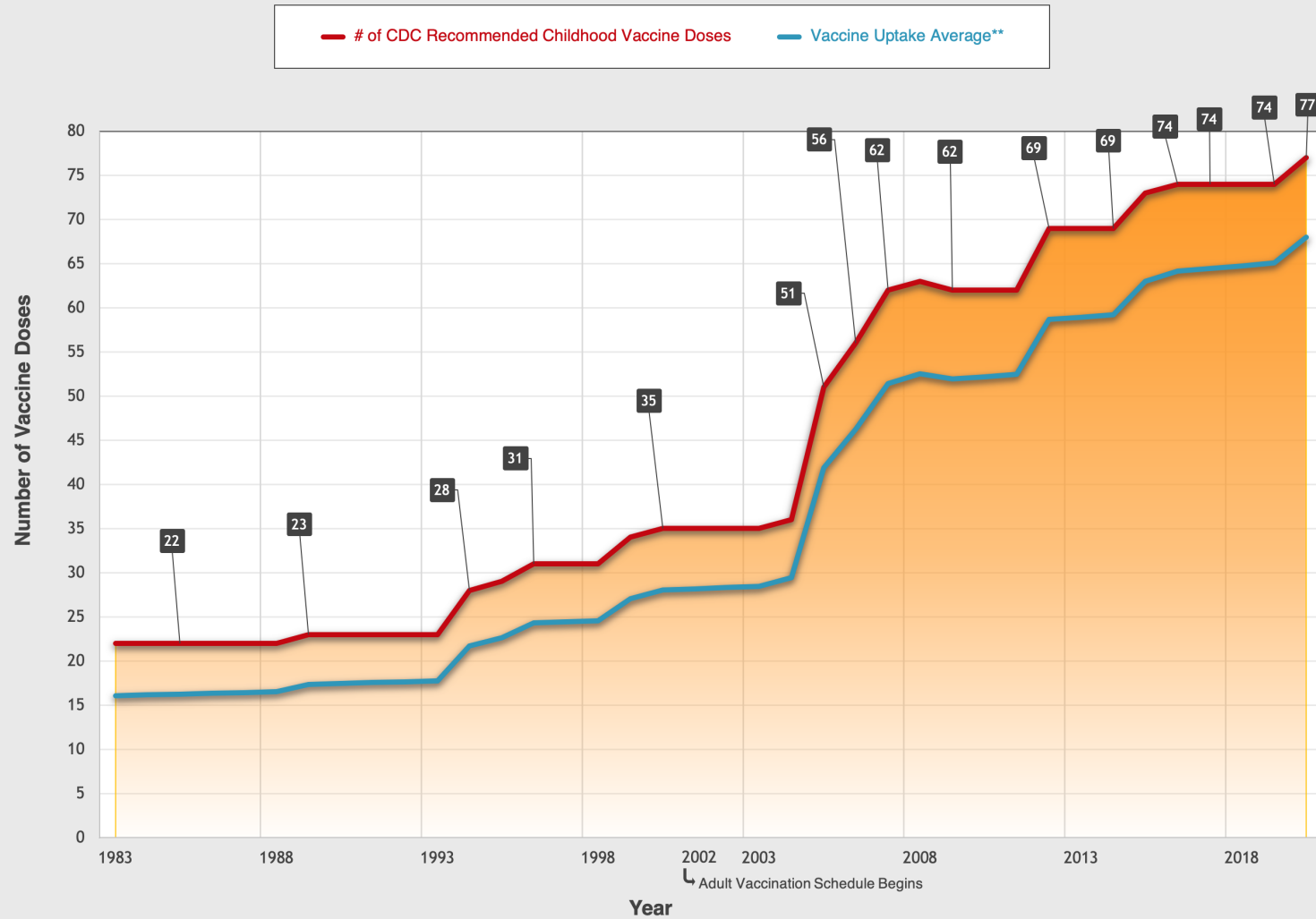


Increase in the Number of Childhood Vaccine Doses



* CDC (2020). Prior immunization schedules. <https://www.cdc.gov/vaccines/schedules/hcp/schedule-related-resources.html>

** CDC (2018). Vaccine Coverage Levels – United States, 1962–2016. The Pink Book, 13th Edition, Appendix E. <https://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/e/coverage-levels.pdf>

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<https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5231a2.htm>

CDC (2008). National, State, and Local Area Vaccination Coverage Among Children Aged 19–35 Months – United States, 2007. *MMWR* 57(35):961-966. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5735a1.htm>

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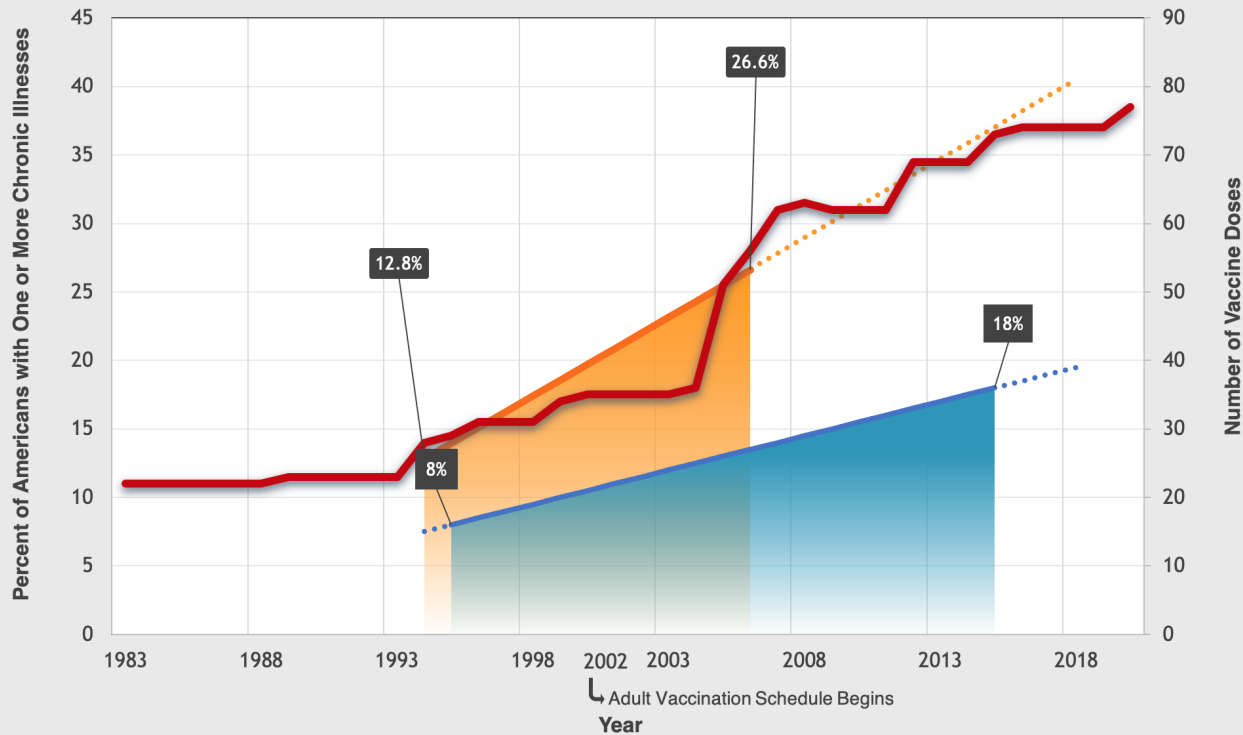
CDC (2013). National, State, and Local Area Vaccination Coverage Among Children Aged 19–35 Months – United States, 2012. *MMWR* 62(36):733-740. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6236a1.htm>

CDC (2018). Vaccination Coverage Among Children Aged 19–35 Months – United States, 2017. *MMWR* 67(40):1123–1128.

<https://www.cdc.gov/mmwr/volumes/67/wr/mm6740a4.htm>

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

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



| Pearson Correlation Coefficient† | | |
|----------------------------------|-----------------------------|------------------------|
| 1.0 | Perfect Correlation | |
| 0.99 – 0.90 | Very High Correlation | »»» This graph is here |
| 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 | |

| | |
|---|----------------------------------------------|
| — | Child Chronic Illnesses* |
| — | Adult Chronic Illnesses** |
| — | # of CDC Recommended Childhood Vaccine Doses |

† 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)

* Van Cleave et al. (2010). Dynamics of obesity and chronic health conditions among children and youth. *JAMA* 303(7):623–630. <https://doi.org/10.1001/jama.2010.104>

** Aspen Health Strategy Group (2019). Reducing the Burden of Chronic Disease. Washington DC: The Aspen Institute. <https://assets.aspeninstitute.org/content/uploads/2019/02/AHSG-Chronic-Disease-Report-2019.pdf>

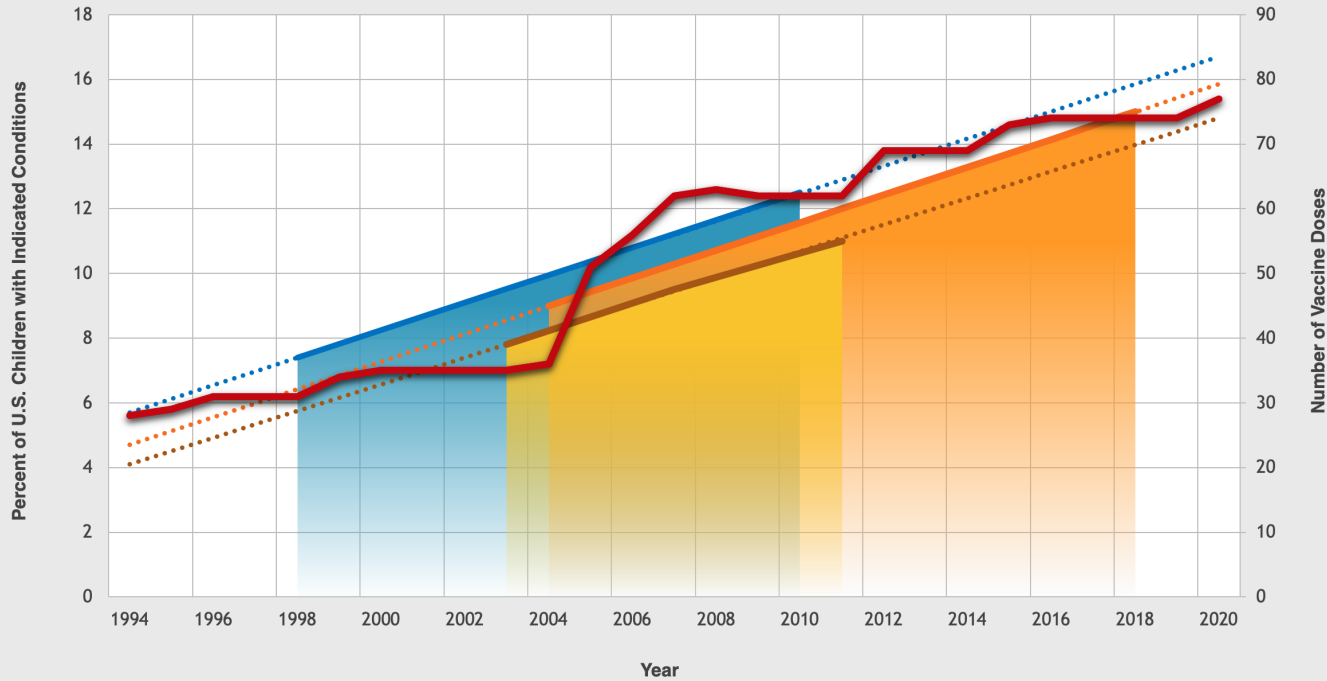
*** CDC (2020). Prior immunization schedules. <https://www.cdc.gov/vaccines/schedules/hcp/schedule-related-resources.html>



THE CONTROL GROUP
LITIGATION

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

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



| Pearson Correlation Coefficient† | | |
|----------------------------------|----------------|-----------------------------|
| This graph is here >>> | 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 | |

- Children with Skin Allergies*
- MDE (Major Depressive Episode) Age 12–17**
- Children with ADHD***
- # of CDC Recommended Childhood Vaccine Doses****

† Correlation between Number of Vaccine Doses and Skin Allergies: Correlation Coefficient = 0.99 (includes origin)
 † Correlation between Number of Vaccine Doses and MDE: Correlation Coefficient = 0.99 (includes origin)
 † Correlation between Number of Vaccine Doses and ADHD: Correlation Coefficient = 0.99 (includes origin)

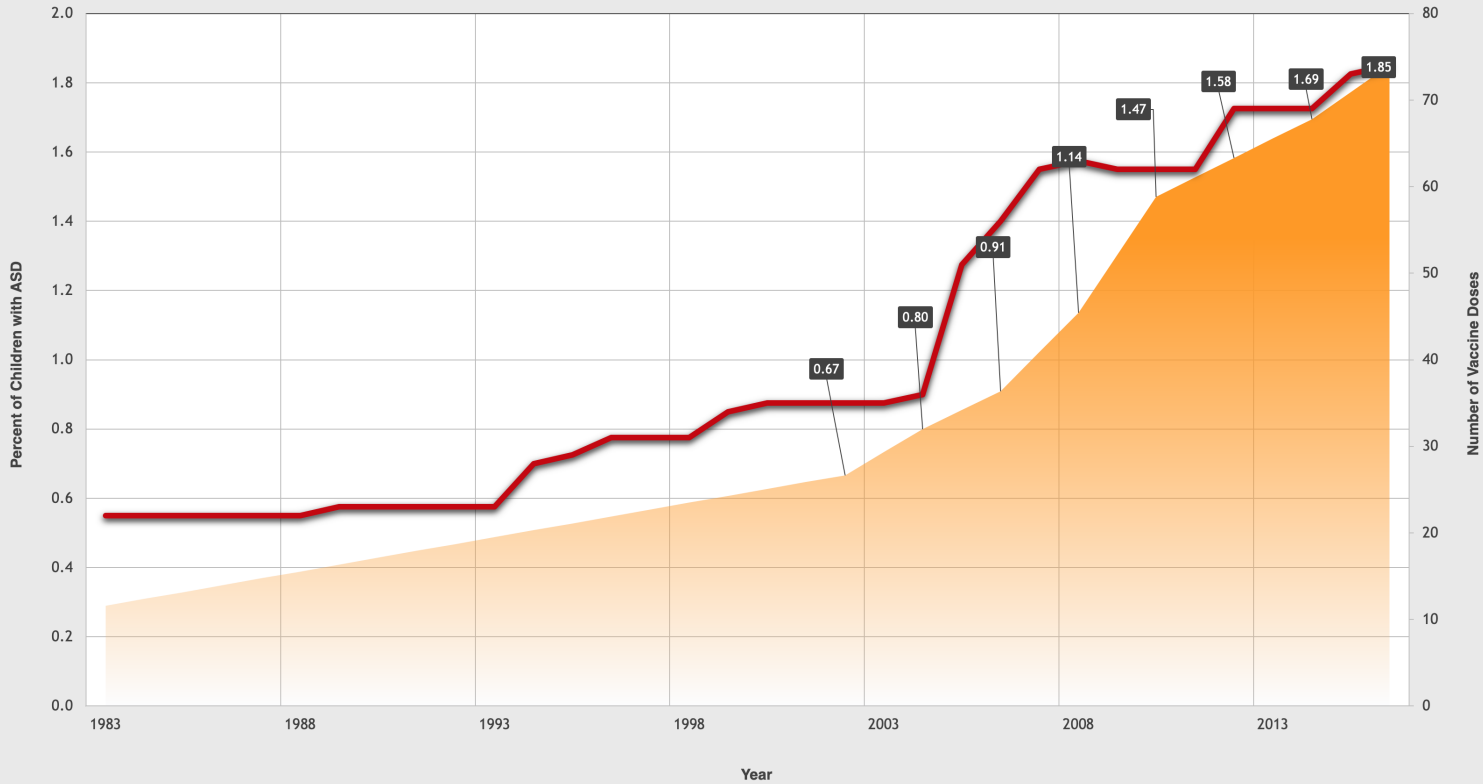
* CDC (2013). Trends in Allergic Conditions Among Children: United States, 1997–2011. *NCHS Data Brief 121*. <https://www.cdc.gov/nchs/data/databriefs/db121.pdf> United States Centers for Disease Control (CDC), *Trends in the Parent-Report of Health Care*
 ** SAMHSA (2018). *Key Substance Use and Mental Health Indicators in the United States: Results from the 2018 National Survey on Drug Use and Health*. <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport2018.pdf>
 *** CDC, *Attention-Deficit / Hyperactivity Disorder (ADHD)*. <https://www.cdc.gov/ncbddd/adhd/features/key-findings-adhd72013.html>
 **** CDC (2020). Prior immunization schedules. <https://www.cdc.gov/vaccines/schedules/hcp/schedule-related-resources.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

— U.S. Children with ASD — # of CDC Recommended Childhood Vaccine Doses**



| Pearson Correlation Coefficient† | | |
|----------------------------------|-------------|-----------------------------|
| This graph is here >>> | 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 ASD: Correlation Coefficient = 0.91

* Nevison et al. (2018). California autism prevalence trends from 1981 to 2014 and comparison to national ASD data from IDEA and ADDM. *Journal of Autism and Developmental Disorders* 48:4103–4117. <https://doi.org/10.1007/s10803-018-3670-2>

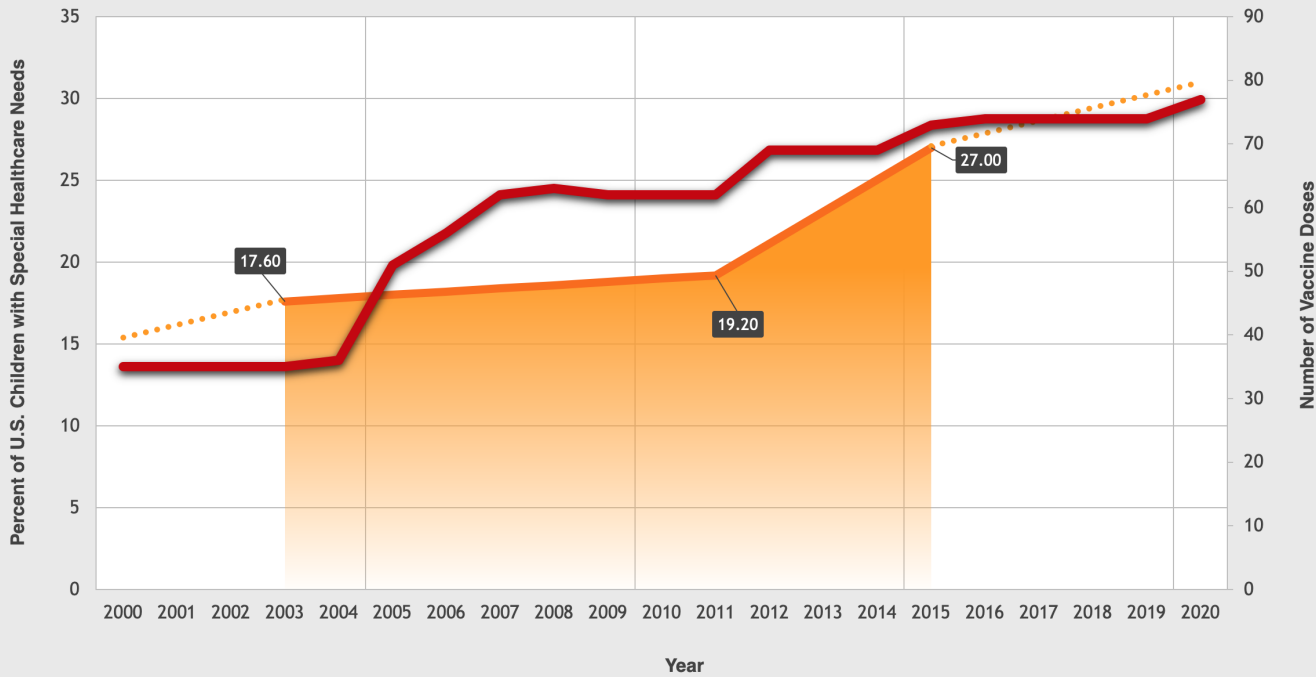
CDC. Autism Spectrum Disorder (ASD). <https://www.cdc.gov/ncbddd/autism/data.html>

** CDC (2020). Prior immunization schedules. <https://www.cdc.gov/vaccines/schedules/hcp/schedule-related-resources.html>



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† | | |
|----------------------------------|-------------|-----------------------------|
| This graph is here >>> | 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 |

- U.S. Children with Special Healthcare Needs*
- # of CDC Recommended Childhood Vaccine Doses**

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

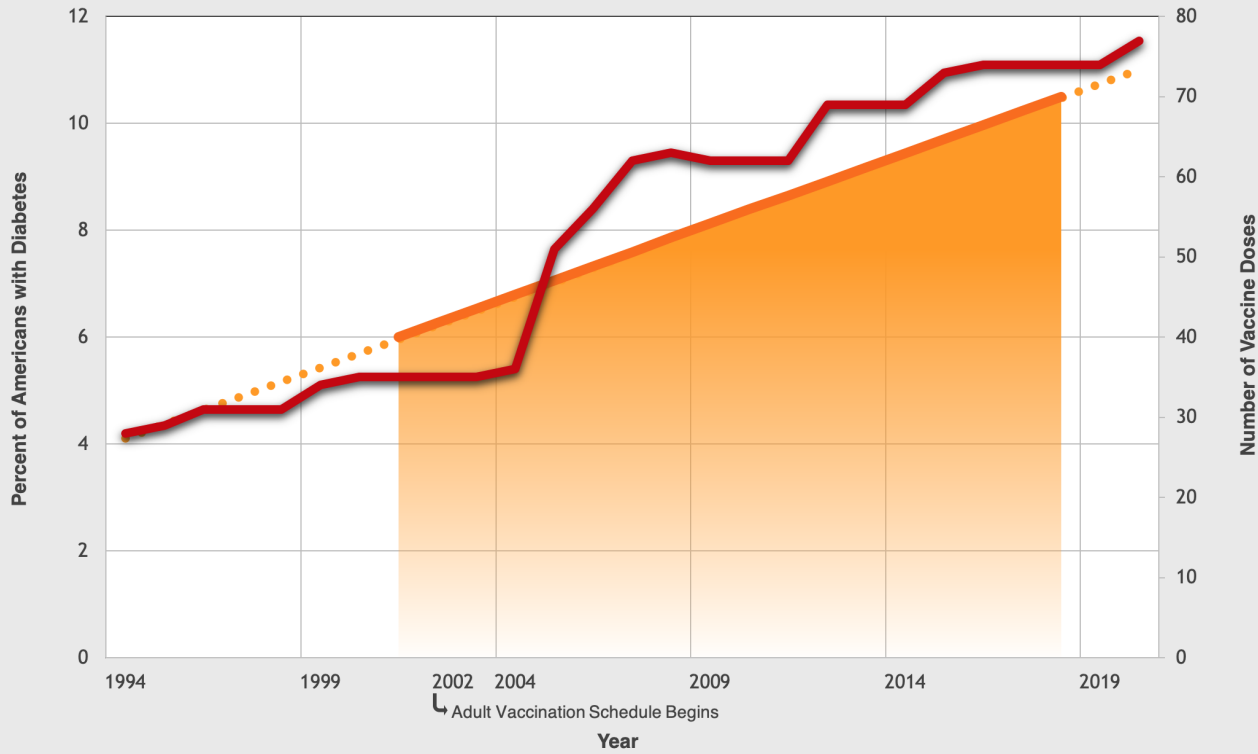
* Bethell et al. (2011). A national and state profile of leading health problems and health care quality for US children: key insurance disparities and across-state variations. *Academic Pediatrics* 11(3 Suppl):S22–S33. <https://doi.org/10.1016/j.acap.2010.08.011>
 CDC, *Preventing Chronic Disease*. https://www.cdc.gov/pccd/issues/2015/14_0397.htm

** CDC (2020). Prior immunization schedules. <https://www.cdc.gov/vaccines/schedules/hcp/schedule-related-resources.html>



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

Diabetes Increasing In Americans



| Pearson Correlation Coefficient† | | |
|----------------------------------|-------------|-----------------------------|
| This graph is here >>> | 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 |

- Diabetes *
- # of CDC Recommended Childhood Vaccine Doses**

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

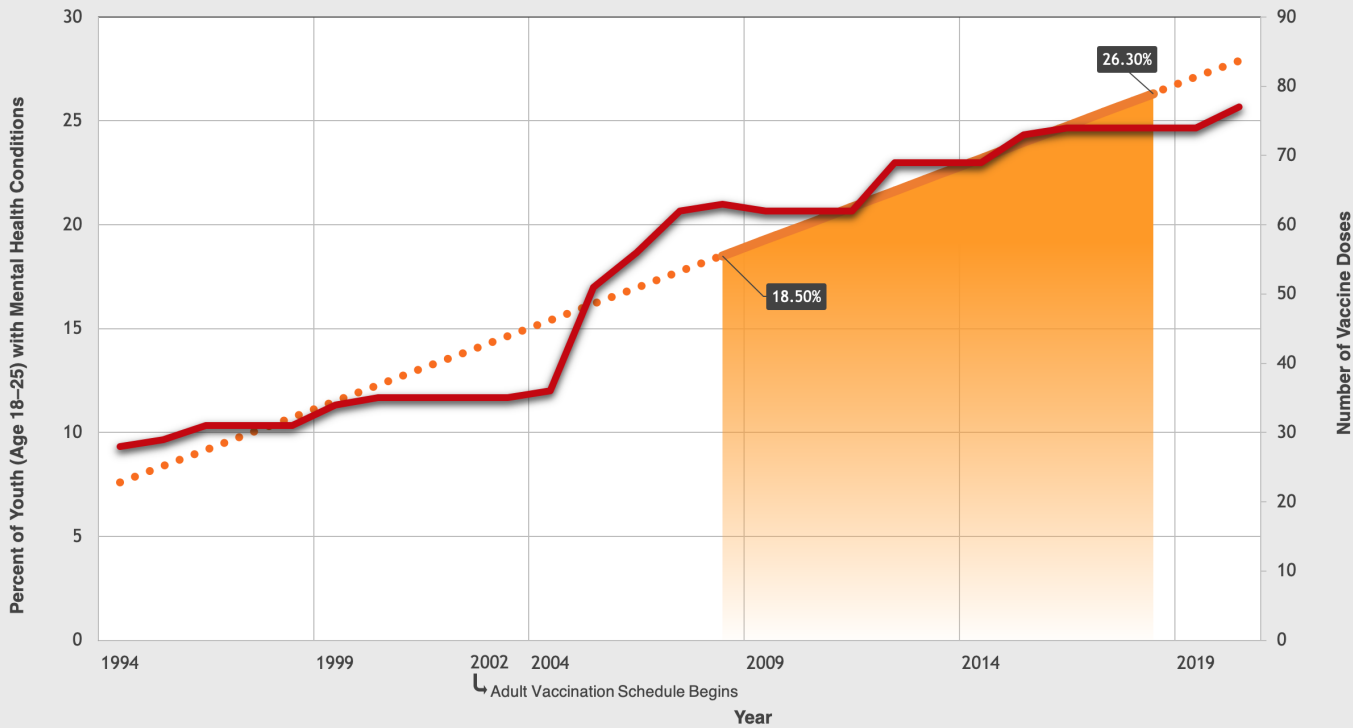
* American Diabetes Association, *Statistics About Diabetes*. <https://www.diabetes.org/resources/statistics/statistics-about-diabetes>
 Dabelea et al. (2014). Prevalence of type 1 and type 2 diabetes among children and adolescents from 2001 to 2009. *JAMA* 311(17):1778–1786. <https://doi.org/10.1001/jama.2014.3201>
 ** CDC (2020). Prior immunization schedules. <https://www.cdc.gov/vaccines/schedules/hcp/schedule-related-resources.html>



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.

Mental Health Conditions, age 18–25* # of CDC Recommended Childhood Vaccine Doses**



| Pearson Correlation Coefficient† | | |
|----------------------------------|-------------|-----------------------------|
| This graph is here >>> | 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 Americans with Mental Health Conditions: Correlation Coefficient = 0.99 (includes origin)

* SAMHSA (2018). Key Substance Use and Mental Health Indicators in the United States: Results from the 2018 National Survey on Drug Use and Health.

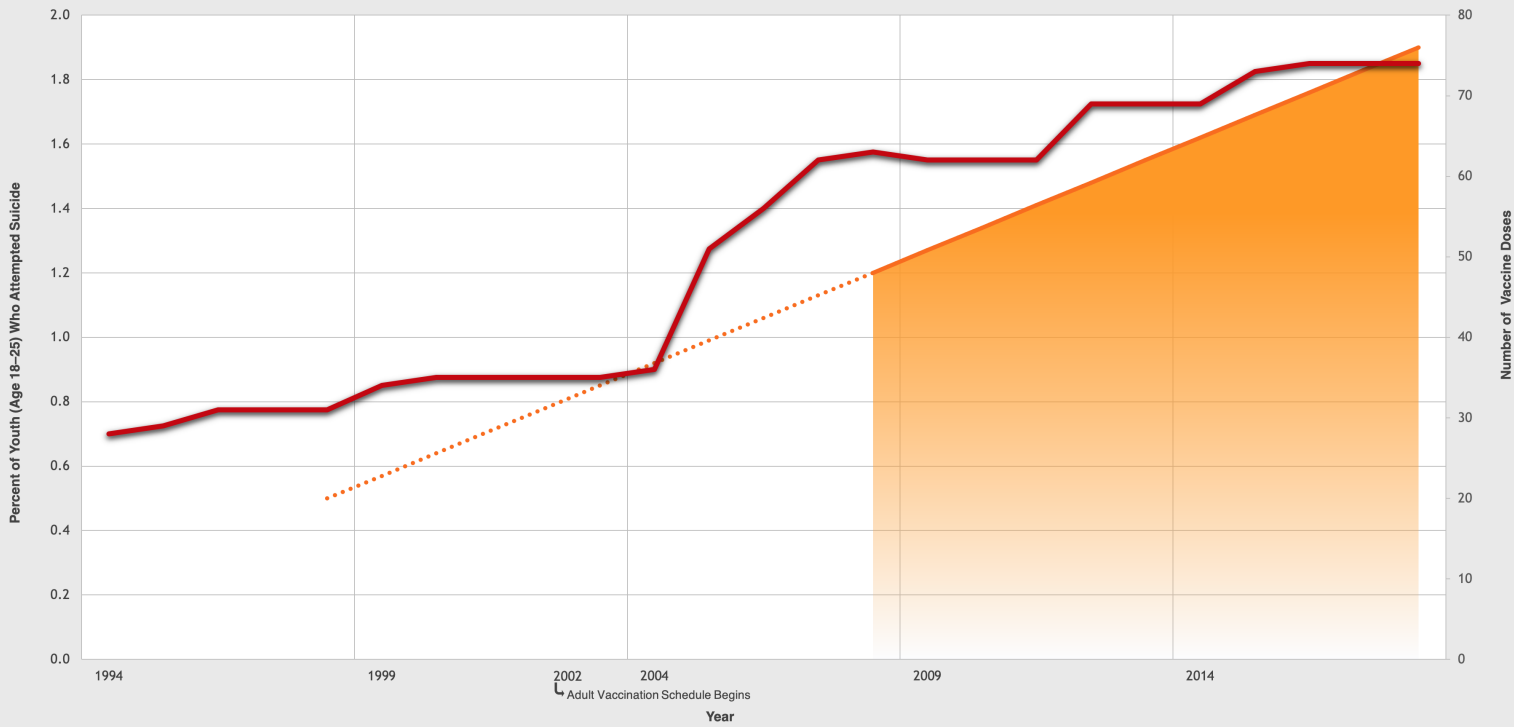
<https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport2018.pdf>

** CDC (2020). Prior immunization schedules. <https://www.cdc.gov/vaccines/schedules/nccp/schedule-related-resources.html>



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

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



| 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 |

— Attempted Suicide*
— # of CDC Recommended Childhood Vaccine Doses**

† Correlation between Number of Vaccine Doses and Attempted Suicide, age 18–25: Correlation Coefficient = 0.97 (includes origin)

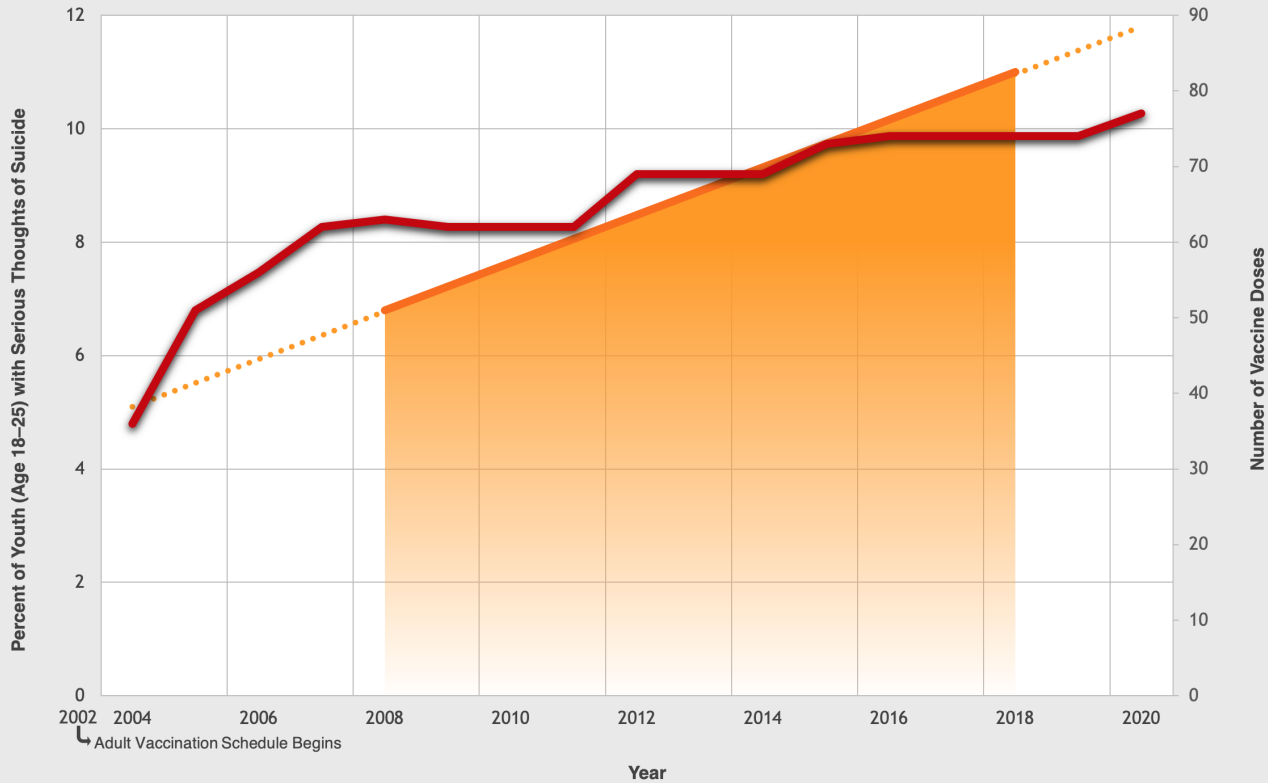
* SAMHSA (2018). Key Substance Use and Mental Health Indicators in the United States: Results from the 2018 National Survey on Drug Use and Health. <https://www.samhsa.gov/data/sites/default/files/cbhsa-reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport2018.pdf>

** CDC (2020). Prior immunization schedules. <https://www.cdc.gov/vaccines/schedules/prev/schedule-related-resources.html>



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.



| Pearson Correlation Coefficient† | | |
|----------------------------------|-----------|-----------------------------|
| This graph is here >>> | 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 |

— Serious Thoughts of Suicide*
— # of CDC Recommended Childhood Vaccine Doses**

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

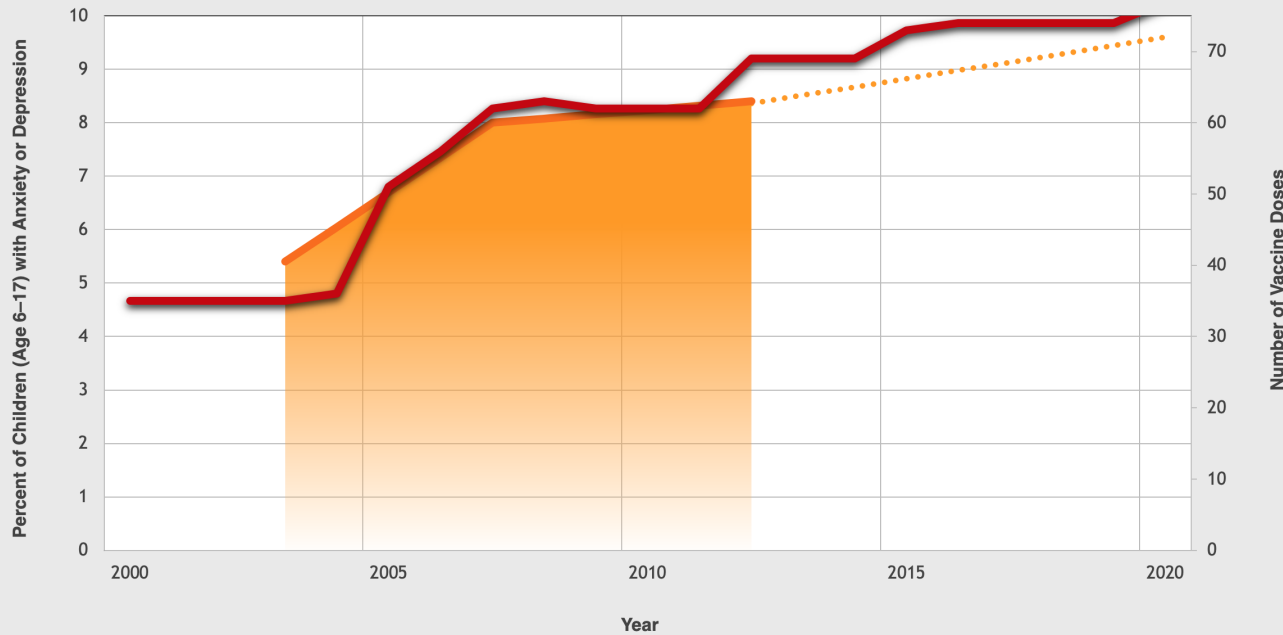
* SAMHSA (2018). *Key Substance Use and Mental Health Indicators in the United States: Results from the 2018 National Survey on Drug Use and Health*. <https://www.samhsa.gov/data/sites/default/files/cbhsa-reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport2018.pdf>

** CDC (2020). Prior immunization schedules. <https://www.cdc.gov/vaccines/schedules/hcp/schedule-related-resources.html>



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† | | |
|----------------------------------|-------------|-----------------------------|
| This graph is here >>> | 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 |

— Anxiety or Depression*
— # of CDC Recommended Childhood Vaccine Doses**

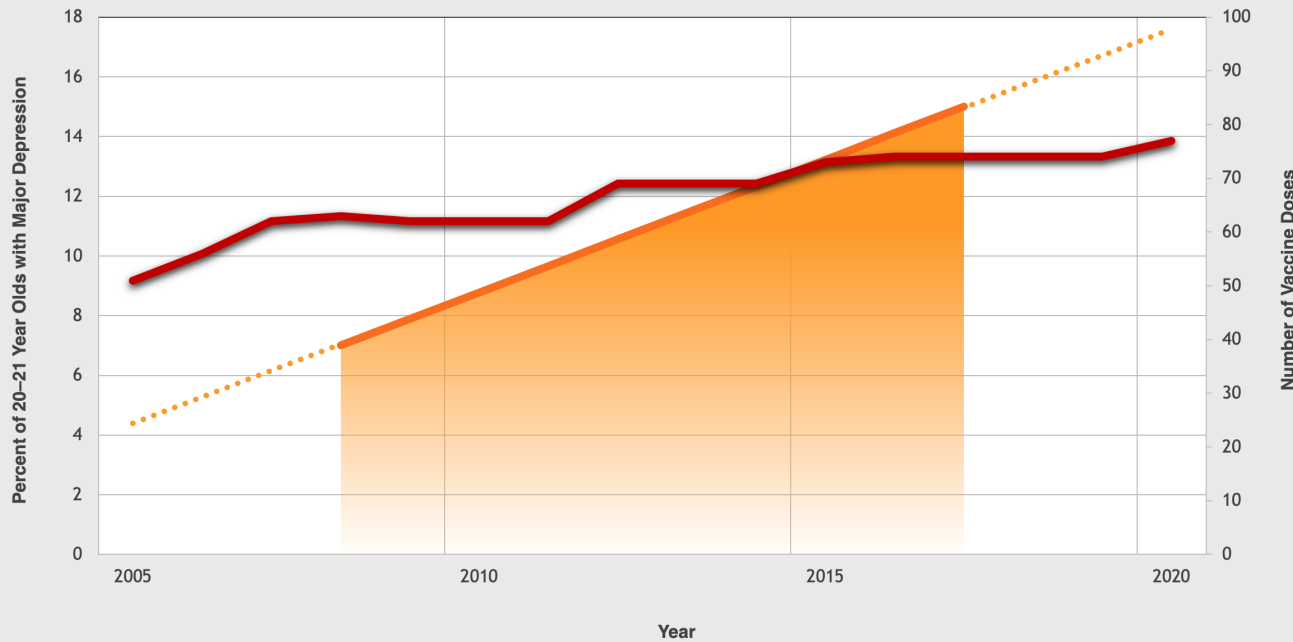
† Correlation between Number of Vaccine Doses and Percent of Children with Anxiety or Depression: Correlation Coefficient = 0.99 (includes origin)

* CDC, *Children's Mental Health*, <https://www.cdc.gov/childrensmentalhealth/features/anxiety-depression-children.html>
 ** CDC (2020). Prior immunization schedules. <https://www.cdc.gov/vaccines/schedules/hcp/schedule-related-resources.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† | | |
|----------------------------------|-----------------------------|--|
| 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 | |

- Major Depression*
- # of CDC Recommended Childhood Vaccine Doses**

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

* SAMHSA (2017). National Survey on Drug Use and Health, 2017. <https://www.datafiles.samhsa.gov/study-dataset/national-survey-drug-use-and-health-2017-nsduh-2017-ds0001-nid17939>

** CDC (2020). Prior immunization schedules. <https://www.cdc.gov/vaccines/schedules/hcp/schedule-related-resources.html>

