

# Cardiac Disorder following COVID Jabs

By Craig Paardekooper (19<sup>th</sup> August 2022)

Myocarditis is inflammation of the heart muscle (myocardium). The inflammation can reduce the heart's ability to pump blood. Severe myocarditis weakens the heart muscle so much that the rest of the body doesn't get enough blood – causing extensive tissue and organ failure. A weakened circulation increases the formation of clots, which can form in the heart, leading to a stroke or heart attack.

## Background

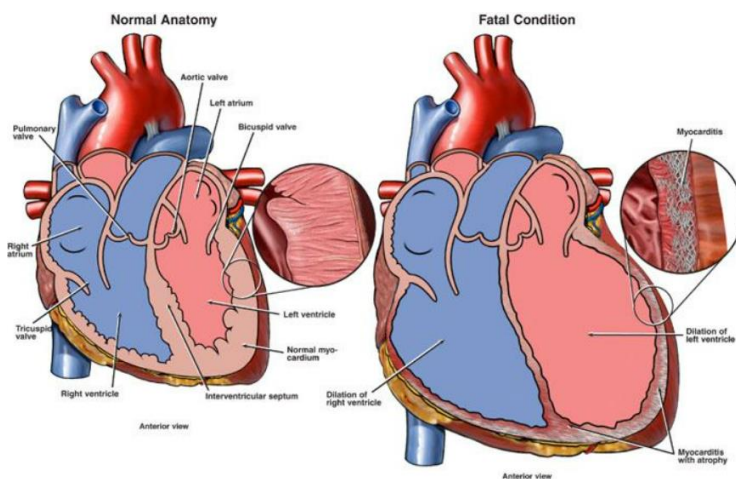
### 1. Damage is caused by the spike protein

The heart is a muscle, and myocarditis is damage to that muscle. The main clinical manifestations of cardiac injury are myocarditis, heart failure (HF), arrhythmia, and Takotsubo cardiomyopathy (TCM).

Vaccine lipid nano-particles, carrying their mRNA payload for the spike protein, enter the blood stream and will naturally infect those cells lining blood vessels (endothelial cells) and also those cells lining the heart, the heart muscle cells (called cardiomyocytes).

When heart cells become infected with the vaccine mRNA, those heart cells will start producing the spike protein. The immune system regards the spike protein as a foreign body, and so it will launch an immune attack against those heart cells, sending white blood cells (lymphocytes and macrophages) to infiltrate the heart muscles, causing inflammation. Consequently, the heart will develop serious damage such as –

- cardiomyocyte degeneration
- cardiomyocyte death
- severe myocarditis caused by lymphocyte and macrophage infiltration of heart muscle cells



Because the walls of the heart (cardiomyocytes) are degraded and weakened, the internal pressure causes the heart to swell to an enormous size – pushing aside the other organs. In some cases the heart can literally burst or explode.

The mRNA in COVID vaccines causes your cells to produce the spike protein, and several studies now show that the spike protein causes heart damage.

[Coronavirus spike protein activated natural immune response, damaged heart muscle cells \(medicalxpress.com\)](https://www.medicalxpress.com)

[New study links COVID vaccines to 25% increase in cardiac arrest for both males & females](#)

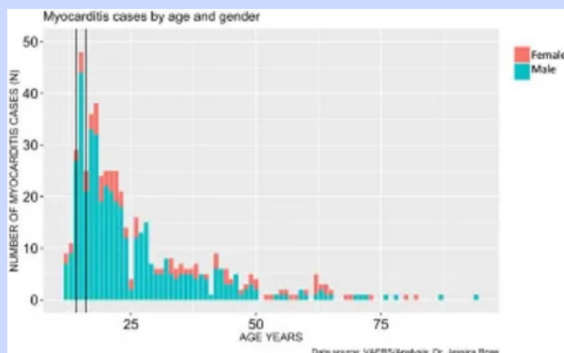
[New research links COVID spike protein to heart damage](#)

## 2. Younger Age Groups are More at Risk

Jessica Rose has demonstrated that younger age groups are more at risk of myocarditis following COVID-19 vaccination. In addition, she has demonstrated that myocarditis risk is far higher after the second dose

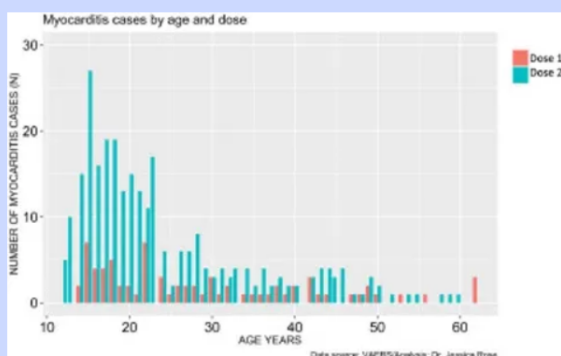
[A Report on Myocarditis Adverse Events in the U.S. Vaccine Adverse Events Reporting System \(VAERS\) in Association with COVID-19 Injectable Biological Products \(substack.com\)](#)

In addition to very high rates of myocarditis cases in children aged 12-15, these rates are observed much more commonly in males. [Figure 4](#) shows the distribution of myocarditis cases by age in males versus females. The distribution is right-skewed toward the younger age groups, and this is statistically significant ( $I=1.28$ ), and males represent 80% of all cases. The most frequent occurrences were in 15-year-old boys ( $N= 44$ ) and 18-year-old girls ( $N= 6$ ).



## 3. Second Dose causes Higher Frequency of Myocarditis

The prevalence of myocarditis reports in the VAERS system is much higher in the context of dose 2 when comparing by age (t-test: p-value=0.00092) and more highly associated with BNT162b2 (74% of all dose 2 reports are in the context of BNT162b2). It is also much higher in males when comparing by age (t-test: p-value=0.000009). Dose 2 is generally administered 3 weeks following the first dose assuming the individual survives dose 1 without any major complications, including death. The BNT162b2 maintains a 21-day interval between dose 1 and 2 while the mRNA-1273 maintains a 28-day interval.<sup>6</sup> [Figure 5](#) reveals that myocarditis reports peak in frequency at 6X for dose 2 in 15-year-old males. It also reveals that regardless of age, myocarditis cases are more frequently reported following dose 2.



See also :

[Dr. McCullough On Myocarditis In Adolescents After COVID Vaccine – The Burning Platform](#)

[Risk of Myocarditis Increased Up to Forty-Fold in Adolescents – Childrens' Health Defense Europe \(childrenshealthdefense.eu\)](#)

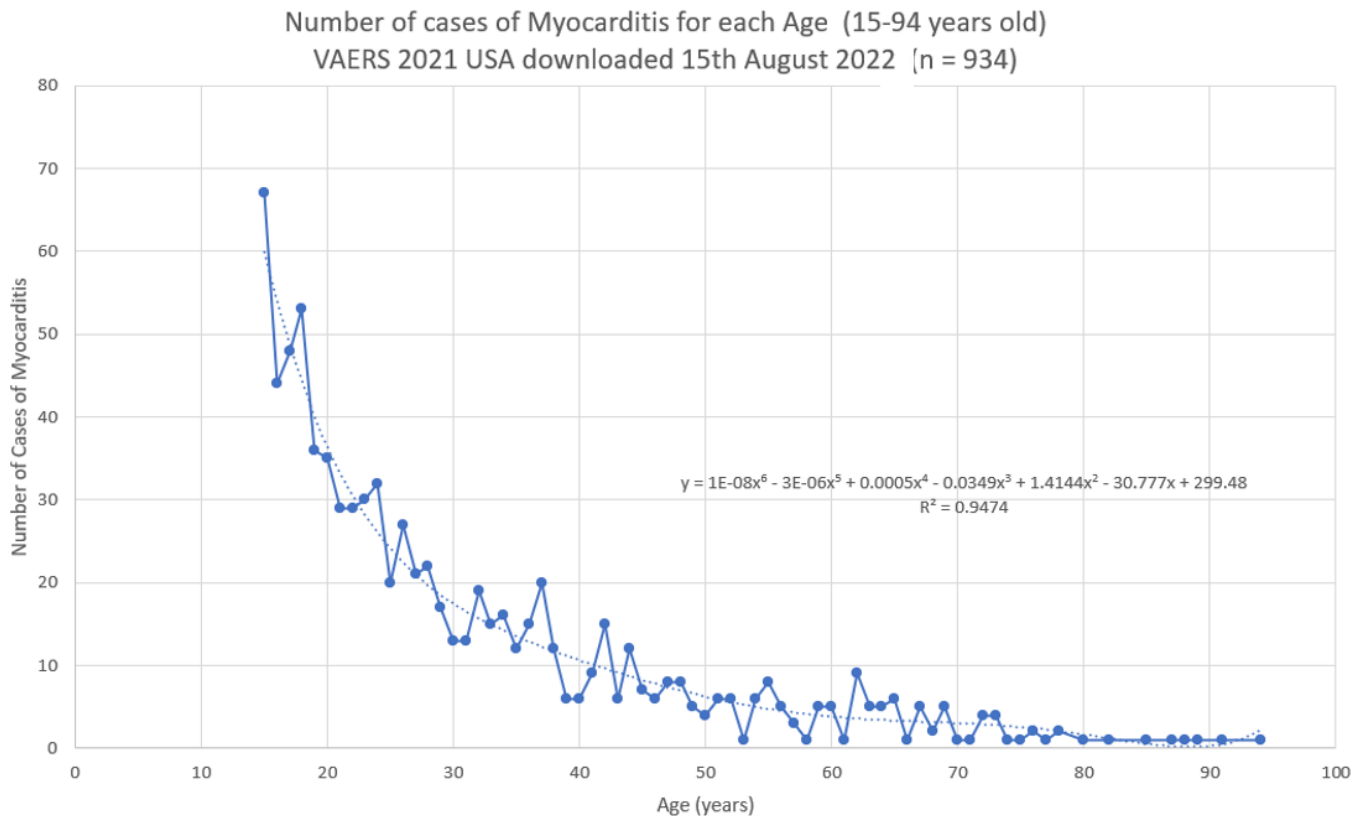
## Age Distribution of Myocarditis following COVID Jab

In this study, I downloaded the VAERS USA data for the whole of 2021 (downloaded 15<sup>th</sup> August 2022), and counted the number of cases where myocarditis was mentioned as a symptom, and the age of each recipient.

There were a total of 934 cases where the age of the recipient was provided.

Then I created a pivot table to count the number of cases of myocarditis for each age. The graph below shows the results.

## Results



The graph shows a consistent increase in the number of cases of myocarditis with declining age for COVID 19 vaccine recipients. If we extrapolate the line back to year 0, we can see that it cuts the y axis at 300 – which means that babies will have 4.5 times more cases of myocarditis compared to 15 year-olds. This suggests that the incidence of myocarditis halves for each 7 years that age increases, approximately.

It is extraordinary that there is a consistent increase in cases of myocarditis with declining age !

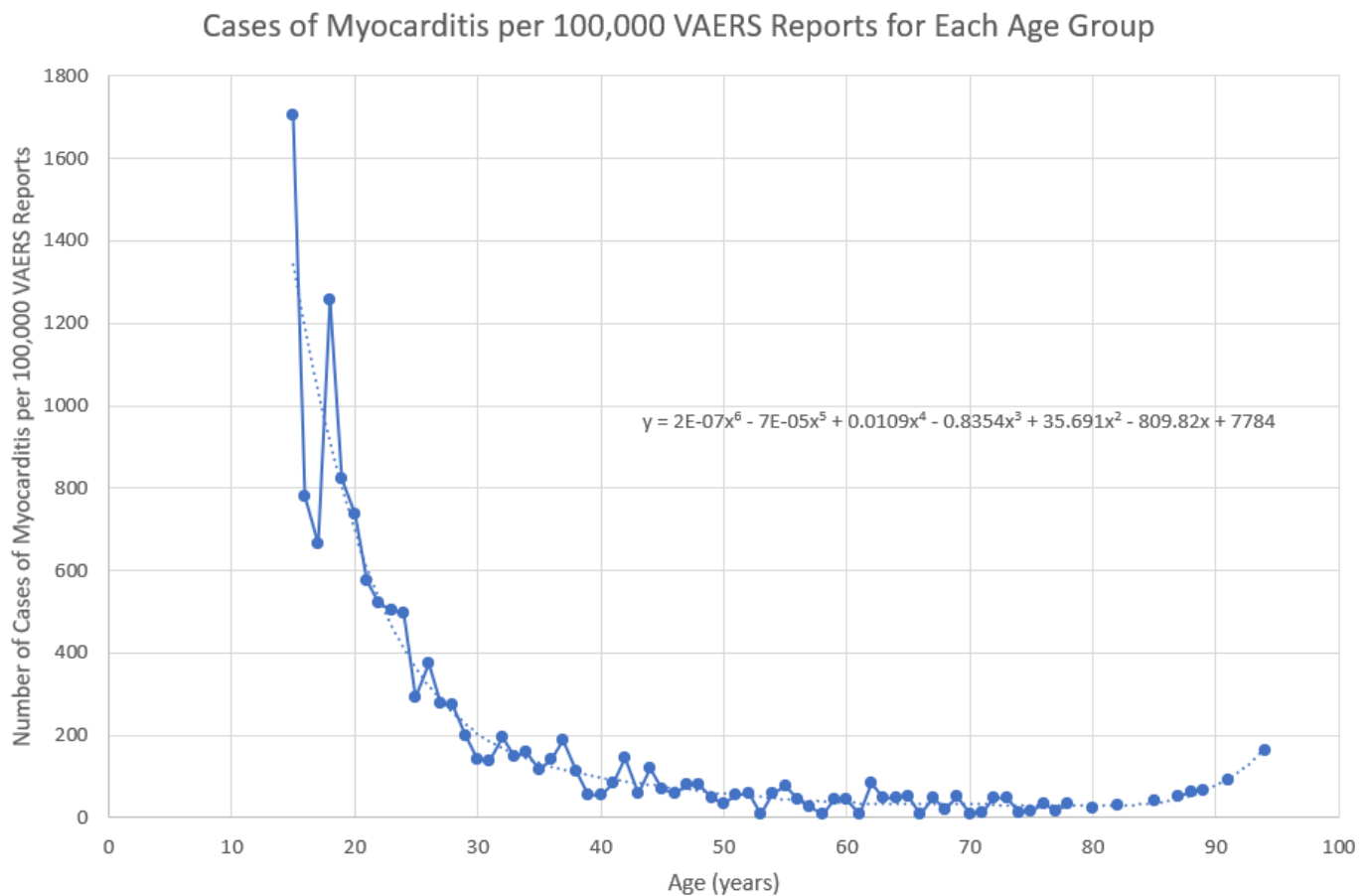
This means that babies will have approximately –

- 4 x the risk compared to 14 year-olds
- 8 x the risk compared to 21 year-olds
- 16 x the risk compared to 28 year-olds
- 32 x the risk compared to 35 year-olds

The graph is a clear indicator that younger age groups are at a much higher risk of myocarditis compared to older age groups. This was especially so, since the population size of adolescents was smaller than that of middle aged groups – and hence would be expected to produce a lower, not higher, incidence. Young people had only recently begun vaccination, so their population was less than older age groups who began vaccination earlier in the year.

## Number of Cases of Myocarditis per 100,000 VAERS Reports (of Adverse Reactions) for each Age Group

In order to compensate for population size effects, I divided the number of cases of myocarditis for each age group by the total number of records (all adverse reactions) for that age group in VAERS. This gives a measure of the % of reports for each age group with symptoms of Myocarditis.

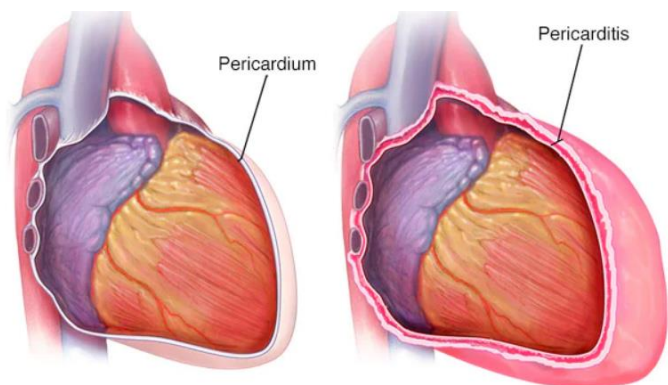


The resulting graph shows that the risk of myocarditis starts jumping up to a very high level as age decreases. The graph intercepts the y axis at 7784 (based on the best fit polynomial equation shown on the graph), so the estimated incidence of myocarditis in babies (at age = 0) is 7784 cases per 100,000 adverse reports – which is 4.5 x the incidence for 15 year-olds.

So, based on VAERS data, we would expect that babies would develop myocarditis in 7.78 reports for every 100 adverse event reports submitted after COVID vaccination – a rate of 7.78%

## Pericarditis

Pericarditis is swelling and irritation of the thin, saclike tissue surrounding the heart (pericardium). Pericarditis often causes sharp chest pain. The chest pain occurs when the irritated layers of the pericardium rub against each other.



© MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH. ALL RIGHTS RESERVED.

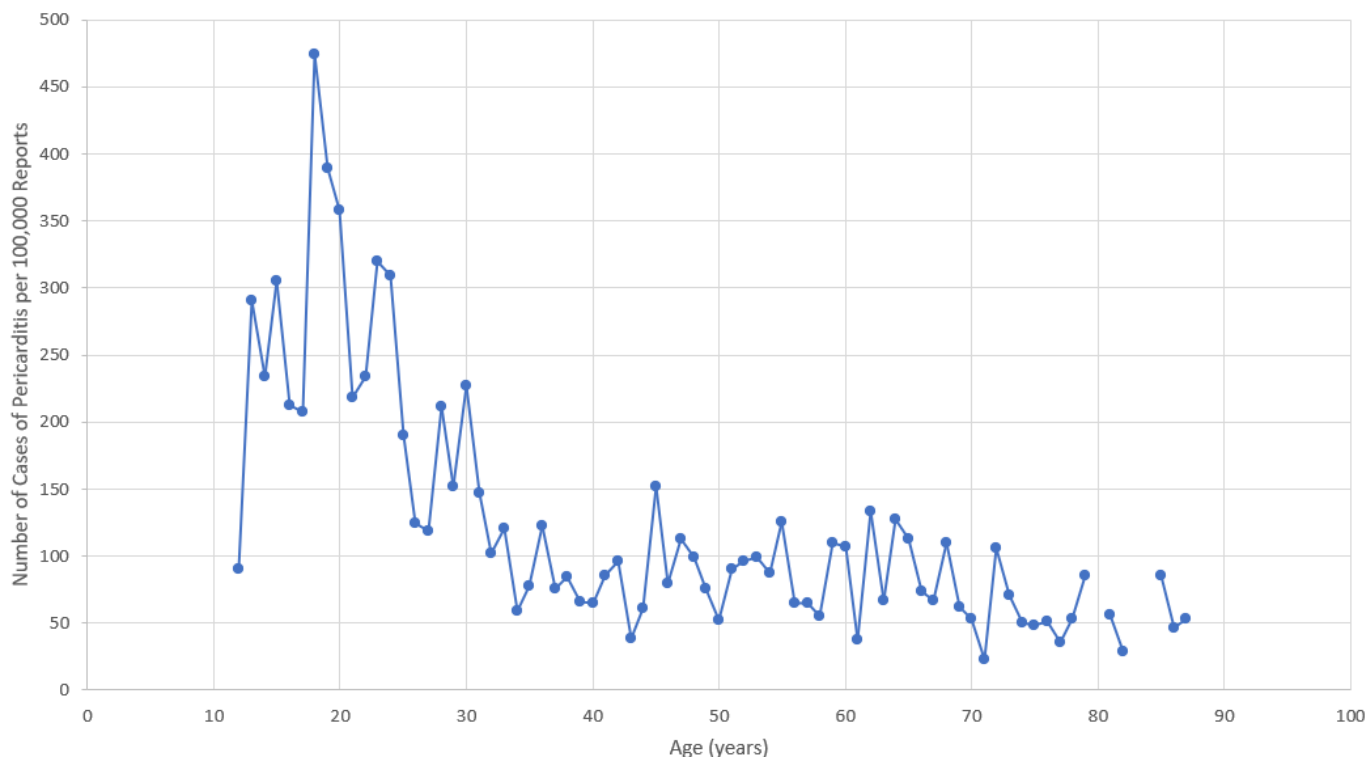
## Pericarditis

The heart on the left shows the typical outer lining of the heart (pericardium). The heart on the right shows a swollen and infected lining (pericarditis).

## Age Distribution of Pericarditis following COVID Jab

VAERS USA 2021 records 643 cases of pericarditis. Once again, in order to compensate for population size effects, I divided the number of cases of pericarditis for each age group by the total number of records (all adverse reactions) for that age group in VAERS. This gave me a measure of the % of reports for each age group with symptoms of pericarditis.

Pericarditis Cases per 100,000 VAERS Records for Each Age Group  
VAERS USA 2021 downloaded 15th August 2022



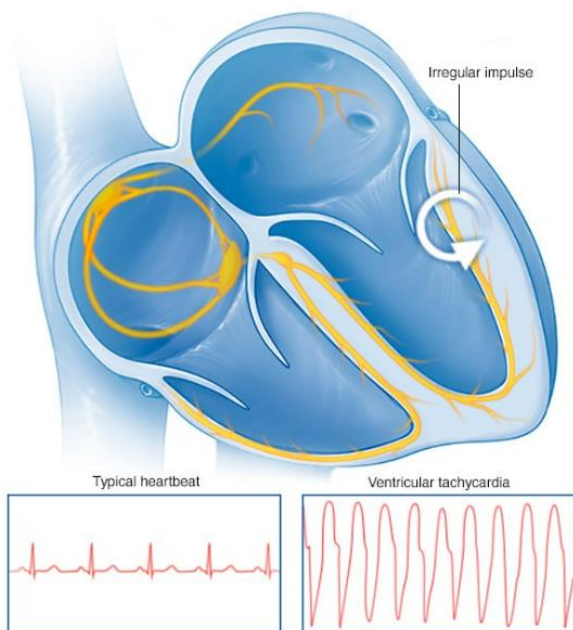
Following COVID-19 jabs, the % of reports involving pericarditis is 4 x higher for adolescents compared to people over 30 years of age. This suggests a greater vulnerability to pericarditis amongst adolescents following COVID-19 jabs.

## Tachycardia

Tachycardia is the medical term for a heart rate over 100 beats a minute. If left untreated, some forms of tachycardia can lead to serious health problems, including heart failure, stroke or sudden cardiac death.

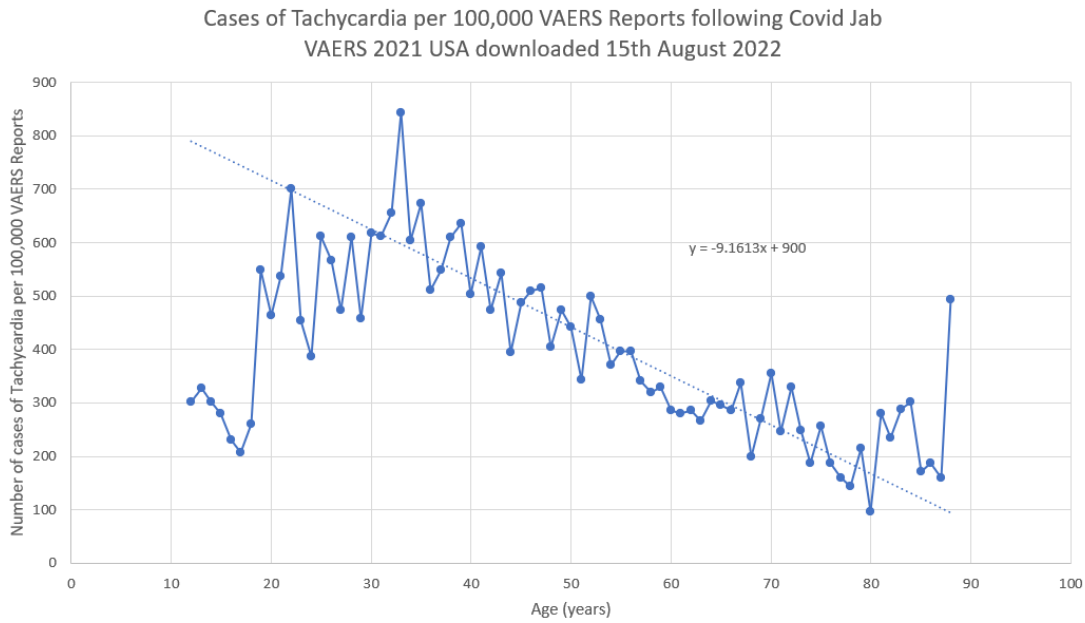
Types of tachycardia include:

- **Atrial fibrillation (A-fib).** This is the most common type of tachycardia. Chaotic, irregular electrical signals in the upper chambers of the heart (atria) cause a fast heartbeat. A-fib may be temporary, but some episodes won't end unless treated.
- **Atrial flutter.** Atrial flutter is similar to A-fib, but heartbeats are more organized. Episodes of atrial flutter may go away themselves or may require treatment. People who have atrial flutter also often have atrial fibrillation at other times.
- **Ventricular tachycardia.** This type of arrhythmia starts in the lower heart chambers (ventricles). The rapid heart rate doesn't allow the ventricles to fill and squeeze (contract) to pump enough blood to the body. Ventricular tachycardia episodes may be brief and last only a couple of seconds without causing harm. But episodes lasting more than a few seconds can be life-threatening.
- **Supraventricular tachycardia (SVT).** Supraventricular tachycardia is a broad term that includes arrhythmias that start above the ventricles. Supraventricular tachycardia causes episodes of a pounding heartbeat (palpitations) that begin and end abruptly.
- **Ventricular fibrillation.** Rapid, chaotic electrical signals cause the ventricles to quiver instead of contracting in a coordinated way. This serious problem can lead to death if the heart rhythm isn't restored within minutes. Most people who have ventricular fibrillation have an underlying heart disease or have experienced serious trauma, such as being struck by lightning.



## Age Distribution of Tachycardia following COVID Jab

VAERS USA 2021 records 2846 cases of tachycardia



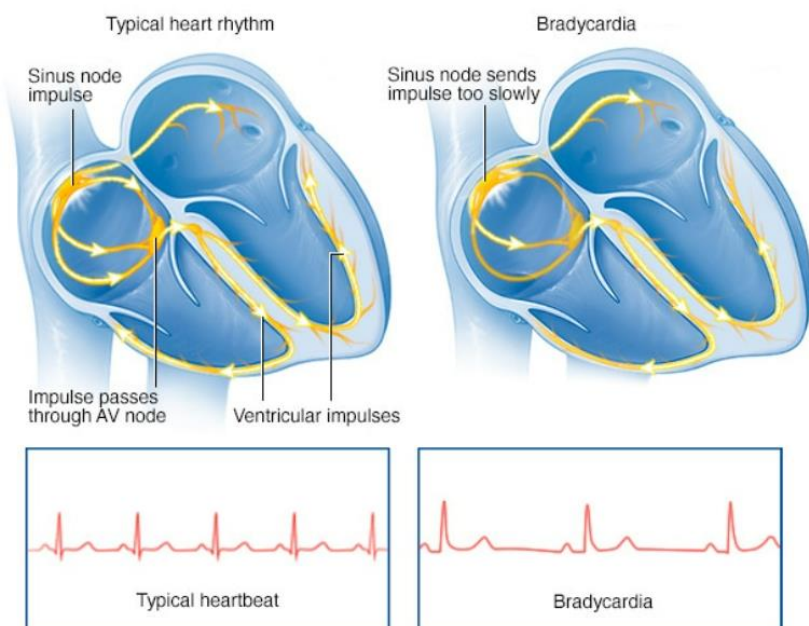
By extrapolating the graph back to the y axis, we can estimate the incidence of tachycardia at year 0. The estimated incidence of Tachycardia in babies at year 0, is about 900 per 100,000 = 0.9%

The incidence of Tachycardia peaks at age 33, and shows a steady decline as age increases from then.

Young people, aged 20-30, who have received the COVID jab, have a rate of tachycardia that is 2.5 x the rate of 75 year-olds, who have also received the COVID jab.

## Bradycardia

If you have bradycardia, your heart beats fewer than 60 times a minute. Bradycardia can be a serious problem if the heart rate is very slow and the heart can't pump enough oxygen-rich blood to the body. If this happens, you may feel dizzy, very tired or weak, and short of breath.

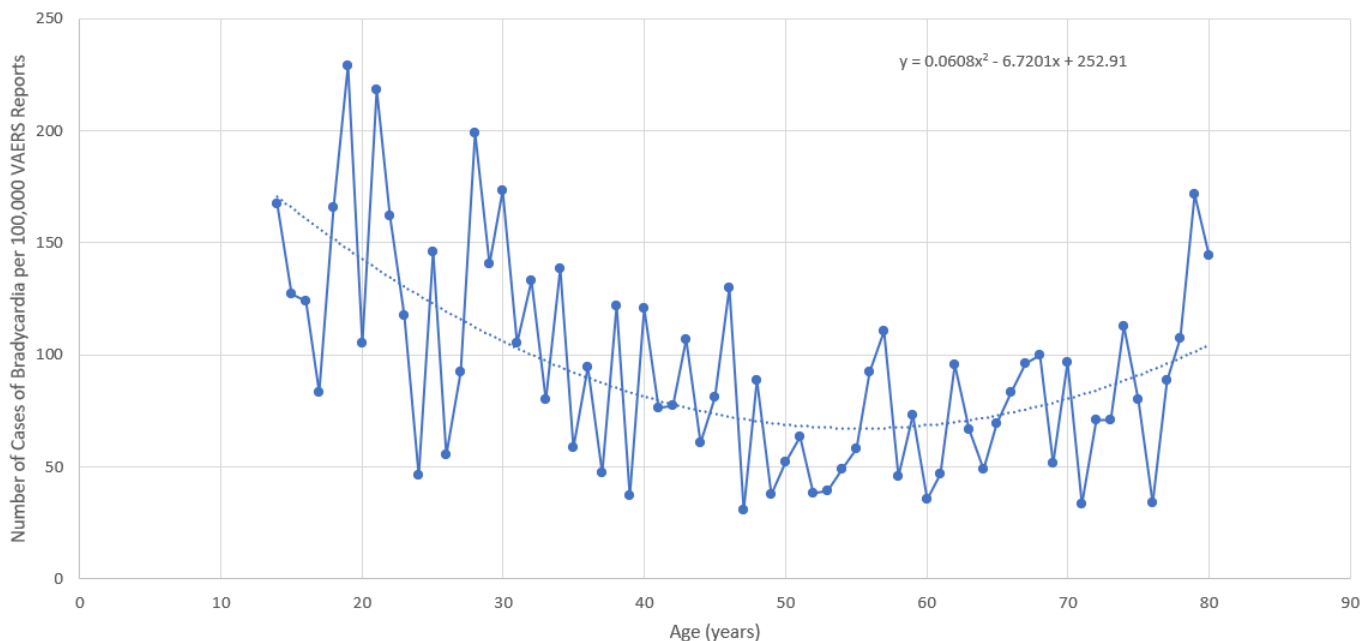


© MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH. ALL RIGHTS RESERVED.

## Age Distribution of Bradycardia following COVID Jab

VAERS USA 2021 records 628 cases of bradycardia.

Cases of Bradycardia per 100,000 VAERS Reports for Ages 14 - 80  
VAERS 2021 USA downloaded on 15th August 2022



The estimated incidence of Bradycardia in babies at year 0, is 253 cases per 100,000 adverse reaction reports = 0.25%. Following COVID-19 jabs, cases of bradycardia are twice as frequent for adolescents compared to older age groups.

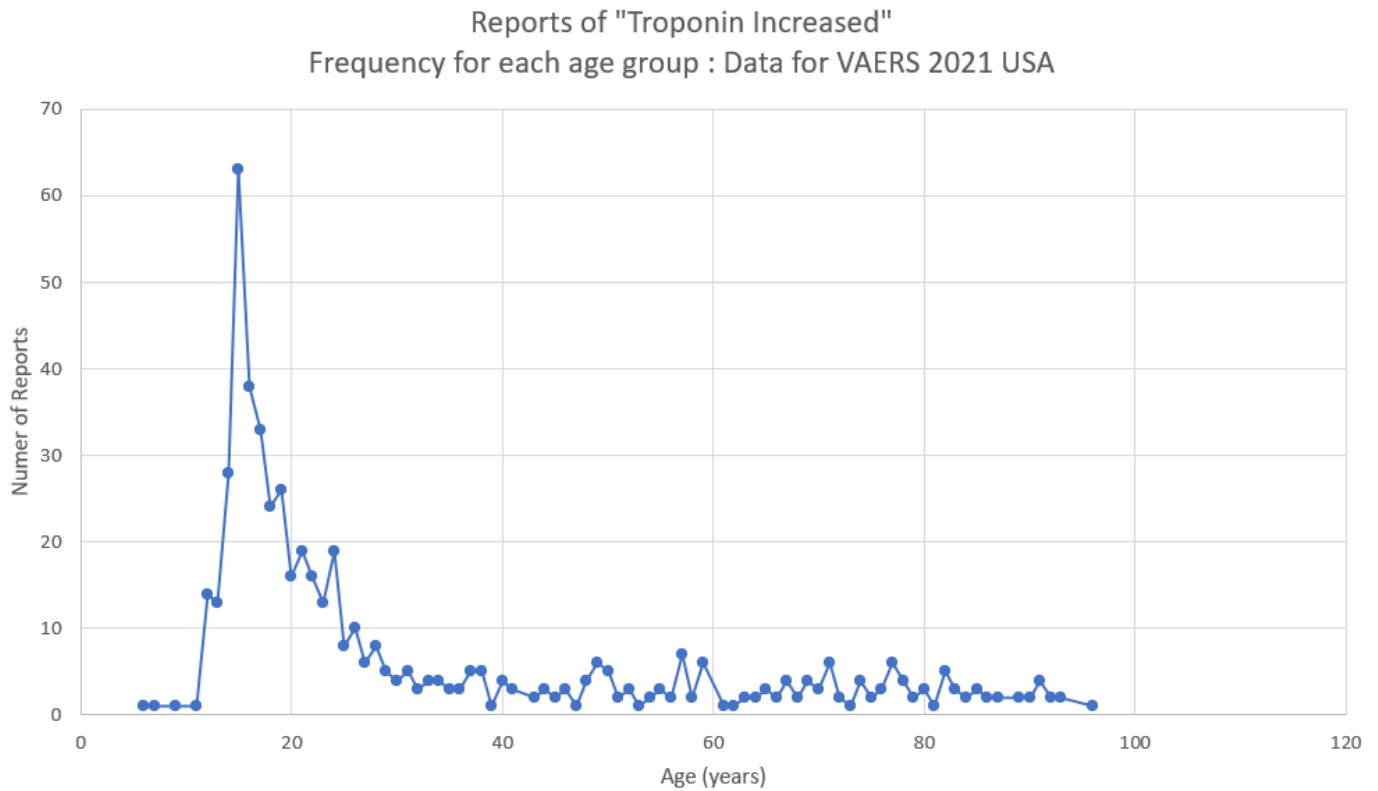


## Increase in Troponin

An elevated level of troponin is an indicator of heart damage. I did a search of the 5 symptoms columns for the word "Troponin increased" - for VAERS records 2021 USA.

## Age Distribution of Elevated Troponin following COVID Jab

VAERS USA 2021 records 556 cases of elevated troponin.

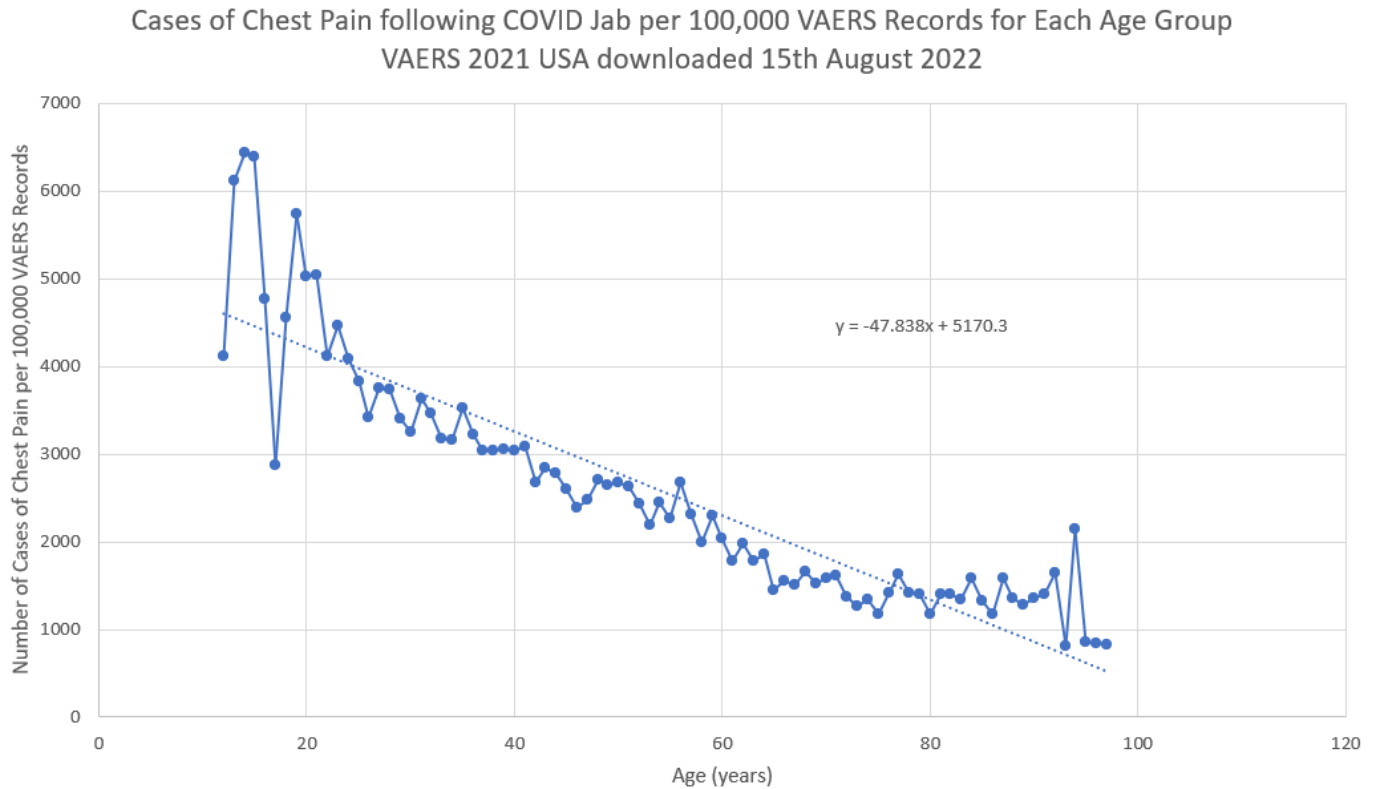


The frequency of reported cases of elevated troponin was far higher amongst those under 30 years of age. This was interesting because the observation of elevated troponin would have been made by doctors and entered into VAERS by them. The incidence of elevated troponin amongst adolescents rises to 9 x that of people aged over 30 years old – indicating that there is a much greater risk of heart damage for adolescents.

## Chest Pain

### Age Distribution of Chest Pain following COVID Jab

VAERS USA 2021 records 19,799 cases of chest pain following the COVID jab.



The estimated incidence of chest pain in babies at year 0, is 5170 cases per 100,000 adverse reports = 5.1%, based on the straight line. However, there is a rapid rise in cases below 25 years of age, which departs from the straight line, suggesting that 5.1% may be an under-estimation for babies.

## **The Thailand Study**

The Thailand myocarditis study ([Cardiovascular Effects of the BNT162b2 mRNA COVID-19 Vaccine in Adolescents\[v1\] | Preprints](#)) found 7 cases of myocarditis in 301 adolescent subjects – a rate of 1 in 43 or 2.3%.

The Thailand study also found that the % of adolescents who developed abnormal electrocardiogram was 18%. Therefore we might expect a very large % of babies, perhaps ALL babies (100%), to have abnormal EKG if exposed to the COVID vaccine. Whilst this might not be fatal, it should be detectable, and will provide a valuable diagnostic test of exposure to COVID vaccine in babies.

I therefore propose a study of the EKG of vaccinated babies compared to unvaccinated ones – and a study of the EKG babies of vaccinated mothers compared to the EKG of babies of unvaccinated mothers.

## Conclusion

**Myocarditis** : This study confirms that the young are at a much higher risk of myocarditis than older age groups following COVID-19 jabs.

- The risk of myocarditis for adolescents is **10 times the risk** for people over 50 years old.
- The risk of myocarditis for babies is estimated to be about **4.5 times the risk** for adolescents – 45 x that of 50 year-olds.

**Pericarditis, Tachycardia, Bradycardia and Chest Pain** also show an elevated risk for young people following COVID-19 jabs.

**Troponin** : When looking for the symptom of “troponin increase” in VAERS, it was found that adolescents have 9 x the number of reports compared to older age groups following COVID-19 jabs. Since elevated troponin is an indicator of heart damage, this finding suggests that adolescents are at higher risk of heart damage following COVID-19 jabs.

The COVID-19 vaccines come with a significantly higher risk of heart injury for young people – as measured by the relative frequency of myocarditis, pericarditis, tachycardia, bradycardia, chest pain and elevated troponin levels for adolescents compared to older age groups. Heart damage in the young and healthy results in reduced performance, and disability that will impact recreational, educational and working life.

## References

### Research Linking Cardiac Disorders with Covid Jabs

So do experimental studies show if the spike protein causes damage to heart muscle cells?

[Coronavirus spike protein activated natural immune response, damaged heart muscle cells \(medicalxpress.com\)](https://www.medicalxpress.com)

[New study links COVID vaccines to 25% increase in cardiac arrest for both males & females](#)

[New research links COVID spike protein to heart damage](#)

[Myocarditis and Pericarditis in Adolescents after First and Second Doses of mRNA Covid-19 Vaccines.pdf \(nih.gov\)](#)

[The effects of gender and age on occurrence of clinically suspected myocarditis in adulthood - PubMed \(nih.gov\)](#)

[Cureus | Myocarditis Following the Second Dose of COVID-19 Vaccination in a Japanese Adolescent](#)

[Myocarditis after BNT162b2 mRNA Vaccine against Covid-19 in Israel | NEJM](#)

[Myocarditis Cases Reported After mRNA-Based COVID-19 Vaccination in the US From December 2020 to August 2021 | Vaccination | JAMA | JAMA Network](#)

[Clinically Suspected Myocarditis Temporally Related to COVID-19 Vaccination in Adolescents and Young Adults: Suspected Myocarditis After COVID-19 Vaccination | Circulation \(ahajournals.org\)](#)

[\[PDF\] Myocarditis following COVID-19 vaccination in adolescents and adults: a cumulative experience of 2021 | Semantic Scholar](#)

[Cardiac MRI of myocarditis after Covid vaccination in adolescents | Mirage News](#)

[Acute Myocarditis in Adolescents Following Pfizer-BioNTech COVID-19 Vaccination | PracticeUpdate](#)