

# Do Any Vaccines Cause Autism ?

## An investigation of PRR safety signals for 100 different vaccines

by Craig Paardekooper

### Introduction :

The CDC ([Data & Statistics on Autism Spectrum Disorder | CDC](#)) estimates that 1 in 36 children now has autism - up from 1 in 110 in 2006. If this is the case, then 2.7% of children have autism . There are 2 billion children in the world , so 2.7% equates to 54 million autistic children . 1 in 6, or 17% of children now suffer developmental disability – that's 340 million children.

- About 1 in 36 children has been identified with autism spectrum disorder (ASD) according to estimates from CDC's Autism and Developmental Disabilities Monitoring (ADDM) Network. [\[Read article\]](#)
- ASD is reported to occur in all racial, ethnic, and socioeconomic groups. [\[Read article\]](#)
- ASD is nearly 4 times more common among boys than among girls. [\[Read article\]](#)
- About 1 in 6 (17%) children aged 3–17 years were diagnosed with a developmental disability, as reported by parents, during a study period of 2009-2017. These included autism, attention-deficit/hyperactivity disorder, blindness, and cerebral palsy, among others. [\[Read summary\]](#)

If the increase in autism is caused by certain vaccines being administered to infants then we can greatly reduce this morbidity by identifying those harmful vaccines.

The CDC and EMA detect a safety signal when a symptom occurs with a disproportionately high incidence for a drug, when compared to the incidence of the symptom for all drugs in the database. This is called Proportional Reporting Ratio. Simply put -

$$PRR = \frac{\text{rate of incidence of symptom per 100 reports for drug A}}{\text{rate of incidence of symptom per 100 reports for all other drugs.}}$$

**Safety Signal : PRR >= 2**

### Data Source :

<https://howbad.info/safety-signal-datasets.zip>

### Method :

33 years of VAERS data from 1990 till 2023 were combined into a single dataset, consisting of two columns – vaccine and symptom. There were 9,020,372 rows of data, 16,849 unique symptoms, and 99 different vaccines. The number of records for each vaccine is shown in Appendix B.

The Proportional Reporting Ratios (PRR) were calculated for each symptom for each vaccine. Nothing like this has been done before – where safety signal calculations have been applied to every symptom of every vaccine – enabling rapid comparison. The PRR ratio reveals where any symptom is occurring at a rate that is disproportionately high.

The resulting spreadsheets are available as downloadable excel files, and as csv files (see above). You are strongly advised to consult these files when investigating any vaccine.

A search was made for symptoms associated with autism –

- |                             |                        |                               |
|-----------------------------|------------------------|-------------------------------|
| 1. Autism                   | 4. Repetitive behavior | 8. Attention Deficit Disorder |
| 2. Autism spectrum disorder | 5. Emotional disorder  | 9. Intellectual disability    |
| 3. Broad autism phenotype   | 6. Emotional poverty   | 10. Learning disability       |
|                             | 7. Aspergers           | 11. Learning disorder         |

The aim was to see which vaccines are associated with a disproportionally high incidence of these symptoms as measured by PRR ratio.

## Results

VACCINE	Autism
MNC	408.05
MMR	231.08
DTPIPV	158.66
PER	44.66
DTAPH	43.55
HBHEPB	35.75
OPV	33.81
MU	31.84
PNC	16.52
MEA	13.79
DTP	13.52
DTAPHEPBIP	12.81
HIBV	10.09
DTAP	8.85
HEP	6.37
IPV	6.15
RUB	5.61
DT	5.23
MEN	2.51
DTPHIB	2.34
MMRV	2.20
HEPA	1.37
VARCEL	1.16
UNK	0.92
FLUN(H1N1)	0.66
TTOX	0.63

VACCINE	Emotional disorder
EBZR	69.34813294
HPVX	9.519437955
HPV2	7.667122771
MEA	6.378962141
MMR	4.615277574
DTAP	3.583438965
IPV	3.156580782
HPV4	2.506765834
DTAPIPV	2.310900258
HPV9	2.273544824
FLUA4	2.208370387
FLU(H1N1)	2.183779364
RAB	2.032501302

VACCINE	Emotional poverty
DTAPIPVHIB	31.97082491
DTP	31.92320473
MMR	18.02842802
MNQ	9.88875836
HPV9	7.307822648
FLU4	5.363985477
PNC13	5.287384167
HEP	1.884984571
HPV4	1.881515045
FLU3	1.083697716
COVID19	0.424561873

VACCINE	Asperger's disorder
MMR	187.4956514
IPV	63.13161563
DTP	56.33506718
DTAP	14.16512344
HEP	7.068692142
HPV4	3.320320668

VACCINE	Autism spectrum disorder
DTPIHI	343.24
DTPIPV	198.62
DTIPV	89.17
MMR	71.34
6VAX-F	57.16
DTAPIPVHIB	13.47
DTAP	13.38
MMRV	13.20
MEA	12.07
DTAPIPV	8.80
RUB	8.19
DTP	8.03
HEP	7.85
DTAPHEPBIP	6.99
HEPA	6.12
IPV	5.98
DT	5.73
PNC13	5.45
PNC	4.83
MEN	3.66
UNK	3.28
MENB	3.09
FLUA3	2.73
HPVX	2.55
HPV2	2.51
RV1	2.41

VACCINE	Attention deficit hyperactivity disorder
DTAPHEPBIP	22.48
MENB	4.98
TDAP	3.68
MMR	3.44
DTAP	2.15
HPV9	1.96
COVID19	1.65
FLUX	1.52
PNC13	1.42
VARCEL	0.77
FLU4	0.69
COVID19-2	0.67
HEP	0.50
HPV4	0.50
VARZOS	0.21

VACCINE	Attention deficit/hyperactivity disorder
PER	992.53
DTPIPV	495.18
MEA	60.33
DTAPIPV	33.67
MMR	32.99
HPVX	25.86
FLUN3	15.40
TTOX	13.92
DTP	13.30
HPV4	11.10
MMRV	10.81
UNK	8.40
PNC	8.01
HEPAB	7.48
DTAP	6.78
TDAP	5.81
ANTH	4.20
HPV2	4.17
HEP	4.16
VARCEL	2.43
FLU4	2.19
FLU3	1.88

VACCINE	Intellectual disability
6VAX-F	142.52
MEA	60.33
DTP	26.98
DTAPIPVHIB	13.32
HPVX	12.75
MMR	8.40
PNC	8.01
DTAP	6.78
UNK	6.21
HIBV	6.19
PNC13	4.47
HPV2	4.17
MENB	3.84
TDAP	2.82
HPV4	1.59
FLUX	1.17
HEP	0.79
PPV	0.75
VARZOS	0.67
COVID19	0.51

VACCINE	Broad autism phenotype
MMR	inf
DTPIHI	0
DTPIPV	0
DTIPV	0

VACCINE	Repetitive speech
MEA	80.44580033
MMR	18.3419659
DTAPIPVHIB	17.76156939
FLUN3	10.12318058
DTAP	9.087060318
MNQ	5.493754644
HPV4	4.427094224
HPV9	4.059901471
TDAP	1.854822283
FLU4	1.440329434
COVID19	0.597040134
DTPIHI	0
DTPIPV	0
DTIPV	0

VACCINE	Intelligence test abnormal
HPV2	224.9398519
DTAPIPVHIB	159.8541245
HPV9	36.53911324
TDAP	16.69340055
FLU4	12.9629649
6VAX-F	0
MEA	0
DTP	0

VACCINE	Learning disability
PER	749.68
HPV2	42.85
DTP	41.64
MMR	27.87
HPVX	19.53
HEP	13.05
FLUN3	11.63
DTAP	10.47
RAB	9.79
ANTH	6.44
FLU(H1N1)	6.29
HPV4	5.13
UNK	3.08
TDAP	2.13
COVID19	0.06

VACCINE	Learning disorder
PER	482.67
HPV2	118.84
DTP	26.60
IPV	14.70
HPV4	14.35
MMR	12.98
HPVX	12.57
DTAPIPV	10.76
MENB	7.67
MMRV	5.26
FLUX	4.83
HEP	3.23
UNK	1.99
TDAP	1.37
FLU3	0.45
COVID19	0.06

## Statistical Significance

The table below shows –

- **Autism** : number of symptoms with vaccine where symptom = “autism”
- **AB** : total number of symptoms for vaccine
- **C** : number of symptoms with all other vaccines where symptom = “autism”
- **CD** : total number of symptoms for all other vaccines
- **S** : standard deviation for PRR score
- **LCI** : Lower limit of the 95% confidence interval

VAX_TYP	Autism	AB	C	CD	PRR	S	LCI
MMR	1124	95204	456	8925168	231.0802	0.055426	207.2922528
DTPIPV	7	253	1573	9020119	158.6577	0.373551	76.29361858
MNC	1	14	1579	9020358	408.0502	0.963953	61.68514411
HBHEPB	5	801	1575	9019571	35.74726	0.446527	14.89880197
DTAPH	3	394	1577	9019978	43.55107	0.575699	14.091395
OPV	4	677	1576	9019695	33.81481	0.499157	12.71207053
PNC	44	15616	1536	9004756	16.51823	0.15269	12.24592096
PER	2	256	1578	9020116	44.65758	0.704789	11.21932569
DTP	22	9409	1558	9010963	13.52331	0.214453	8.882537712
MU	2	359	1578	9020013	31.84459	0.705584	7.987868454
HIBV	35	20204	1545	9000168	10.09143	0.17079	7.220608766
DTAP	56	37304	1524	8983068	8.848555	0.135965	6.778551146
DTAPHEPBIP	8	3581	1572	9016791	12.81401	0.354058	6.401846127
MEA	5	2076	1575	9018296	13.79071	0.447385	5.738058819
HEP	160	156741	1420	8863631	6.371779	0.083353	5.411393752
IPV	9	8397	1571	9011975	6.148401	0.334108	3.194208838
DT	4	4372	1576	9016000	5.234046	0.500406	1.962834827
RUB	3	3060	1577	9017312	5.605899	0.577616	1.807042419
MMRV	9	23436	1571	8996936	2.199265	0.334223	1.14230293
MEN	3	6835	1577	9013537	2.508686	0.577772	0.808418846
VARCEL	21	103508	1559	8916864	1.16041	0.21966	0.754453816
HEPA	9	37513	1571	8982859	1.371826	0.334247	0.712496189
UNK	10	61811	1570	8958561	0.923151	0.317208	0.495747217
DTPHIB	1	2445	1579	9017927	2.335854	1.000112	0.328952446
MNQ	3	30304	1577	8990068	0.564355	0.577871	0.181827373
TDAP	5	89169	1575	8931203	0.31797	0.44791	0.132165045

All of the figures are provided so PRR and LCI can be manually checked.

The incidence of autism with MMR is 231 times greater than the comparator drugs. Even when we take the lower limit of the 95% confidence interval, autism is still 200 times greater than the comparator drugs.

Other drugs with total symptom records (AB) exceeding 10000, that also generate high PRR values (PRR > 2) and high LCI (LCI > 2) are -

- PNC
- HIBV
- DTAP
- HEP

Note that MMR is associated with at least 17 x the incidence of autism compared to the worst of these.

## Discussion

Some vaccines show-

1. High PRR ratios for autism
2. Same Symptom Consistency (SSC) –
  - a. Autism
  - b. Aspergers
  - c. Broad autism phenotype
3. Related Symptom Consistence (RSC) –
  - a. Repetitive speech
  - b. Emotional disorder
  - c. Emotional poverty
  - d. Attention deficit
  - e. Intellectual disability
  - f. Intellectual
  - g. Intelligence test abnormal
  - h. Learning disability

There is, therefore considerable confirmation of the high PRR ratios for autism in both Same Symptom Consistency (SSC) and Related Symptom Consistency (RSC). A strong pattern of consistency is apparent across multiple symptoms.

So, even though some vaccines have very strong associations with autism and its symptoms, many additional vaccines have a lesser but still very significant effect. This would probably be cumulative with the number of these vaccines taken at one time, and cumulative if these vaccines are taken annually.

The effect of these vaccines may differ depending upon the age at which they are administered. This may require a separate study where PRRs are calculated for different age groups – to determine if the vaccines are more associated with devastating outcomes for younger ages.

## Conclusion

This study confirms that MMR is strongly associated with autism, as evidenced by very high PRR scores, and by a consistency in high PRR scores across multiple related symptoms.

However, this study also alerts the public to other vaccines with similar associations.

I hope this study serves to convey the power of this dataset for detecting safety signals. You have seen how it can detect elevations in the incidence of multitudes of related symptoms, enabling us to see Related Symptom Consistency. The symptom inventory is very rich, consisting of 16849 unique symptoms, enabling a detailed and thorough investigation of any vaccine. Finally the results can be ranked and compared. You can view all the symptoms for any one vaccine, ranked by PRR, or you can view all the vaccines for any one symptom, ranked by PRR.

The data is available

- [Safety Signal](#)
- [Excel Spreadsheets](#)

Background information on the creation of the dataset is available

- [Powerpoint](#)
- [PDF](#)

This dataset is critical for informed choice. It is highly recommended that people consult this data before taking any vaccine for themselves or for their children.

Please share this document widely,  
especially with anyone considering  
parenthood.

## APPENDIX A : Additional Symptoms Related to Autism

- Developmental delay
- Developmental regression
- Lack of spontaneous speech
- Speech disorder
- Speech disorder development
- Speech sound disorder
- Seizures
- Cerebral palsy
- Hearing loss

See : [Increase in Developmental Disabilities Among Children in the United States | CDC](#)

VACCINE	Developmental delay
PER	649.49
DTPIPV	490.63
DTPPVHBPB	70.32
HBHEPB	51.18
6VAX-F	46.64
DTAPHEPBIP	46.41
DTAPIPVHIB	45.46
MMR	31.06
PNC	30.20
MEN	24.31
DTP	17.65
DTPHIB	16.77
DTAP	16.29
RV1	14.15
HEP	12.12
PNC13	11.55
DT	9.37
HIBV	6.13
MENB	5.09
IPV	4.88
HPVX	4.17
RV5	4.00
DTAPIPV	3.57
HEPA	3.30
TYP	3.24
UNK	2.67

VACCINE	Developmental regression
6VAX-F	131.55
DTAP	34.90
MMR	31.78
DTAPIPVHIB	24.91
PNC13	17.87
MMRV	15.15
MENB	14.73
IPV	13.76
DTP	12.28
HIBV	11.57
RV5	11.48
FLUN4	10.54
HEPA	9.45
UNK	7.73
PNC	7.39
MNQ	3.80
HEP	3.02
FLU4	2.02
TDAP	1.28
VARCEL	1.10
FLUX	1.08
HPV4	0.72
COVID19	0.02

VACCINE	Lack of spontaneous speech
COVID19	7.83
MMR	3.12
FLU3	0.53

VACCINE	Speech disorder
DTAPIPV	9.68
MMR	7.09
DTPIPV	6.24
PER	6.16
DTP	4.71
MEA	4.56
HBHEPB	3.94
JEV1	3.83
DF	3.34
DTPHIB	3.23
HEP	2.43
DTAPHEPBIP	2.20
DTAP	2.08
DTAPIPV	2.07
RUB	2.06
YF	2.02
6VAX-F	1.79
LYME	1.79
FLUR3	1.78
FLUX(H1N1)	1.76
RAB	1.70
HPV2	1.63
MEN	1.62
HEPAB	1.60
HPV4	1.58
JEV	1.58

VACCINE	Speech disorder development
DTPIHI	528.06
DTPIPV	306.03
6VAX-F	43.85
DTAPHEPBIP	32.56
MMR	30.02
DTAPIPVHIB	25.13
DTAP	21.18
PNC	20.32
MEA	18.56
MEN	17.05
MMRV	15.29
IPV	13.88
RUB	12.59
PNC13	9.29
DT	8.81
HEP	7.96
HIBV	7.71
HEPA	5.21
UNK	4.45
DTAPIPV	3.36
MENB	2.37
SMALL	2.29
VARCEL	1.49
MNQ	1.27
RV5	1.24

VACCINE	Speech sound disorder
RAB	17.04
DTAP	8.92
MMR	3.47
VARCEL	3.19
PPV	2.00
COVID19	1.83
DTPIHI	0.00

VACCINE	Cerebral palsy
DTPIPV	488.39
PER	482.67
HBHEPB	154.25
DTP	26.60
HPVX	25.50
FLUR4	18.22
PNC	16.02
HIBV	12.37
SMALL	7.35
MMR	6.79
HPV2	4.11
FLU(H1N1)	4.05
MENB	3.78
HPV9	3.00
TDAP	2.78
PNC13	2.17
HEP	1.57
VARZOS	1.35
VARCEL	1.18
COVID19-2	1.03

VACCINE	Hearing impaired
LYME	53.38
JEV	44.09
DTPHIB	17.99
MMR	17.24
PNC	14.34
MEN	12.93
DTAPHEPBIP	12.28
ANTH	12.22
FLU(H1N1)	11.95
FLUN3	10.82
RAB	9.11
HEP	8.90
HEPAB	7.95
FLU3	5.98
HPV4	5.74
IPV	5.24
FLUN(H1N1)	5.05
TTOX	4.89
FLUN4	4.01
TDAP	3.52
TYP	3.48
MNQ	2.91
PPV	2.47
DTAP	2.36
HEPA	2.35
HIBV	2.17

## APPENDIX B : Childhood vaccine schedule

The results of PRR analysis reveal that MMR, DTAP, HEP, HIBV and PNC vaccines are all associated with a significant risk of autism (brain damage).

MMR, DTAP, HEP are included on the childhood vaccine schedule ! Please consider this information before allowing your child to receive vaccines.

A doctor can get £400 for every 2 year old who is fully vaccinated with 24 vaccines ([incentives paid to doctors](#)). However, the money is only paid out if the doctor reaches a quota of 63% of their clients. The schedule includes 4 DTAP vaccines, 3 IPV vaccines, and 1 MMR vaccine. The effect of this schedule will be the creation of a dependent population of people with emotional and intellectual disability.

CHILDHOOD IMMUNIZATIONS – COMBO 10	
Product lines	BCN Commercial
Source	HEDIS
Description	<p>The percentage of children 2 years of age who meet the combination 10 criteria on or before their second birthday:</p> <ul style="list-style-type: none"><li>• (4) DTaP* vaccinations</li><li>• (3) IPV* vaccinations</li><li>• (1) MMR vaccination</li><li>• (1) VZV vaccination</li><li>• (3) HiB* vaccinations</li><li>• (3) Hepatitis B vaccinations</li><li>• (4) PCV* vaccinations</li><li>• (1) HepA vaccination</li><li>• (2 or 3) RV* vaccinations</li><li>• (2) Influenza** vaccinations</li></ul> <p>*Vaccinations administered prior to 42 days after birth are not counted as a numerator hit.</p> <p>**Vaccinations administered prior to 180 days after birth are not counted as a numerator hit.</p>
Continuous enrollment	Must be continuously enrolled 12 months prior to child's second birthday