Appendix

Frame 1: Survey questionnaire – Adapted from MacIntyre *et al*., 2021[24].

Question	Type	Option	Variable coded as
Are you aged 18 or older?	Multiple choice	1 Yes 0 No	Binary
What is your city of residence?	Multiple choice	1 Sydney, Australia 2 London, UK 3 New York City, NY, USA 4 Melbourne, Australia 5 Phoenix, AZ, USA	Categorical
What is your gender?	Multiple choice	1 Female 2 Male 3 Other	Categorical
What is your age?	Open-ended		Numerical
Have you ever been told by a doctor or a nurse that you have any of the following lung conditions?	Tick box	0 None 1 Asthma 2 Emphysema 3 Chronic Bronchitis 4 Chronic Obstructive Pulmonary Disease (COPD) 5 Bronchiectasis 6 Other chronic lung disease 7 Other	Binary for each option
Please indicate whether a doctor has ever diagnosed you with any of the following (please select all that apply):	Tick box	0 None 1 Diabetes 2 Hypertension (high blood pressure) 3 Heart disease (heart attack, angina, heart failure, arrhythmia or other) 4 Cancer (current or past) 5 Stroke 6 Other neurological condition (such as epilepsy, neuropathy, Parkinson's disease, dementia) 7 Kidney disease (such as stones, nephropathy, kidney failure, dialysis) 8 Liver disease (hepatitis, liver failure, cirrhosis) 9 Allergies (hay fever, eczema) 10 Dermatitis or other skin disease 11 Immunocompromised conditions (e.g., transplantation, regular corticosteroid use) 12 Other chronic lung diseases (fibrosis) 13 Other medical condition(s)	Binary for each option

Question	Type	Option	Variable coded as
Have you ever experienced any negative issues while wearing a mask, N95 or P2?	Tick box	0 No 1 I felt embarrassed to wear it 2 I received negative comments when wearing it 3 I received racist comments when wearing it 4 People laughed at me 5 People stared at me 6 People thought I was infected 7 Other	Binary for each option
How severe do you think COVID-19 would be if you got it?	Sliding scale	Scale 1-100	Numerical
What measures have you taken for reducing your risk from COVID-19 during March and April 2020?	Tick box	0 None 1 Working from home 2 I was unable to work 3 Restricting visitors to my home 4 Avoiding crowded places or large gatherings 5 Avoiding close contact with sick people in my home 6 Avoid using public transport 7 Reduce or avoid going to hospitals or going to the doctor unless required 8 Keeping 1.5m/6 feet or more between myself and others 9 Wearing a mask or P2 or N95 10 Wearing a homemade cloth mask 11 Wearing gloves 12 Avoiding touching my eyes, nose, and mouth with unwashed hands 13 Taken herbal supplements 14 Taken vitamins 15 Wearing a face shield 16 Washing my hands frequently 17 Using hand sanitizer to clean hands when soap and water was not available for washing hands 18 Using disinfectant to clean surfaces at home or work or other places I attend frequently 19 Using homeopathic remedies 20 Reduce or avoid sending child(ren) to school or childcare 21 Shopping online for food and other necessities 22 Ensuring a balanced diet 23 Other	Binary for each option

Question	Type	Option	Variable coded as
What measures are you currently taking to reduce your risk from COVID-19?	Tick box	0 None 1 Working from home 2 I was unable to work 3 Restricting visitors to my home 4 Avoiding crowded places or large gatherings 5 Avoiding close contact with sick people in my home 6 Avoid using public transport 7 Reduce or avoid going to hospitals or going to the doctor unless required 8 Keeping 1.5m/6 feet or more between myself and others 9 Wearing a mask or P2 or N95 10 Wearing a homemade cloth mask 11 Wearing gloves 12 Avoiding touching my eyes, nose, and mouth with unwashed hands 13 Taken herbal supplements 14 Taken vitamins 15 Wearing a face shield 16 Washing my hands frequently 17 Using hand sanitizer to clean hands when soap and water was not available for washing hands 18 Using disinfectant to clean surfaces at home or work or other places I attend frequently 19 Using homeopathic remedies 20 Reduce or avoid sending child(ren) to school or childcare 21 Shopping online for food and other necessities 22 Ensuring a balanced diet 23 Other	Binary for each option
Have you ever worn a mask/N95/P2 during the COVID-19 pandemic?	Multiple choice	1 Yes 0 No	Binary
What level of trust do you have in the information about COVID-19 from your national government?	Likert scale	4 Very High 3 High 2 Intermediate 1 Low 0 Very low	Ordinal
What level of trust do you have in the information about COVID-1 from your state/ local government?	Likert scale	4 Very High 3 High 2 Intermediate 1 Low 0 Very low	Ordinal

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Question	Type	Option	Variable coded as
What do you think is your level of risk of catching COVID-19 during this pandemic?	Sliding scale	Scale 1-100	Numerical
How effective did you think a surgical mask is at reducing your risk of COVID-19?	Sliding scale	Scale 1-100	Numerical
How effective did you think a N95 or P2 mask is at reducing your risk of COVID-19?	Sliding scale	Scale 1-100	Numerical
How effective did you think a cloth mask is at reducing your risk of COVID-19?	Sliding scale	Scale 1-100	Numerical

Table 1: Percentage change of participant responses providing an internal validation between survey 1 and survey 2 for each city.

	Sydney Survey 1/Survey 2	Melbourne Survey 1/Survey 2
None	-0.5	-3.4
Working from home	4.6	11.6
I was unable to work	4.9	1.9
Restricting visitors to my home	-5.5	-7.0
Avoiding crowded places or large gatherings	-2.2	-10.4
Avoiding close contact with sick people in my home	-2.3	2.8
Avoid using public transport	0.5	-7.5
Reduce or avoid going to hospitals or going to the doctor	-1.3	-4.5
Keeping 1.5m/6 feet or more between myself and others	4.3	-5.0
Wearing a mask or P2 or N95	11.1	19.6
Wearing a homemade cloth mask	12.8	15.8
Wearing gloves	1.8	-2.3

Table 2: Demographic table, perceived effectiveness of masks and wearing of masks by survey respondents (n=700).

Mean age	Years
	46 ± 16.8
Gender	**N (%)**
Female	351 (50.1%)
Male	348 (49.7%)
Unspecified	1 (0.1%)
Pre-existing health conditions	**N (%)**
Co-morbidities (such as diabetes, cancer, stroke etc.)	334 (47.71)
None	559 (79.9)
Pre-existing lung conditions	186 (26.6)
COVID-19 mask perception	
Perceived effectiveness of masks (1–100)	
N95/P2 masks	62.2 ± 22.2
Surgical masks	57.3 ± 22.3
Cloth masks	50.0 ± 23.5
Wearing of masks over the nose and mouth	**N (%)**
No	291 (41.6)
Unsure/did not specify	277 (39.6)
Yes	132 (18.9)

Note: (i) Percentages may not add up to 100% in some questions because participants could choose more than one option. (ii) Mean ± SD were reported for sliding scale questions of 1–100, where 1 = minimum and 100 = maximum.