

COVID-19 Vaccines

(shared on 8 August 2021 as part of Pastor Cory's sermon "Spirit Led Discernment")

Dr. Timothy Tan
(MBCChB, FACEM)

Main points

- Why vaccinate
- Vaccine efficacy
- Vaccine side effects

Why vaccinate – personal level

- Prevents you from becoming seriously ill / dying from COVID-19
- Reduces the risk of you spreading the COVID-19 virus to others
- Reduces the risk of long COVID
 - 5% (AUS), 10% (UK) of COVID-19 patients can have debilitating fatigue, headaches, muscle aches, breathlessness, neurological problems, and chest pain for months

Why vaccinate – Community level

- Makes it harder for the virus to spread → less people dying or needing hospital care
- Reduces the ability of the COVID-19 virus to mutate and become more virulent
- Protects the hospital system from being overwhelmed → reduces both COVID-19 and non-COVID-19 deaths

Vaccine efficacy

- COVID-19 vaccine efficacy is measured by how well it prevents you from developing symptoms when you are infected, severe disease and death
- Example: What does 85% efficacy mean
 - If 100 vaccinated people are infected with COVID-19, 85% efficacy means only 15 would develop symptoms

Pfizer v AstraZeneca

Two doses of AstraZeneca are comparable to Pfizer in reducing serious illness and death from the Delta variant, the Doherty Institute says.

% reduction

	Pfizer		AstraZeneca	
	1 dose	2 doses	1 dose	2 doses
Symptomatic infection	33%	83%	33%	61%
Hospitalisation	71%	87%	69%	86%
ICU admission	71%	87%	69%	86%
Mortality	71%	92%	69%	90%

Common vaccine side effects

- Pain/swelling to arm, fevers, chills, tiredness, headache
 - Indications that your immune system is doing what it should do

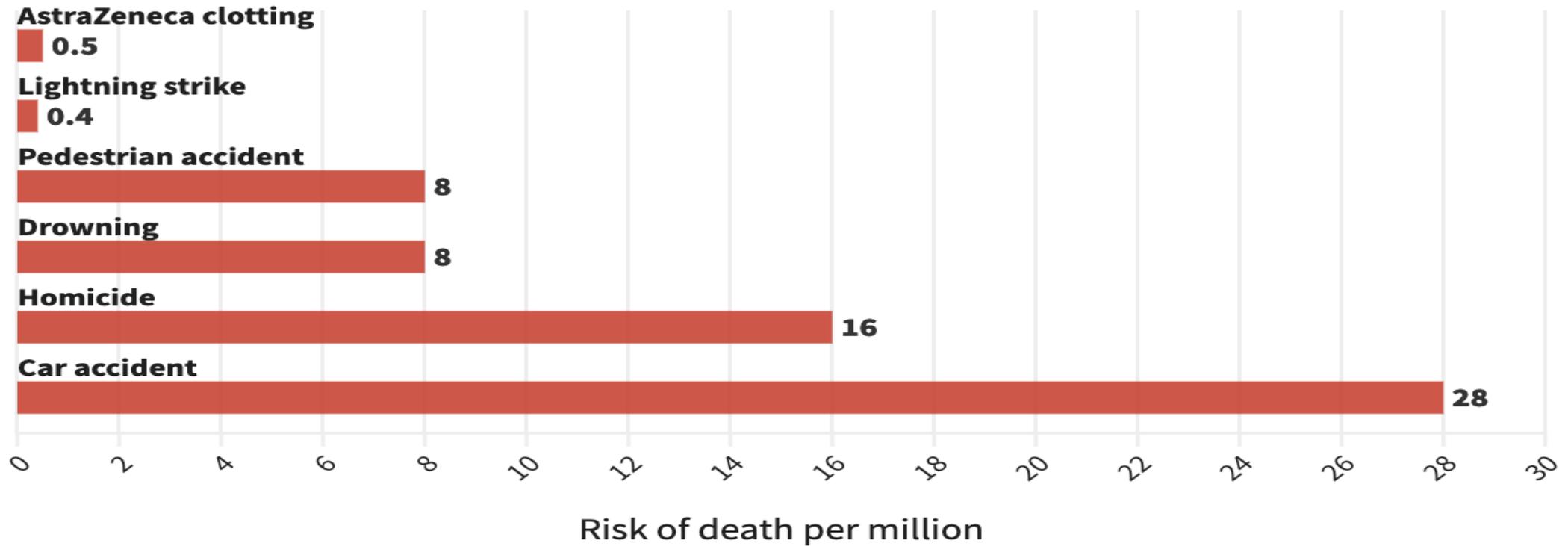
- Risk of severe allergy/anaphylaxis is 2.47 per 10,000 (0.025%)

Astra Zeneca and blood clots

- Incidence of blood clots in the normal population is **2 per 100,000** (0.002%)
- Incidence of blood clot from AZ = **2-3 per 100,000** or 0.003%
- In Aus, risk of death from blood clot due to AZ is under **1 per million** or 0.0001%

AZ vaccination vs. other activities

Risk of dying from a TTS blood clot after a dose of AstraZeneca vaccine in Australia vs. annual risk of death from other activities.



Sources: [AstraZeneca data \(health.gov.au\)](https://www.health.gov.au), [lightning risk \(UWA lightning fact sheet\)](#), [other risks \(ABS release 3303.0\)](#).

Pfizer and heart inflammation

- In normal population
 - Females 18-34 yo: **16 per million** (0.0016%)
 - Males 18-34 yo: **37 per million** (0.0037%)
- Pfizer
 - Females 12-29 yo: **4.2 per million** (0.00042%)
 - Males 12-29 yo: **40.6 per million** (0.00406%)

Final thoughts

- It's here to stay, never going away
- As soon as we open borders we will be liable
- As a Christian, I see vaccination as a way for me to love others (Mark 22:39) by following Jesus's commands on loving my neighbour as myself
- Please speak to your doctor if you have any concerns. We are there for you...



Resources

- [health.gov.au](https://www.health.gov.au)
- [nature.com](https://www.nature.com)
- [cdc website](https://www.cdc.gov)
- [gavi.org](https://www.gavi.org)
- WHO
- * Data provided is current as of July 2021.