Increase in the Number of Childhood Vaccine Doses

- # of CDC Recommended Childhood Vaccine Doses
- Vaccine Uptake Average**


VACCINES ARE A REASONABLE SUSPECT IN AMERICA'S PANDEMIC OF CHRONIC DISEASES AND DISORDERS

Increase in Chronic Disease Rates in the U.S. Population

This graph is here

Pearson Correlation Coefficient

<table>
<thead>
<tr>
<th>Coefficient</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
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† Correlation between Number of Vaccine Doses and Chronic Illnesses in Children: Correlation Coefficient = 0.99 (includes origin)
‡ Correlation between Number of Vaccine Doses and Adult Chronic Illnesses: Correlation Coefficient = 0.90 (includes origin)

VACCINES ARE A REASONABLE SUSPECT IN AMERICA’S PANDEMIC OF CHRONIC DISEASES AND DISORDERS

Increase in Miscellaneous Disease/Disorder Rates in U.S. Children

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1 Correlation between Number of Vaccine Doses and Skin Allergies: Correlation Coefficient = 0.28 (includes origin)
2 Correlation between Number of Vaccine Doses and ADHD: Correlation Coefficient = 0.19 (includes origin)

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*** CDC. Attention-Deficit / Hyperactivity Disorder (ADHD). https://www.cdc.gov/ncbddd/ADHD/factsheet.html

VACCINES ARE A REASONABLE SUSPECT IN AMERICA’S PANDEMIC OF CHRONIC DISEASES AND DISORDERS

Increase in Autism Spectrum Disorder (ASD) in U.S. Children

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**Pearson Correlation Coefficient**

- Perfect Correlation: 1.0
- Very High Correlation: 0.99 – 0.90
- High Correlation: 0.89 – 0.80
- Moderately High Correlation: 0.79 – 0.90
- Moderate Correlation: 0.59 – 0.40
- Low Correlation: 0.39 – 0.20
- Negligible Correlation: 0.19 – 0.10
- No Correlation: < 0.09

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1 Correlation between Number of Vaccine Doses and ASD: Correlation Coefficient = 0.91


VACCINES ARE A REASONABLE SUSPECT IN AMERICA'S PANDEMIC OF CHRONIC DISEASES AND DISORDERS

Increase in U.S. Children with Special Healthcare Needs

Pearson Correlation Coefficient:

- 1.0: Perfect Correlation
- 0.99 – 0.90: Very High Correlation
- 0.89 – 0.80: High Correlation
- 0.79 – 0.60: Moderately High Correlation
- 0.59 – 0.40: Moderate Correlation
- 0.39 – 0.20: Low Correlation
- 0.19 – 0.10: Negligible Correlation
- < 0.09: No Correlation

† Correlation between Number of Vaccine Doses and Percent of U.S. Children with Special Healthcare Needs: Correlation Coefficient = 0.96 (includes origins)


CDC, Preventing Chronic Disease. https://www.cdc.gov/pcd/issues/2012/12_0097.htm

**VACCINES ARE A REASONABLE SUSPECT IN AMERICA'S PANDEMIC OF CHRONIC DISEASES AND DISORDERS**

**Diabetes Increasing In Americans**

![Graph showing increasing diabetes and vaccination rates](image)

**Pearson Correlation Coefficient**

- 1.0  Perfect Correlation
- 0.99 – 0.90  Very High Correlation
- 0.89 – 0.80  High Correlation
- 0.79 – 0.60  Moderately High Correlation
- 0.59 – 0.40  Moderate Correlation
- 0.39 – 0.20  Low Correlation
- 0.19 – 0.10  Negligible Correlation
- < 0.09  No Correlation

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1  Correlation between Number of Vaccine Doses and Percent of Americans with Diabetes: Correlation Coefficient = 0.98 (includes origin)


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**Diabetes**

**# of CDC Recommended Childhood Vaccine Doses**

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Exhibit E
VACCINES ARE A REASONABLE SUSPECT IN AMERICA’S PANDEMIC OF CHRONIC DISEASES AND DISORDERS

Increase in Mental Health Conditions, age 18–25 in the U.S.

![Graph showing correlation between mental health conditions and recommended childhood vaccine doses](chart.png)

- **Pearson Correlation Coefficient**
  - 1.0: Perfect Correlation
  - 0.99 – 0.90: Very High Correlation
  - 0.89 – 0.80: High Correlation
  - 0.79 – 0.60: Moderately High Correlation
  - 0.59 – 0.40: Moderate Correlation
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  - < 0.09: No Correlation

---

**Notes:**
- † Correlation between Number of Vaccine Doses and Percent of Americans with Mental Health Conditions: Correlation Coefficient = 0.99 (includes origin)

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Exhibit E
A Bellwether for Mental Health
Increase in Attempted Suicide, Age 18–25 in the U.S.

VACCINES ARE A REASONABLE SUSPECT IN AMERICA’S PANDEMIC OF CHRONIC DISEASES AND DISORDERS

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**Pearson Correlation Coefficient**

This graph shows the correlation between the number of vaccine doses and attempted suicide rates among youth aged 18-25. The Pearson Correlation Coefficient is used to measure the strength and direction of the linear relationship between two variables.

- **1.0**: Perfect Correlation
- **0.90 – 1.00**: Very High Correlation
- **0.80 – 0.90**: High Correlation
- **0.70 – 0.80**: Moderately High Correlation
- **0.60 – 0.70**: Moderate Correlation
- **0.50 – 0.60**: Low Correlation
- **0.40 – 0.50**: Negligible Correlation
- **< 0.40**: No Correlation

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*Correlation between Number of Vaccine Doses and Attempted Suicide, age 18-25. Correlation Coefficient = 0.87 (includes original).*


**CDC (2016)**, Pneumococcal Vaccine Schedule. [https://www.cdc.gov/vaccines/schedules/hcp/imls/pneumococcal-schedule.html](https://www.cdc.gov/vaccines/schedules/hcp/imls/pneumococcal-schedule.html)

---

**Exhibit E**
VACCINES ARE A REASONABLE SUSPECT IN AMERICA’S PANDEMIC OF CHRONIC DISEASES AND DISORDERS

A Bellwether for Mental Health
Serious Thoughts of Suicide, Age 18–25 in the U.S.

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**Pearson Correlation Coefficient**

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1. Correlation between Number of Vaccine Doses and Percent of Americans with Serious Thoughts of Suicide: Correlation Coefficient = 0.97 (Includes origin)


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Exhibit E
VACCINES ARE A REASONABLE SUSPECT IN AMERICA’S PANDEMIC OF CHRONIC DISEASES AND DISORDERS

A Bellwether for Mental Health
Increase in Anxiety or Depression in U.S. Children, Age 6–17

Pearson Correlation Coefficient†

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† Correlation between Number of Vaccine Doses and Percent of Children with Anxiety or Depression: Correlation Coefficient = 0.95 (includes origin)

* CDC (Children’s Mental Health), https://www.cdc.gov/childrensmentalhealth/features/anxiety-depression-children.html
VACCINES ARE A REASONABLE SUSPECT IN AMERICA’S PANDEMIC OF CHRONIC DISEASES AND DISORDERS

A Bellwether for Mental Health
Increase in Major Depression among 20–21 Year-olds in the U.S.

Pearson Correlation Coefficient*

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1. Correlation between Number of Vaccine Doses and Percent of 20–21 Year-Olds with Major Depression: Correlation Coefficient = 0.91 (includes origin)


** CDC (2020). Prior immunization schedule: [https://www.cdc.gov/vaccines/schedules/fd/schedules-related-resources.html](https://www.cdc.gov/vaccines/schedules/fd/schedules-related-resources.html)