



THE UNIVERSITY OF
**WESTERN
AUSTRALIA**



VaxPoLab

Impact of COVID-19 Vaccine Mandates



CORONAVAX

22 June 2023



COSS | Collaboration on
Social Science
and Immunisation

A/Prof Katie Attwell, Ph.D,
with Amy Morris, Leah Roberts

Acknowledgement of country

I'm privileged to be on Noongar land today.

Noongar people remain the spiritual and cultural custodians of their land, and continue to practise their values, languages, beliefs and knowledge.



Artist: Dr Richard Barry Walley OAM

Background and Aims



- Part of “Coronavax: Preparing Community and Government” – qualitative interviews
- Refusal of COVID-19 vaccines posed risks to individuals, communities, and public health systems.
- Mandates seek to orient the hesitant towards vaccination, but risk polarising / radicalising refusers.
- Little is known globally about the attitudes and experiences of vaccine hesitant and refusing adults in contexts of mandatory COVID-19 vaccination.
- We wanted to understand the reasons for vaccine refusal in the WA community and the impact of mandates on compliance.
- Unique WA context: little community transmission for nearly 2 years; mandates as part of driving up coverage rates for border reopening instead.

Updated Vax Intentions and Status Model

COVID-19
vaccination
status

Reason/s

Acceptor	No concerns about vaccine safety; and	No concerns about vaccine efficacy; and	No concerns about access; and	Accepted the vaccine that was offered, when it was offered		
Cautious Acceptor	May have some concerns about vaccine safety; or	May have some concerns about vaccine efficacy; or	May have some concerns about access; or	May have <i>preferred</i> other vaccine brand, but	Accepted what was offered.	
Coerced/Hostile Acceptor	Concerns about vaccine safety; and/or	Concerns about efficacy; and	Did not want to vaccinate, but was prompted to by mandates			
Wait Awhile	For more data on general vaccine safety; or	For more data on general vaccine efficacy; or	For easier access; or	For other vaccine brand perceived as safer or more effective	To feel at risk from COVID-19 disease	For the vaccines to be mandatory
Refuser	Concerns about vaccine safety; and	Concerns about efficacy; and	No concerns about access (as no intention to vaccinate)			

Open Access Article

‘COVID Is Coming, and I’m Bloody Scared’: How Adults with Co-Morbidities’ Threat Perceptions of COVID-19 Shape Their Vaccination Decisions

<https://www.mdpi.com/1660-4601/20/4/2953>

Vaccine Refusing Cohort



20 October 2021 – mandatory COVID-19 vaccination announced for 75% of Western Australia's workforce

Interview date	Pseudonym	Age	No. of vaccine doses	Employment
14 December 2021	Anne	41	0 doses	Scheduler (Mining)
15 December 2021	Lisa	57	0 doses	Underground truck driver (Mining)
17 December 2021	Messi	53	0 doses, wait for Novavax	Operator (Mining)
20 December 2021	Eden	37	0 doses	Teacher

22 December 2021 – third COVID-19 dose added; 4 January 2022 – third COVID-19 dose available

18 January 2022	Gohan	31	2 doses, booster planned	Network engineer (Mining)
24 January 2022	Grey	38	0 doses	Engineer (Mining)

31 January 2022 – Proof of vaccination requirements implemented for public spaces

1 February 2022	Quinn	56	2 doses, booster planned	Administration officer
2 February 2022	Sparticus	35	0 doses	Geologist (Mining)
14 February 2022	Sophie *	43	0 doses	Nurse
17 February 2022	Tony	41	0 doses	Operations director (Mining)
22 February 2022	Kelly	36	2 doses, booster planned	Offshore
28 February 2022	Alexis	25	0 doses	Urban planner
4 March 2022	Trixie	51	3 doses	Government employee
11 March 2022	Angela	31	0 doses	Teacher
16 March 2022	Brooklyn	31	0 doses	Pilates instructor
4 April 2022	Nicole	48	0 doses	Lab operator (Mining)
8 April 2022	Charlie *	30	1 dose, only intending 2	Electrician (Mining)

Theoretical Basis of Compliance



	VOLUNTARY PROGRAM	MANDATORY PROGRAM
COST OF CONSEQUENCES	No cost	Cost of non-compliance must be higher than what individual perceives as cost of compliance. Perceived cost draws from heuristics (non-rational) High perceived likelihood of detection and sanctions.
NORMATIVE OBLIGATION	Government possesses legitimacy; fulfils duties. Honest, competent, rule of law. Perceptions of legitimacy informed by social cues.	See LHS. Also, sanctions must not appear unfairly punitive.
SOCIAL PRESSURES	Behaviour of wider public and peers shapes compliance. Stigmatised groups or those with alternative views may construct counter-norms, including non-compliance.	See LHS.

Drivers of (non)compliance



	VOLUNTARY PROGRAM	MANDATORY PROGRAM
COST OF CONSEQUENCES	No cost	Employment mandates successfully coerce some, others work around consq (sunk costs). Public space mandates seen as easier to circumvent.
NORMATIVE OBLIGATION	Government and healthcare system illegitimate and dishonest; manipulating data etc. Vax don't prevent infection or transmission and are unsafe, incl causing death. Governments promoting vax against this backdrop are unscrupulous.	Sanctions appear unfairly punitive, esp public space mandates, not seen as effective for or designed for disease prevention. Concentration camps and kidneys: punitive and vengeful governments.
SOCIAL PRESSURES	Some peers reinforce the above views or ostracise refusers, who orient to those who agree with them.	Peers clash about the effects of the mandates, refusers are further ostracised and form networks for mutual aid.

Mandates Work

Jurisdiction	People with at least one dose	% People with at least one dose	People with two doses	% People with two doses	People with three dose	% People eligible with three doses	People with four doses	% People eligible with four doses (aged 30+)
National	20,066,657	97.3%	19,783,927	95.9%	14,295,016	72.3%	5,219,681	43.1%
NSW	6,311,279	97.0%	6,228,836	95.8%	4,379,667	70.4%	1,665,483	44.6%
VIC	5,166,547	97.9%	5,105,908	96.7%	3,796,032	74.4%	1,297,173	40.8%
QLD	3,869,672	93.0%	3,813,250	91.6%	2,488,234	65.3%	997,933	46.2%
WA	2,099,679	96.1%	2,073,717	94.9%	1,730,423	83.5%	534,556	37.4%
SA	1,374,157	93.4%	1,348,963	91.7%	1,026,068	76.2%	412,259	47.1%
TAS	442,989	95.2%	435,352	93.5%	324,797	74.7%	139,646	49.7%
ACT	353,135	96.8%	348,216	95.5%	281,035	80.8%	113,438	48.9%
NT	171,177	88.6%	167,307	86.6%	133,187	79.7%	27,474	25.9%

<https://www.health.gov.au/initiatives-and-programs/covid-19-vaccines/numbers-statistics#jurisdictional-data>

Data as at:

23 November 2022

Conclusions / Recommendations



- Mandates work: changed the behaviour of 5/17 holdouts
- Compliance doesn't last – WA's lower 4th dose coverage (voluntary)
- When governments lose people's trust with mandates, we may lose them for a long time and for existing or new vaccines / other health engagement.
- Work to regain trust for *all vaccines*
- Long road to rebuild social cohesion and social trust.
- Where did these people (and those like them) end up?

Coronavax team



Investigators

- University of Western Australia
 - A/Prof Katie Attwell
 - Dr Lara McKenzie
 - Dr Tael Harper
 - A/Prof Marco Rizzi
 - Dr Jordan Tchilingirian
 - Dr Sian Tomkinson
 - Ms Leah Roberts
 - Dr Barbara Nattabi
 - Prof Lisa Wood
 - Mr Jake Turvey
 - Dr Michael Deml

Funders

- *WCVID Catalyst Research Grant*
- *CDCD - WA Department of Health*
- *FHRI COVID-19 Focus Grant*

- Telethon Kids Institute



VaxPolLab

“MandEval” MRFF 2022

Stream 2; MCR; \$4.75m; 4 years

MandEval: Evaluating COVID-19 Vaccine Mandates



Aim

This mixed methods research project aims to:

- 1) Analyse the **impact of vaccine mandates for COVID-19 vaccines** on vax uptake, attitudes, politics
- 2) Ascertain **lessons learnt for ongoing or future vaccine mandates**

Led by [A/Prof Katie Attwell](#), MandEval partners with most State Health Departments.

Chief Investigator team is made up of EMCRs from Australia, the US, France and Italy. It includes:

- Chris Blyth (UWA / TKI)
- Mesfin Genie
- Jess Kaufman
- Jeremy Ward
- Jane Williams
- Huong Le
- Marco Rizzi (UWA / TKI)
- Annette Regan
- Uwana Evers

Associate investigators: Margie Danchin, Francesco Paolucci, Frank Beard, Bette Liu, Julie Leask, Teresa Gavaruzzi, and Hannah Moore.

MandEval: 5 Studies



Study one analyses data from the Australian Immunisation Register, the Australian Bureau of Statistics and the Australian Tax Office, as linked by the new Multi-Agency Data Integration Project (MADIP). Our multidisciplinary team will assess the impacts of policy announcements regarding the introduction and removal of vaccine mandates for COVID-19 in different Australian states amongst key population groups. Australian data will be directly compared with international comparators (CA, Italy and France). We will also analyse relevant state government datasets relating to vaccine mandate exemptions.

Study two consists of quantitative surveys of specific population groups affected by either employment mandates or public space mandates. We will ascertain how the public understands, thinks, and feels about these mandates and how they have motivated vaccine uptake. We will also address mandate removal. These studies will be conducted in relevant Australian states with comparative work in Italy and France.

Study three addresses the same broad questions as Study Two using qualitative methods. It focuses in on key groups including the hesitant/refusers and those who have to manage their hesitancy in implementing mandates (e.g. immunisers; medical exemption seekers).

Study four is a key informant analysis in which CI Attwell will speak to elected officials as well as technical experts working for government in Australian states and Italy and France. We will examine the circumstances in which mandates were introduced and removed in these jurisdictions, and how and why decisions were made regarding timing and design of policies, and their targets, goals, and purposes, as well as implementation issues (e.g exemption processes, vaccination fraud, etc)

Study five consists of a thorough legal analysis of the policy instruments utilised in vaccine mandates in Australian states as well as comparators in France and Italy. We will analyse legal cases that are in progress wherein claimants are seeking to overturn or otherwise resist vaccine mandates and build an online observatory so that the public and policymakers can follow the development of these cases during the three-year study period.