



## Pediatric Immunization Information Session for Healthcare Providers

Vaccine Preventable Disease Control Program  
Los Angeles County Department of Public Health  
December 10, 2025 | 12:00-1:00 pm



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### Pediatric Immunization Information Session for Healthcare Providers

None of the planners or presenters for this activity have disclosed relevant financial relationships with ineligible companies.

There is no commercial support for today's activity  
Ineligible companies are companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

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### Agenda

Time	Topic	Speaker
12:00-12:03	Welcome	Jocelyn Martinez, MPH
12:04-12:23	LAC DPH Updates: <ul style="list-style-type: none"> <li>Infant Botulism Outbreak Linked to Infant Formula</li> <li>Brief ACIP Updates</li> <li>Respiratory Vaccine Dashboards</li> </ul>	Dr. Moon Kim, MD, MPH Dr. Nava Yeganeh, MD, MPH Sherry Yin, MPH
12:24-12:54	The Science Behind Autism Etiology: From Vaccines to Medications	Dr. Hohui Wang, MD
12:55-1:00	Q&A and Closing Remarks	Jocelyn Martinez, MPH

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### LAC DPH Update: Infant Botulism Outbreak Linked to Infant Formula November 2025

Presented by: Moon Kim, MD, MPH




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### Types of Botulism

- Foodborne**
  - From eating foods contaminated with toxin
  - Often due to improperly canned/preserved foods
- Wound**
  - Spores enter a wound and produce toxin
  - Higher risk with injection drug use or traumatic injuries**
- Infant**
  - Spores grow and make toxin in an infant's intestines
- Iatrogenic**
  - Too much botulinum toxin given during cosmetic or medical procedures
- Adult Intestinal Toxemia**
  - Very rare; spores grow in adult intestines
  - More likely with serious gut conditions

<https://www.cdc.gov/botulism/about/index.html>

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- Infant botulism is an intestinal toxemia.
- The neurotoxin binds to cholinergic nerve terminals and cleaves intracellular proteins necessary for acetylcholine release. This can result in:
  - Bulbar palsy
  - Hypotonia
  - A symmetric, descending, flaccid paralysis
- The disease results after spores of the bacterium *Clostridium botulinum* or related species are swallowed. These spores temporarily colonize an infant's large intestine and produce botulinum neurotoxin.
- Symptoms often start with:
  - Constipation
  - Difficulty feeding (sucking/swallowing), a weak or altered cry, loss of head control
- Without treatment, symptoms may progress to muscle paralysis and respiratory failure.

[https://www.cdc.gov/botulism/hcp/clinical-overview/infant-botulism.html#cdc\\_clinical\\_overview\\_chs\\_faq-signs-and-symptoms](https://www.cdc.gov/botulism/hcp/clinical-overview/infant-botulism.html#cdc_clinical_overview_chs_faq-signs-and-symptoms)



Patient recovering from infant botulism still has neck muscle weakness

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County of Los Angeles Public Health

Signs can appear more quickly or may appear up to 30 days after a baby swallows something that contains the bacterium

- Constipation
- Poor feeding
- Ptosis (drooping eyelid)
- Sluggish pupils
- Flattened facial expression
- Diminished suck and gag reflexes
- Weak and altered cry
- Respiratory difficulty and possibly respiratory arrest

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County of Los Angeles Public Health

ByHeart recalls all baby formula sold nationwide as infant botulism outbreak grows



<https://www.cbsnews.com/parts/whyheart-baby-formula-infant-botulism-recall-20251114-10241427724>

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Proportion vs Market Share: Why ByHeart Formula Starts  Public Health

- Since August 1, 2025, among **84 infants** treated with BabyBIG® (Botulism Immune Globulin Intravenous (Human) (BIG-IV) that is FDA approved for treatment of infant botulism):
  - 36 (43%)** had exposure to any powdered infant formula.
  - 15 infants** ( $\approx 40\%$  of those with formula exposure) reported use of ByHeart formula.
- Since ByHeart formula represents approx. **1% of all infant formula sales** in the U.S. — this indicated a disproportionate representation among affected infants.

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Infant Botulism Outbreak Linked to Infant Formula — November 2025

This map shows where the 39 infants in this infant botulism outbreak lived.



Number of Sick People

- 1 to 2
- 3 to 4
- 5 to 6
- 7 to 8

<https://www.cdc.gov/botulism/outbreaks-investigations/infant-formula-nov-2025/index.html>

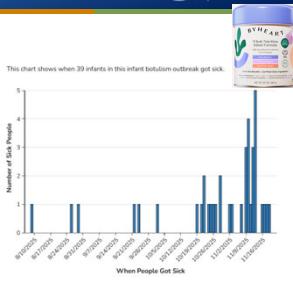
<https://www.cdc.gov/botulism/outbreaks-investigations/infant-formula-nov-2025/timeline.html>

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Timeline & Growth of the Outbreak

Date	Number of Reported Cases / States	Additional Info
November 8, 2025	13 infants, 10 states	Two initial lots recalled.
November 11–14, 2025	23 infants, 13 states.	Additional states added; recall broadened.
November 19, 2025	31 infants, 15 states.	New states included (e.g., Idaho, Maine). Newly added cases, labs detected contamination in unopened formula.
November 26, 2025	37 infants, 17 states.	Latest official update.
December 3, 2025	39 infants, 18 states.	

This chart shows when 39 infants in this infant botulism outbreak got sick.



When People Got Sick

<https://www.cdc.gov/botulism/outbreaks-investigations/infant-formula-nov-2025/timeline.html>

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What the Investigation Found (Epidemiologic & Laboratory Data)

- Epidemiologic Data**
  - As of December 3, 2025: **39 infants** with suspected or confirmed infant botulism across **18 states**.
  - Illness onset dates range from **August 9 through November 19, 2025**.
  - All 39 infants were hospitalized and treated with BabyBIG® (botulism immune globulin).
  - Age range: 16 to 264 days; about 38–43% are female.
  - Laboratory & Traceback Data**
  - Epidemiologic and lab data indicate that ByHeart infant formula may be contaminated with Clostridium botulinum.
  - An opened can (lot 206VABP/251131P2) fed to a sick infant tested positive for the bacteria by the California Department of Public Health.
  - Additional testing by state labs, CDC, and FDA is ongoing to identify scope and other potentially contaminated lots.

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**LAHAN** CDPH Health Advisory Outbreak of Infant Botulism Linked to ByHeart Infant Formula November 10, 2015

The California Department of Public Health (CDPH) issued a **Health Advisory** regarding an outbreak of infant botulism linked to ByHeart Whole Nutrition Infant Formula (ByHeart Whole Nutrition Infant Formula). As of November 10, 12 infants with symptoms of infant botulism have been reported in California, including one infant from Los Angeles County. These infant cases range from mid-August to the present. All infants are less than 6 months of age.

Per the U.S. Food and Drug Administration (FDA), all Purture Whole Nutrition Infant Formula products have been recalled as of November 10, 2015. This includes all Purture Whole Nutrition Infant Formula products distributed by CDPH.

Infant botulism symptoms can take up to 30 days to develop after exposure. Early symptoms include:

- Poor feeding
- Difficulty swallowing
- Loss of head control

Healthcare providers should maintain a high index of suspicion for infant botulism. If suspected, contact the CDPH Infant Botulism Treatment and Prevention Program at 415-231-7600 or email [IBTPP@cdph.ca.gov](mailto:IBTPP@cdph.ca.gov) for consultation and review of BabyBIG.

Read the Full CDPH Advisory <https://www.cdph.ca.gov/Programs/CDPH/Pages/CDPH-Health-Advisory-Botulism-Linked-to-ByHeart-Infant-Formula.aspx>

To view this and other communications or to sign up to receive LAHANs, please visit <https://publichealth.lacounty.gov/lahan/>

<https://www.cdph.ca.gov/Programs/CDPH/Pages/CAHAN/Outbreak-of-Infant-Botulism-Linked-to-ByHeart-Infant-Formula.aspx>

<http://publichealth.lacounty.gov/lahan/>

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**What clinicians should do:**

Initial diagnosis of infant botulism is based on clinical symptoms.

Clinicians should consider infant botulism in an infant with unexplained weakness or feeding problems — do not wait for lab confirmation.

Consult with the Infant Botulism Treatment and Prevention Program at the California Department of Public Health. is available for suspected cases, **Immediately call 510-231-7600 for case consultation.** Consultation is available 24 hours a day, 7 days a week.

If clinical consultation supports infant botulism, begin treatment as soon as possible. Do not wait for laboratory confirmation.

A stool or enema specimen is required for definitive diagnosis of infant botulism. Enemas should be performed with sterile, non-bacteriostatic water.

Infant botulism is a notifiable disease. All suspected cases must be reported to the state public health department.

[https://www.cdc.gov/botulism/hcp/clinical-overview/infant-botulism.html#cds\\_clinical\\_overview\\_test\\_dia\\_steps-to-take](https://www.cdc.gov/botulism/hcp/clinical-overview/infant-botulism.html#cds_clinical_overview_test_dia_steps-to-take)



BabyBIG®: Human antitoxin for the treatment of infant botulism

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**Recommendation for caregivers:**

- Do not use any ByHeart infant formula.
- Wash items/surfaces that contacted the formula thoroughly with hot soapy water or use dishwasher.
- If an infant consumed ByHeart formula and shows any of these signs, seek immediate medical care: poor feeding, difficulty swallowing, loss of head control, decreased facial expression/alertness.
- Symptoms may take several weeks to appear — to remain vigilant even if formula use stopped as incubation period can be up to 30 days
- Keep leftover formula or potential testing if illness occurs

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**Ongoing Investigation: CDC, CDPH IBTPP, State, Local Health Depts**

Scope of contamination — whether more lots or other products (cans or single-serve packets) are affected.

Source and point of contamination during manufacturing or distribution — FDA and public health partners continue inspections and testing.

Long-term follow-up of affected infants and tracking additional cases through surveillance and caregiver interviews.

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**CDPH Infant Botulism Treatment and Prevention Program**

**New Infant Botulism Hotline for Parents and Caregivers**

1-833-389-2022

We are currently receiving a high volume of calls and emails. Please review the temporary hotline schedule below.

- Monday-Friday 8:00 a.m. to 4:00 p.m. for the temporary hotline from November 10, 2015.
- If you have questions, e-mail [IBTPP@cdph.ca.gov](mailto:IBTPP@cdph.ca.gov). Emails will be answered by 4:00 p.m. Pacific Time (PT).
- The email hotline will remain on November 10 and be available until 5 days a week, 7 a.m.-8 a.m. Pacific Time (PT).
- The initial support line (415) 231-7600 remains open 24/7 for suspected infant botulism cases. Calls from medical providers can help with:

  - Understanding signs of infant botulism
  - What to do if your baby consumed ByHeart formula
  - How to wash items and surfaces
  - Where to find updates and resources, including treatment, if needed

**⚠️ If your baby is experiencing a medical emergency or showing signs of infant botulism, such as poor feeding, loss of head control or muscle weakness – call 9-1-1 or go to the nearest medical emergency immediately.**

**What should parents do?**

Warning: If you feel that your baby is experiencing a medical emergency, please call 911 or go to the nearest medical emergency room.

  - If this is not an emergency, please contact your child's primary care provider about your child's health.
  - Our program does not provide medical advice directly to patients or families.

**Do not use ByHeart Whole Nutrition infant formula**

Do not use ByHeart Whole Nutrition infant formula if your infant has been sick. If your infant has been sick, please contact your healthcare provider for medical advice. If your infant has been sick, please contact the state health department for testing. If no symptoms appear after a month, please contact the state health department for testing.

  - If you have infant ByHeart Whole Nutrition infant formula and your infant was sick, take it to your healthcare provider for testing. If no symptoms appear after a month, please contact the state health department for testing.
  - Seek immediate medical attention if your baby drank ByHeart infant formula in the past 30 days and shows any of these symptoms:

    - Poor feeding
    - Difficulty swallowing
    - Decreased responsiveness
    - Loss of head control

  - Watch closely for these symptoms for 30 days after your baby last drank ByHeart formula.
  - Communication is a very common sign in healthy infants. It is also a common early sign of infant botulism.

**My baby is not sick today. Does my baby need to be tested?**

  - No. Testing for infant botulism is not recommended for healthy babies.
  - Yes. For infant botulism is complicated, not rapid, and only performed by a few, specialized laboratories in the U.S.
  - State public health departments need an appropriate request for testing.

<https://www.infantbotulism.org/>

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**Key Takeaways**

Infant botulism — is rare but serious

Early recognition and treatment (with BabyBIG®) is critical.

Do not use ByHeart Whole infant formula has been recalled

For caregivers: monitor infants for signs like poor feeding, weak cry, difficulty swallowing, loss of head control

Seek medical care **immediately** if symptoms appear.

For medical providers:

- be alert to possible infant botulism in infants with corresponding symptoms and history of ByHeart formula use
- do not wait for lab confirmation before starting treatment and reporting.

Public health investigation continues — scope may change

stay updated via reliable sources (CDC, FDA, state health departments).

**CDPH Infant Botulism TREATMENT AND PREVENTION PROGRAM**

**Parents and caregivers**

- If you have questions, e-mail [IBTPP@cdph.ca.gov](mailto:IBTPP@cdph.ca.gov). Emails will be answered daily.
- The Infant Botulism Hotline (1-833-389-2022) is available toll-free 7 days a week, 7 a.m.-8 p.m. Pacific Time (PT).

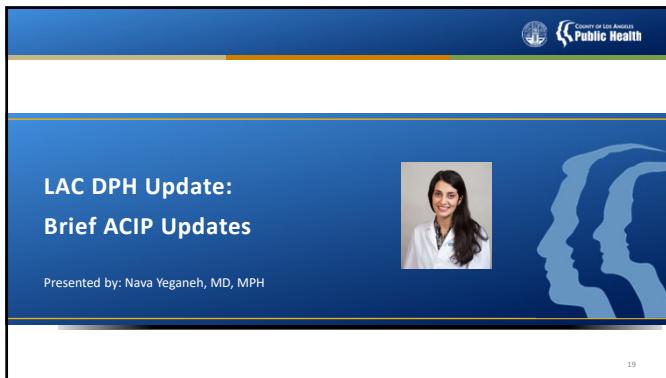
**Health care providers**

- The clinical support line (510-231-7600) remains open 24/7 for suspected infant botulism cases. Calls from medical providers receive priority response.

If your child has clinical symptoms or you are concerned about their health, contact your health care provider. In an emergency, seek medical care immediately.

<https://www.cdph.ca.gov/Programs/CDPH/IBTPP>

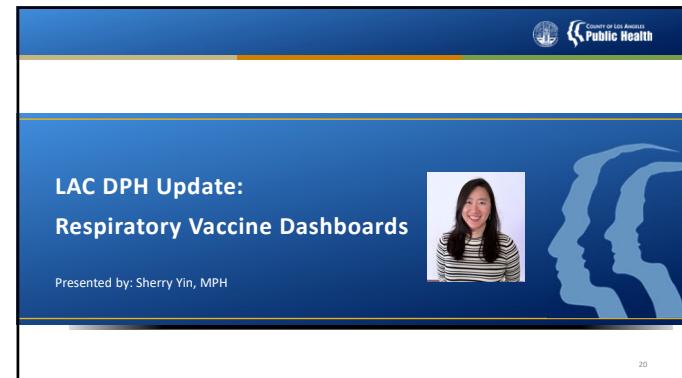
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**LAC DPH Update:**  
**Brief ACIP Updates**

Presented by: Nava Yeganeh, MD, MPH

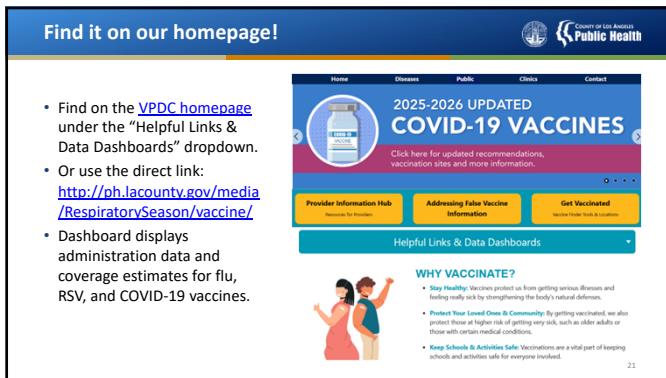
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**LAC DPH Update:**  
**Respiratory Vaccine Dashboards**

Presented by: Sherry Yin, MPH

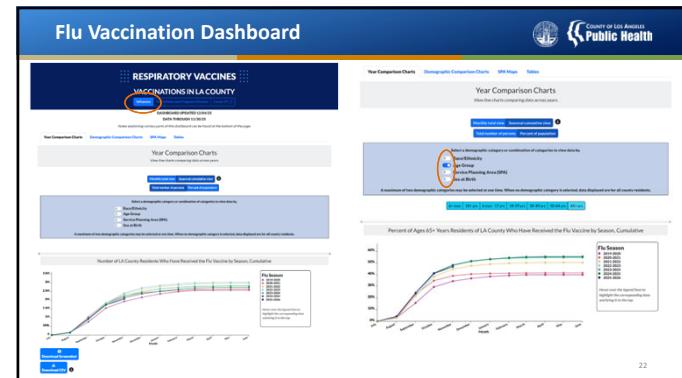
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**Find it on our homepage!**

- Find on the [VPDC homepage](#) under the "Helpful Links & Data Dashboards" dropdown.
- Or use the direct link: <http://ph.lacounty.gov/media/RespiratorySeason/vaccine/>
- Dashboard displays administration data and coverage estimates for flu, RSV, and COVID-19 vaccines.

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**Flu Vaccination Dashboard**

**RESPIRATORY VACCINES**

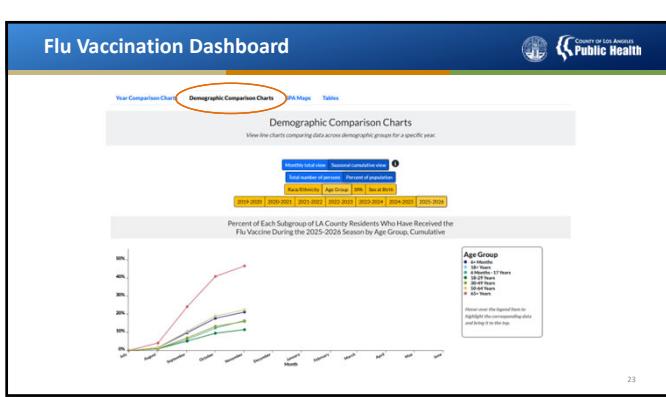
**VACCINATIONS IN LA COUNTY**

Year Comparison Charts | Demographic Comparison Charts | SPA Maps | Tables

Number of LA County Residents Who Have Received the Flu Vaccine by Season, Cumulative

Percent of Age 65+ Years Residents of LA County Who Have Received the Flu Vaccine in Each Season, Cumulative

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**Flu Vaccination Dashboard**

**Demographic Comparison Charts**

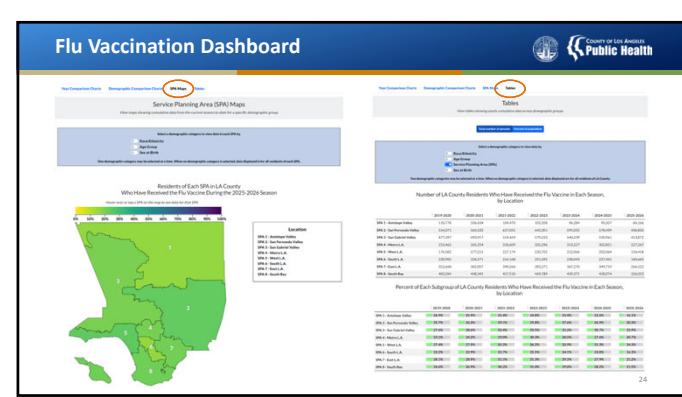
View line charts comparing data across demographic groups for a specific year.

Year Comparison Charts | Demographic Comparison Charts | SPA Maps | Tables

Percent of Each Subgroup of LA County Residents Who Have Received the Flu Vaccine During the 2025-2026 Season by Age Group, Cumulative

Age Group: 0-19 Years, 20-29 Years, 30-39 Years, 40-49 Years, 50-59 Years, 60-69 Years, 70+ Years

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**Flu Vaccination Dashboard**

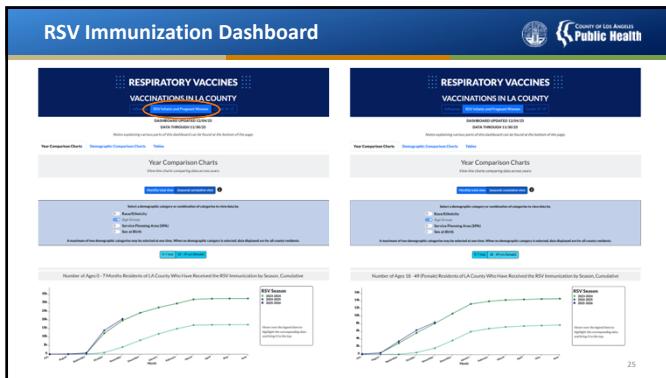
**Service Planning Area (SPA) Maps**

Residents of Each SPA in LA County Who Have Received the Flu Vaccine in Each Season

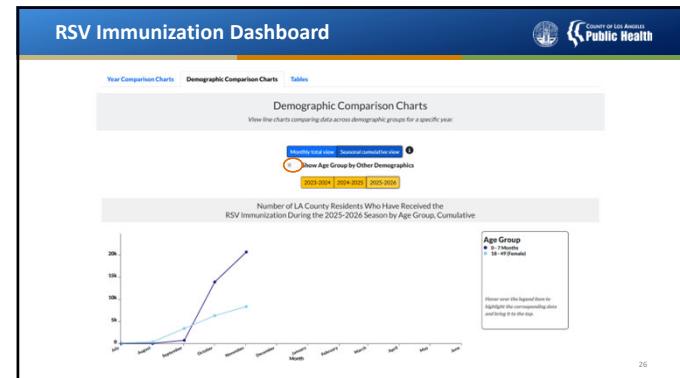
Number of LA County Residents Who Have Received the Flu Vaccine in Each Season, Cumulative

Percent of Each Subgroup of LA County Residents Who Have Received the Flu Vaccine in Each Season, Cumulative

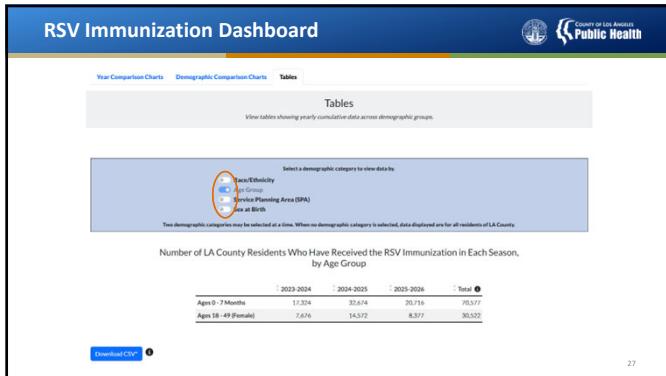
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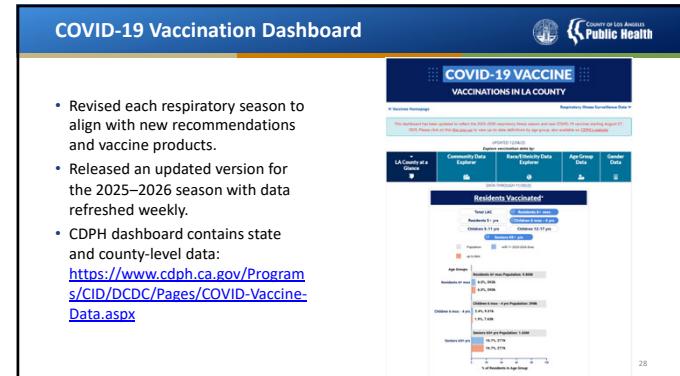
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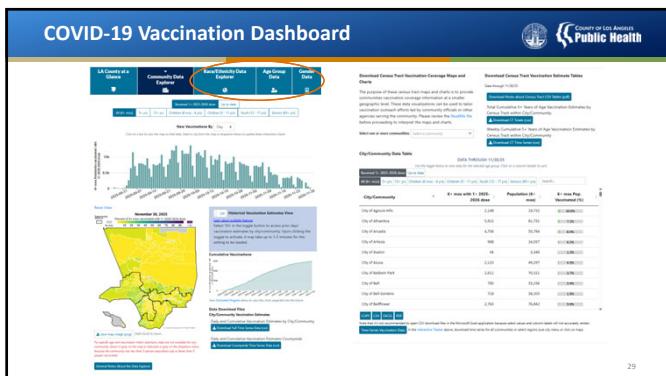
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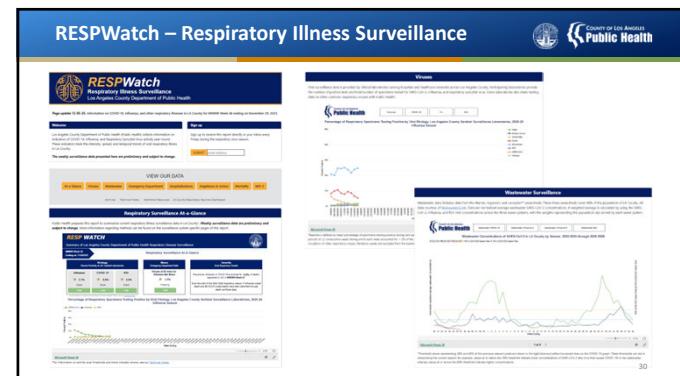
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**Resources**

• VPDC homepage: <http://www.publichealth.lacounty.gov/ip/>  
 • LAC respiratory vaccines dashboard: <http://ph.lacounty.gov/media/RespiratorySeason/vaccine/#/flu>  
 • LAC COVID-19 vaccination dashboard: <http://publichealth.lacounty.gov/media/coronavirus/vaccine/vaccine-dashboard.htm>  
 • Statewide COVID-19 vaccination data: <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-Vaccine-Data.aspx>  
 • LAC RESPWatch: <http://publichealth.lacounty.gov/acd/RespWatch/index.htm>

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**The Science Behind Autism Etiology: From Vaccines to Medications**

Presented by: Hohui "Eileen" Wang, MD




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**The Science Behind Autism Etiology: From Vaccines to Medications**

Hohui E. Wang, MD  
 Department of Psychiatry and Behavioral Sciences  
 University of California, San Francisco

Dec 10, 2025

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**The California Child and Adolescent Mental Health Access Portal**

 **Cal-MAP**  
 a Child Youth Behavioral Health Initiative  
 CalHOPE program powered by UCSF

Empowering California Primary Care Providers to  
 Assess and Treat  
 Mental & Behavioral Health Conditions in Youth 0-25

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**Language and Terminology: The Neuroaffirming Approach**

<b>Terminology</b>	<b>Definition and Rationale</b>
<b>Neurodiversity</b>	Neurological differences are <b>natural variations</b> , not deficits or disorders that necessarily need to be cured. This framework promotes acceptance and respect for diverse brain function.
<b>Neuroaffirming</b>	Perspectives, policies, and language that recognize and validate neurodevelopmental differences and experiences.
<b>Language Choice: Autistic Person vs. Person with Autism</b>	<b>Identity-First Language</b> ("Autistic Person") is preferred by many in the autism community, as it recognizes autism as an inherent part of identity (like being "Irish" or "athletic"). <b>Person-First Language</b> ("Patient/Person with Autism") is common in medical and clinical settings.

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## The Origin of a Myth: A Retracted Study

- The initial concern linking the MMR vaccine and autism originated from a single study published in *The Lancet* in 1998.
- This study has been discredited and was retracted by the journal.
- Investigations revealed critical flaws:
  - Methodological Flaws: A small, uncontrolled case series of only 12 children without valid comparison group.
  - Ethical Violations: The lead author had undisclosed financial conflicts of interest and manipulated patient data.



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## The Overwhelming Evidence

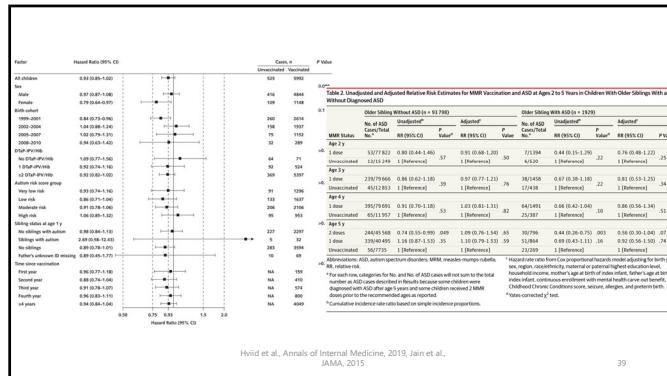
**657,461**

- A 2019 Nationwide Study of Over 650,000 Children
- Danish Cohort Study, Annals of Internal Medicine
- Followed 657,461 children for over a decade
- Conclusion: no increased risk of autism after MMR vaccination
- Crucial Sub-point: true even for children with higher genetic risk for ASD (e.g.,
- A JAMA Study on High-Risk US Children
- US Sibling Study, JAMA
- A study of 95,727 US children with older siblings
- Conclusion: MMR vaccination was not associated with an increased risk of ASD at any age

Hviid et al, Annals of Internal Medicine, 2019; Jain et al, JAMA, 2015

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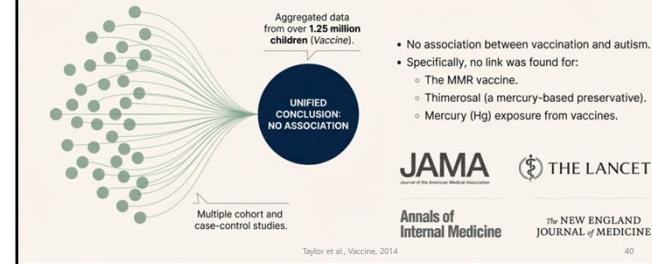
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## The Verdict from Meta-Analyses: A Million Children Studied

The conclusion is not based on a single study, but on a vast body of global research.



Taylor et al., Vaccine, 201

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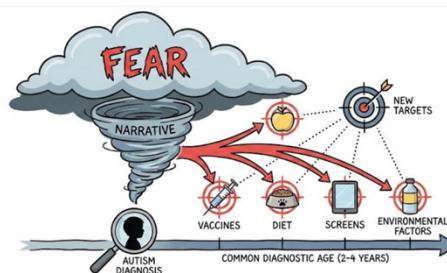
## Deconstructing Evolving Hypotheses: Thimerosal, Aluminum, and “Immune Overload”

Thimerosal	
 Myth: "Thimerosal, a mercury preservative once used in vaccines, causes autism."	 Fact: Thimerosal was removed from most childhood vaccines in the US by 2001 as a precaution. Large-scale epidemiological studies before and after its removal have shown no link between thimerosal exposure and autism. ASD rates continued to rise long after its removal.
 Aluminum Adjuvants	
 Myth: "Aluminum adjuvants in vaccines are linked to autism."	 Fact: While a few publications have speculated on a link, these claims are not supported by the broader body of high-quality epidemiological evidence, which consistently shows no association between aluminum adjuvants and ASD.
 Immune Overload	
 Myth: "The number of vaccines in the childhood schedule overwhelms the immune system."	 Fact: This hypothesis is not supported by scientific evidence. Studies have shown no difference in ASD risk between children who follow the recommended schedule and those with delayed or alternative schedules.

Parker et al., Pediatrics, 2004, Miller ER et al., Vaccine, 2019, DeStefano F et al., Pediatrics, 2013.

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## The “Moving Target”



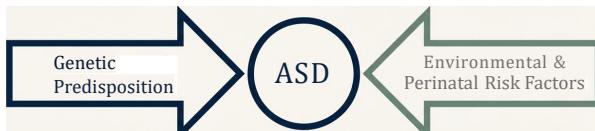
Larson et al., NEJM, 2021

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## Beyond The Myths: The Etiology of ASD

A Complex Interplay of Genetic Predisposition and Environmental Factors



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## The Foundation: A Strong Genetic Contribution

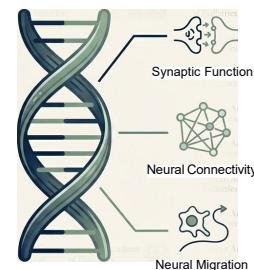
**Heritability of ASD:**  
50% to 80%

Based on twin and family studies

ASD is not caused by a single "autism gene." Hundreds of different genes have been implicated, many involved in early brain development.

Key Concept: Gene-Environment Interaction. Genetic susceptibility can be amplified or triggered by exposure to specific environmental risk factors.

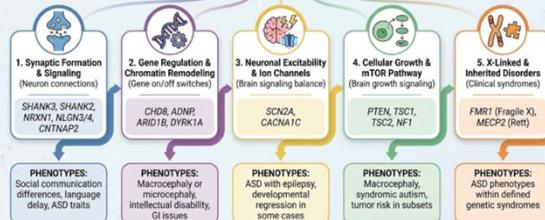
Sandin S et al., JAMA, 2017; Tick B et al., JAMA Psychiatry, 2016



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## Autism Genetics

GENETICALLY DRIVEN & BIOLOGICALLY HETEROGENEOUS.  
Most well-established genes converge on BRAIN DEVELOPMENT, not environmental exposure.



Grove J et al., Nature Genetics, 2019

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## Established Environmental Factors



### Parental & Pregnancy Factors

- Advanced Parental Age: Both maternal (>35) and paternal (>40) age
- Interpregnancy Interval: Short (<12 months) or long (>72 months)
- Maternal Health: Gestational diabetes, obesity, hypertension during pregnancy.



### Perinatal Complications

- Preterm Birth (<37 weeks)
- Low Birthweight
- Birth Trauma / Hypoxia (oxygen deprivation)
- COVID infection



### Protective Factors

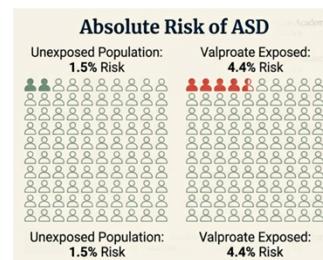
- Folic Acid Supplementation: Consistent evidence shows that maternal folic acid supplementation before and during early pregnancy is protective against ASD

Gardener H et al., Pediatrics, 2011

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## Valproic Acid: A Confirmed Prenatal Risk Factor

- While most medications are not linked to autism, prenatal exposure to the anticonvulsant/mood stabilizer: valproic acid (valproate) is a well-documented risk.
- Clinical Implication: This is a known teratogen with risks that must be carefully weighed against benefits in women of childbearing age.

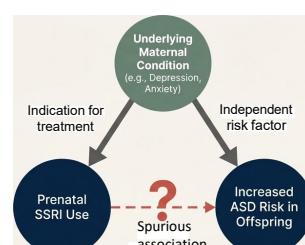


Christensen J et al., JAMA, 2013

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## Interpreting the Evidence: The Case of SSRIs

- The Question: Some studies have suggested a statistical association between prenatal SSRI use and ASD
- The Nuance: This association is likely due to confounding by indication
- Clinical Bottom Line: The evidence does not preclude the use of SSRIs during pregnancy when clinically indicated.
- Untreated maternal depression carries its own significant risks



Sugunan A et al., Molecular Psychiatry, 2021

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## Leucovorin and Its Application

- A reduced form of vitamin B9, mostly used for methotrexate toxicity rescue
- Emerging Research Area: It is currently being investigated as a targeted therapy for a specific subgroup of children with ASD, "cerebral folate deficiency"
- Mechanism: The research focuses on children with confirmed folate metabolism abnormalities or cerebral folate receptor alpha autoantibodies
- Data for short-term use (12-week trial) was found in children 3-14 y/o, mean 7 y/o, male-predominant cohort
- Preliminary Findings: Early studies suggest high-dose leucovorin (0.5-2 mg/kg, NTE 50 mg daily) may improve language impairment in these specific patient populations
- Weighing risks and benefits for each case: most common side effects are hyperactivity and irritability. Long-term effect and side effects unclear.

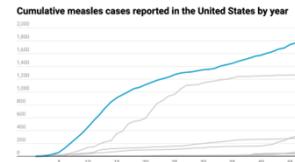
Frye et al., Molecular Psychiatry, 2018

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## The Clinical Imperative: Public Health Consequences of Misinformation

The vaccine-autism myth has led to a measurable public health crisis:

- Vaccine Hesitancy: A documented increase in parental refusal or delay of recommended vaccines
- Disease Outbreaks: Resurgence of vaccine-preventable diseases, such as measles, in communities with low immunization rates
- The PCP's Role: Clinicians are on the front lines of this information battle and play a critical role in protecting both individual patients and community health



<https://publichealth.jhu.edu/vac/resources/us-measles-tracker>

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## A Motivational Interviewing Framework To Educate Families

Skills	Objectives	Examples
Open questions	To evoke responses and avoid doubts	Open-ended questions: ("What did you understand?")/("What do you think?") Closed questions: ("Did you understand?")/("Do you think it's important?")
Affirmation	To encourage the individual and highlight their strengths	"The health and safety of your children are important to you." "You already have a lot of knowledge."
Reflective listening/summaries	To allow the individual to add nuance to and correct what they have just said Simple reflection: what the individual says Complex reflection: what the individual means	"You have read articles about the relationships between vaccines and disorders such as autism." "What matters most to you is that your child is as healthy as possible."
Elicit-Share-Elicit	How to give information/advice: ELICIT = ask what the parent/caregiver knows and ask permission to complete their knowledge SHARE = provide the information/advice on the subject ELICIT = verify what the parent/caregiver has understood and what they will do with this information	"What do you know about ...?" "If you agree, I could complete ..." "Does this new information make sense?"

Gagnon A. Can Commun Dis Res. 2020.

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## Key Takeaways

- The Verdict is In**
- Etiology is Complex**
- Communication is Critical**

The vaccine-autism link has been exhaustively investigated and disproven by decades of robust, global scientific research.

ASD is a neurodevelopmental disorder with strong genetic roots, modulated by primarily prenatal environmental and physiological risk factors

PCP's role in clearly and confidently communicating the scientific evidence is our strongest tool to counter misinformation and protect public health

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## You Can Call "Curbside" Consultations

» Providers can consult directly with:	
• Child and Adolescent Psychiatrists	
• Psychologists with Specialized Expertise - Substance Use, Autism, Mood & Behavior	
• LCSW Care Coordinators	
<b>Telephone</b>	<b>e-Consult</b>
Monday-Friday, 8:30am-5pm Receive a call back within 5 minutes, max 30 minutes	Request anytime
Receive consult letter detailing discussion and recommendations within 24 hours	Receive written recommendations within 1 business day

**Fast, convenient, on-demand**  
**No call is too small!**

**Get started on Cal-MAP.org** **or** **Call 1-800-253-2103**

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## Cal-MAP Offerings

- "Curbside consultations"** with providers on specific patient cases
- 50+ hours of CME training** with other clinicians on diagnosing and treating mental health concerns.
- Curated resources for clinicians and families** including diagnosis-specific information
- Care Coordination services**, including vetted referrals by patient insurance and location, and direct-to-family care coordination support

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Thank you!

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