

The DELTA Scariant

The NSW Chief Health Officer has pointed to the case of two COVID-19 patients under 40 requiring ICU treatment in hospital to highlight the threat posed by the virus. Of the 10 patients currently in ICU one is in their 20s, the other in their 30s, six are over 50 and two are over 70. New South Wales has recorded 44 new coronavirus cases - the highest number of local infections in the state during the latest outbreak.

On 10th July, this was the latest news about the highly infectious Delta strain that is now instilling fear in the Australian population.

But is it representative for the threat this Delta strain actually poses? Let's look at a sample of 92029 cases of attendance to emergency care and deaths of COVID-19 cases in England infected with the Delta variant. This is a better sample than 10! See:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/997418/Variants_of_Concern_VOC_Technical_Briefing_17.pdf

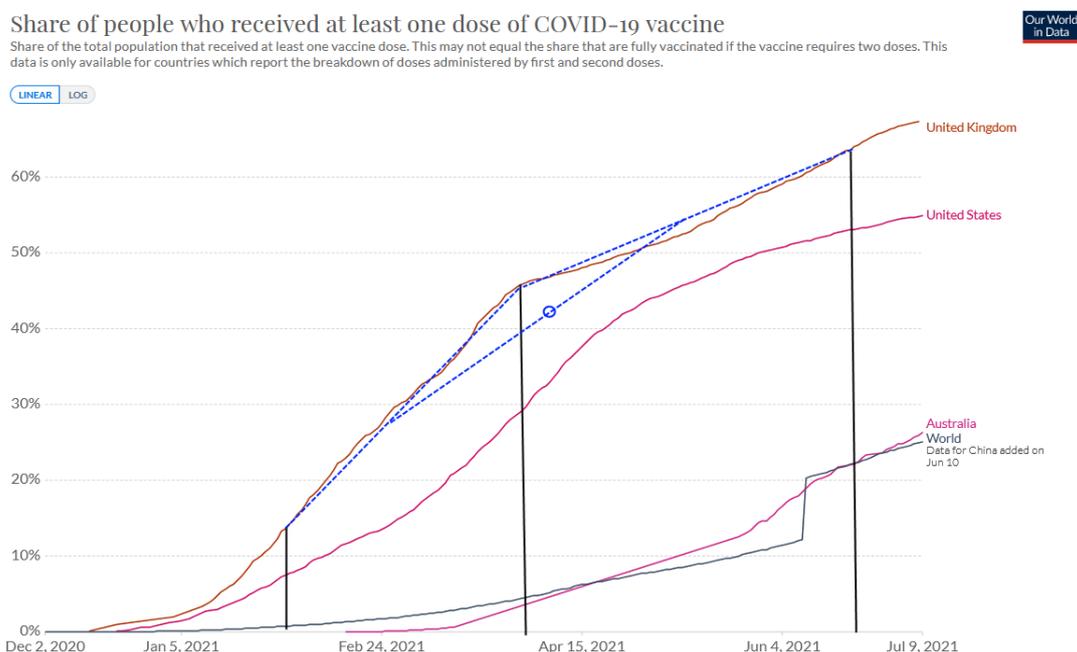
	# cases	case %	deaths	CFR	
Alpha	225085	70.30%	4262	1.9%	1.89%
Delta	92056	28.80%	117	0.1%	0.13%
					CFR for Delta variant is 15 times lower than for the Alpha variant

1 feb - 21 jun	# cases	Deaths	CFR	unlink	vac 1	vac 1+2	unvac	total
Alpha <50	117263	66	0.0563%					
Alpha ≥50	32289	1551	4.8035%					
	149552	1617						
Delta <50	82458	8	0.0097%	9,892	16,004	3,689	52,846	82,431
				12%	19%	4%	64%	
Delta ≥50	9571	109	1.1389%	1,123	3,953	3,546	976	9,598
				12%	41%	37%	10%	
all	92029	117		11,015	19,957	7,235	53,822	92,029
				12%	22%	8%	58%	

First thing to note is that the Case Fatality Ratio (CFR) for the Delta strain is 15 times lower than that of the Alpha strain.

It is claimed that with the high vaccination rates in England the vaccines are working since overall nearly 60% of the people in this sample is unvaccinated. This is a false interpretation of these figures, because this sample is taken in a period from 1 Feb 2021 until 21 Jun 2021. Let's look at the average vaccination rate in this period in England.

To determine this average let's have a look at the vaccination progression pattern.



This is a graph for the whole UK, but given that England takes up 82% of the total UK population it can be expected that this pattern is the same for England.

Not look at the vaccination data from England. See:

<https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-vaccinations/covid-19-vaccinations-archive/>

Generic data:	Total population England		<50	≥50									
	Million	56.287	35,243,298	21,043,663	56,286,961								
	82% Total population UK												
	Million	68.241											
From	https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-vaccinations/covid-19-vaccinations-archive/												
	COVID-19 Weekly announced vaccinations	dates	4 feb; 8-12-20	31-1-21	1 apr: 8-12-20	28-3-21	24 jun: 8-12-20	20-6-21					
	Average vaccination rate for period 1 feb to 21 jun												
			4-feb data	> 80 = 80% vac rate									
			<70 vac 1	<70 vac 1+2									
			3,020,989	111,062									
			average in period		20% of <70 is <50 average in period				average in period				
		vac 1	vac 1+2	vac 1	vac 1+2	<50 vac 1	<50 vac 1+2	<50 vac 1	<50 vac 1+2	≥50 vac 1	≥50 vac 1+2	≥50 vac 1	≥50 vac 1+2
4 feb report		8,100,135	457,779			604,198	22,212			7,495,937	435,567		
average		17,007,579	1,685,667			3,468,666	384,305			13,538,913	1,301,362		
1 apr report		25,915,022	2,913,555	23,939,348	8,165,140	6,333,134	746,397	7,203,495	2,120,798	19,581,888	2,167,158	16,735,853	6,044,342
average		30,871,118	14,644,613			10,938,324	3,857,291			19,932,794	10,787,322		
24 jun report		35,827,213	26,375,670			15,543,513	6,968,185			20,283,700	19,407,485		
			57%	43%	15%		80%	20%	6%		20%	80%	29%
			unvac				unvac of <50				unvac of ≥50		

Conclusions:

In this sample of 92109 cases of infections with the Delta variant (when people attended to emergency care or died!), on average the unvaccinated group was 57%. More specifically:

- 80% of the people younger than 50 years old
- 20% of the people at least 50 years old

64% (max 76% allocating all unlinked to unvaccinated) of cases were unvaccinated whilst the average in the total age group below 50 is **80%**

10% (max 22% allocating all unlinked to unvaccinated) of cases were unvaccinated whilst the average in the total age group of 50 and above is **20%**

This raises serious questions about the efficacy of the vaccines against the delta variant and about the efficacy in reducing the spread of the Delta variant. What is the real benefit in relation to the Delta strain becoming the main strain in recent outbreaks?

It is time to re-evaluate the risk/benefit of a mass vaccination program!