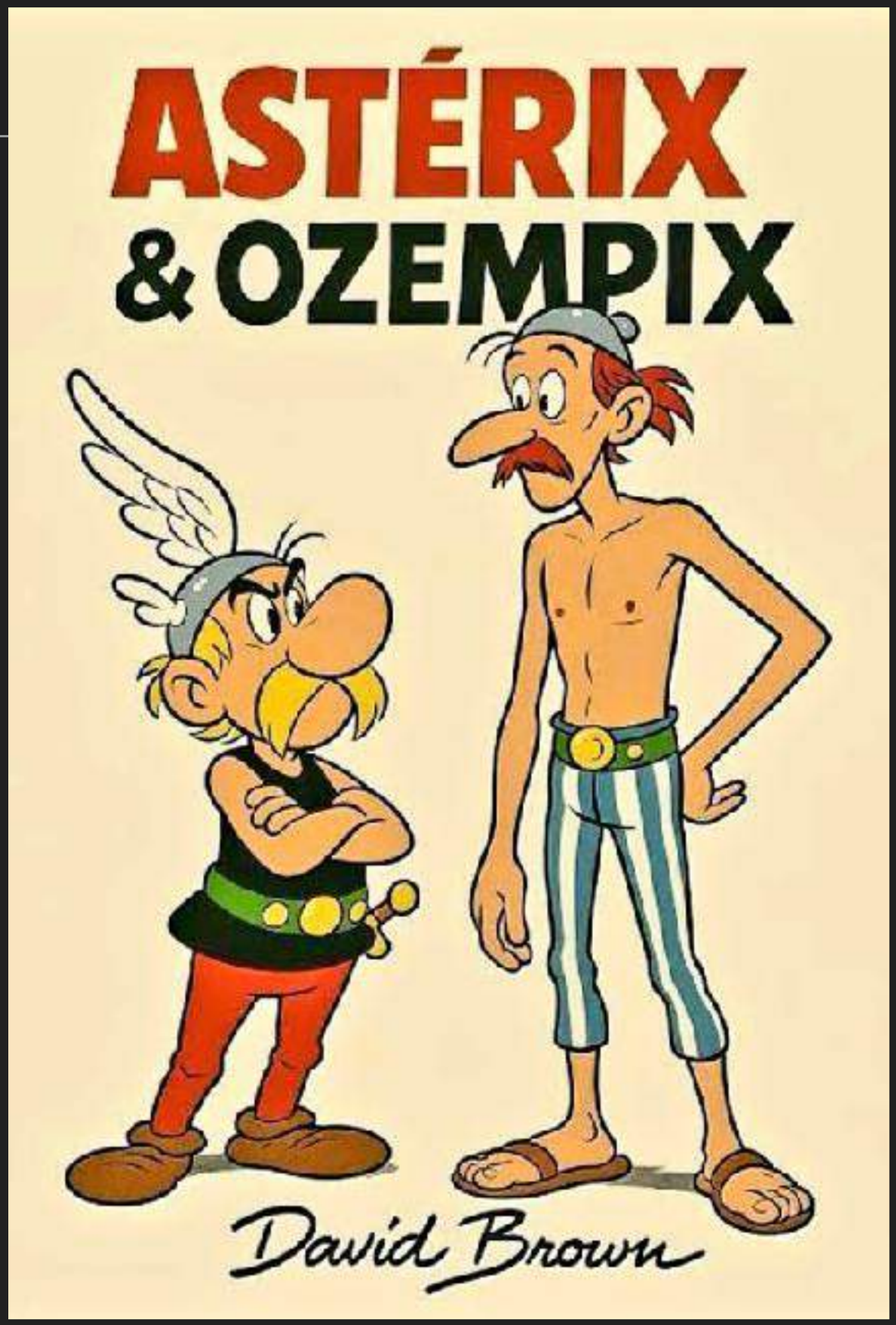
BREASTFEEDING

- MY UNPOPULAR FACT
- BF vs IMR
- We tried everything. Nothing works
  - WHO
  - Milk companies reprimanded
  - Paediatricians accused
- GenZ !!
- Take care of Plan B

20 YEARS LATER

NCD – OBESITY

- Some hope
- GenZ : Gym, image conscious
- Bariatric surgery
- New medicines



TAKE HOME MESSAGES

20 YEARS LATER

CAN WE SHAPE A BETTER GEN ALPHA –BETA ?

- Digital hygiene : time and CONTENT
- Screen together : a family moment
- Protect sleep and meal times
- Teach frustration tolerance.
- Prioritise real-world achievement.
  - Sports
  - Morality - religion

CAN WE SHAPE A BETTER GEN ALPHA –BETA ?

- Campaigns on screen toxicity
- No phone in school
- ↑ birth : IVF,
- Support (young) mothers :
  - Tertiary education
  - Work
- WHO guidelines
  - be critical
  - Stop the fight

PAEDIATRIC SOCIETY

caring for the community

Paediatric Society

WhatsApp group

www.paediatricsociety.mu