REACT Follow-Up Survey 2024/2025

CONTENTS

LANDING PAGE

Title: This is the REACT Follow-up Survey.

Please enter your 8 character access code from your invitation email.

(Free text box - 8 characters - and text underneath: “This is the code you have been sent by email, it should look similar to this: YYQp-tu4z”)

If you did not receive an email to take part in this study, thank you for being so keen to help, but our studies are currently invitation only.

SECTION 1: PARTICIPANT CONFIRMATION AND CONSENT

Introductory screen

Title: REACT Follow-up Survey

Subtitle: Welcome

Thank you for taking part in one of the biggest studies of its kind. With your help, we can learn about people’s health and wellbeing now and since the pandemic, and how they can be improved.

You do not need to have had COVID-19 to take part – everyone's experience is valuable.

Start survey [BUTTON]

How long will it take?

The survey can be completed in around 25 minutes. This is followed by a cognitive test – you can do this straight after the survey or return later.

Can I pause and return?

Responses are saved as you go along – you can stop and return later if you need more time – just use the same code as before.

Help button

For some questions, more information is available by clicking this button: ? [Further information will appear like this.]

What is this survey?

This survey is part of the REal-time Assessment of Community Transmission (REACT) study led by Imperial College London. You have been invited because you previously took part in REACT.

Why is your participation important?

You can help us understand current and future health problems and how to prevent and treat them. You

will also be helping the NHS plan health services and prepare for any future pandemics. We need as many people as possible to take part so that our findings are reliable and represent a broad range of experiences.

Who should answer this survey?
Everyone who has already taken part in REACT.

SECTION 2: CURRENT HEALTH, SYMPTOMS AND IMPACTS

The following questions will help us understand more about your health and if you suffer from any health issues.

ASK ALL

HEALTH

How is your health in general? Is it…

1. Very Good
2. Good
3. Fair
4. Bad
5. Very bad
6. Prefer not to say

ASK ALL

SYMPTANY1

Since **January 2020**, have you had any symptoms **lasting four weeks or more**?

Please select all that apply:

1. Fever
2. Persistent cough
3. Shortness of breath
4. Chest pain
5. Tightness in the chest
6. Headache
7. Dizziness
8. Mild fatigue (e.g. feeling more tired than normal)
9. Severe fatigue (e.g. inability to get out of bed)
10. Loss of appetite
11. Constipation, diarrhoea or abdominal bloating

12. Joint pain/Aches
13. Muscle pain/Aches
14. Difficulty thinking or concentrating (“brain fog”)
15. Fast pulse or irregular heartbeat/heart palpitations
16. None of these [EXCLUSIVE]
17. Prefer not to say [EXCLUSIVE]

ASK ALL

SYMPTANY2

How about these? Since **January 2020**, have you had any symptoms **lasting four weeks or more**?

Please select all that apply:

1. Swelling in one leg (including due to a blood clot)
2. Swelling in both legs
3. Facial pain or tenderness
4. Numbness or tingling
5. Skin issues (itchy, scaly, redness, rash)
6. Itchy eyes
7. Loss or change to sense of taste
8. Loss or change to sense of smell
9. Vision issues
10. Ringing in the ears (tinnitus)
11. Hair loss
12. Difficulty sleeping
13. Poor memory
14. Mood swings
15. Anxiety
16. Low mood
17. Other (please write in) (Free text box max 200 characters)
18. None of these [EXCLUSIVE]
19. Prefer not to say [EXCLUSIVE]

ASK IF CODES 1 TO 15 SELECTED AT SYMPTANY1 OR CODES 1 TO 17 SELECTED AT SYMPTANY2

Thinking about [named symptom from SYMPTANY1 or SYMPTANY2]:

RECENTSYMPT

Have you had this symptom in the last **two weeks**?

- Yes
- No

- Don’t know

DURNSYMPT

How long did you have/have you had this symptom?

If you can’t remember exactly how long, please enter your best guess.

- 4 to 7 weeks
- 8 to 11 weeks
- 12 weeks to 6 months
- 7 to 12 months
- One to two years
- More than two years to five years
- More than five years
- Don’t know

FREQSYMPT

How frequently do/did you experience this symptom?

- Every day
- Most days
- Some days
- Occasionally
- Don’t know

SYMPTOMIMPACT

How much does/did this symptom reduce your ability to carry out day-to-day activities?

- A lot
- Quite a bit
- Somewhat
- A little bit
- Not at all
- Don’t know

ASK ALL

BREATHING

[Modified MRC dyspnoea scale, exclusive option via a single drop-down menu]

Which best describes your level of breathlessness on exertion? If you never get breathless even with strenuous exercise, please select 0.

If you are unable to walk, please try to answer as best you can. If you feel unable to answer, you can select "Not applicable".

- 0 – I only get breathless with strenuous exercise
- 1 – I get short of breath when hurrying on level ground or walking up a slight hill
- 2 – On level ground, I walk slower than people of my age because of breathlessness, or I have to stop for breath when walking at my own pace on the level
- 3 – I stop for breath after walking about 100 yards or after a few minutes on level ground
- 4 – I am too breathless to leave the house or I am breathless when dressing/undressing
- Not applicable

ASK IF SYMPTANY1 = 8 or 9 (Mild fatigue or Severe fatigue)

POSTACTIVE2

Do you experience a worsening of your fatigue/energy related symptoms after engaging in minimal physical effort?

1. Yes
2. No
3. Don't know

POSTACTIVE3

Do you experience a worsening of your fatigue/energy related symptoms after engaging in mental effort?

1. Yes
2. No
3. Don't know

POSTACTIVE4

If you feel worse after activities, how long does this last?

- Under 1 hour
- 2 to 3 hours
- 4 to 10 hours
- 11 to 13 hours
- 14 to 23 hours
- 24 hours or over

- Don't know
- Not applicable

POSTACTIVE5

Does exercise make your fatigue/energy related symptoms worse?

- Yes
- No
- Don't know

ASK IF SYMPTANY1 = 8 or 9 (Mild fatigue or Severe fatigue)

FACIT_FATIGUE

You told us that you've had fatigue.

We'd now like to present a list of statements that other people with fatigue have said are important. Please select one response per statement as it applies to the past 7 days.

	Not at all	A little bit	Somewhat	Quite a bit	Very much
I feel fatigued	0	1	2	3	4
I feel weak all over	0	1	2	3	4
I feel listless ("washed out")	0	1	2	3	4
I feel tired	0	1	2	3	4
I have trouble starting things because I am tired	0	1	2	3	4
I have trouble finishing things because I am tired	0	1	2	3	4
I have energy	0	1	2	3	4
I am able to do my usual activities	0	1	2	3	4
I need to sleep during the day	0	1	2	3	4
I am too tired to eat	0	1	2	3	4
I need help doing my usual activities	0	1	2	3	4
I am frustrated by being too tired to do the things I want to do	0	1	2	3	4
I have to limit my social activity because I am tired	0	1	2	3	4

FACIT Fatigue Scale (Version 4) Copyright 1987, 1997 by David Cella, Ph.D

MOBILITY

Please select the ONE box that best describes your health TODAY

EQ-5D-5L Health Questionnaire English Version for the UK

MOBILITY

1. I have no problems in walking about
2. I have slight problems in walking about
3. I have moderate problems in walking about
4. I have severe problems in walking about
5. I am unable to walk about

SELFCARE

Please select the ONE box that best describes your health TODAY

SELF-CARE

1. I have no problems washing or dressing myself
2. I have slight problems washing or dressing myself
3. I have moderate problems washing or dressing myself
4. I have severe problems washing or dressing myself
5. I am unable to wash or dress myself

ACTIVITIES

Please select the ONE box that best describes your health TODAY

USUAL ACTIVITIES (e.g. work, study, housework, family or leisure activities)

1. I have no problems doing my usual activities
2. I have slight problems doing my usual activities
3. I have moderate problems doing my usual activities
4. I have severe problems doing my usual activities
5. I am unable to do my usual activities

PAINDISC

Please select the ONE box that best describes your health TODAY

PAIN/DISCOMFORT

1. I have no pain or discomfort

2. I have slight pain or discomfort
3. I have moderate pain or discomfort
4. I have severe pain or discomfort
5. I have extreme pain or discomfort

ANXIETYDEP

Please select the ONE box that best describes your health TODAY

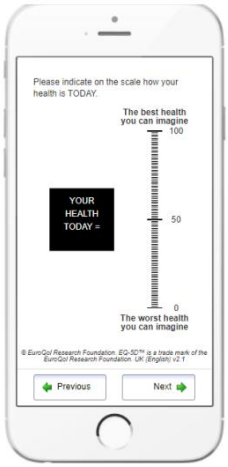
ANXIETY/DEPRESSION

1. I am not anxious or depressed
2. I am slightly anxious or depressed
3. I am moderately anxious or depressed
4. I am severely anxious or depressed
5. I am extremely anxious or depressed

HEALTHSCORE

We would like to know how good or bad your health is TODAY. You will see a scale numbered from 0 to 100. 100 means the best health you can imagine. 0 means the worst health you can imagine.

Please indicate on the scale how your health is TODAY



PHQ-9

The next questions ask about aspects of your life and how you feel in more detail. If you feel uncomfortable answering a question, you do not have to answer.

ASK ALL

MHEALTH1

Over the last two weeks, how often have you been bothered by:

Little interest or pleasure in doing things?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

MHEALTH2

Over the last two weeks, how often have you been bothered by:

Feeling down, depressed, or hopeless?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

MHEALTH3

Over the last two weeks, how often have you been bothered by:

Trouble falling or staying asleep, or sleeping too much?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

MHEALTH4

Over the last two weeks, how often have you been bothered by:

Feeling tired or having little energy?

1. Not at all
2. Several days
3. More than half the days

4. Nearly every day
5. Prefer not to say

MHEALTH5

Over the last two weeks, how often have you been bothered by:

Poor appetite or overeating?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

MHEALTH6

Over the last two weeks, how often have you been bothered by:

Feeling bad about yourself- or that you are a failure or have let yourself or your family down?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

MHEALTH7

Over the last two weeks, how often have you been bothered by:

Trouble concentrating on things, such as reading the newspaper or watching television?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

MHEALTH8

Over the last two weeks, how often have you been bothered by:

Moving or speaking so slowly that other people could have noticed? Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

MHEALTH9

Over the last two weeks, how often have you been bothered by:

Thoughts that you would be better off dead, or of hurting yourself in some way?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

GAD-7

PROB1

Over the last two weeks, how often have you been bothered by:

Feeling nervous, anxious or on edge?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

PROB2

Over the last two weeks, how often have you been bothered by:

Not being able to stop or control worrying?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

PROB3

Over the last two weeks, how often have you been bothered by:

Worrying too much about different things?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

PROB4

Over the last two weeks, how often have you been bothered by:

Trouble relaxing?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

PROB5

Over the last two weeks, how often have you been bothered by:

Being so restless that it is hard to sit still?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

PROB6

Over the last two weeks, how often have you been bothered by:

Becoming easily annoyed or irritable?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

PROB7

Over the last two weeks, how often have you been bothered by:

Feeling afraid as if something awful might happen?

1. Not at all
2. Several days
3. More than half the days
4. Nearly every day
5. Prefer not to say

ADHD

Please answer the questions below using the drop-down option that best describes how you have felt and conducted yourself over the **past 6 months**. [DROPDOWN OPTIONS: Never, Rarely, Sometimes, Often, Very often, Prefer not to say]

ADHD_1

How often do you have trouble wrapping up the final details of a project, once the challenging parts have been done?

ADHD_2

How often do you have difficulty getting things in order when you have to do a task that requires organization?

ADHD_3

How often do you have problems remembering appointments or obligations?

ADHD_4

When you have a task that requires a lot of thought, how often do you avoid or delay getting started?

ADHD_5

How often do you fidget or squirm with your hands or feet when you have to sit down for a long time?

ADHD_6

How often do you feel overly active and compelled to do things, like you were driven by a motor?

The Adult ADHD Self-Report Scale (ASRS) v1.1 Screener. Kessler, R.C., Adler, L., Ames, M., Demler, O., Faraone, S., Hiripi, E., Howes, M.J., Jin, R., Secnik, K., Spencer, T., Ustun, T.B., Walters, E.E. (2005). The World Health Organization Adult ADHD Self-Report Scale (ASRS). Psychological Medicine, 35(2), 245-256

MDQ

We'd now like to ask you some more questions about your experiences and behaviours. Please answer each question to the best of your ability using the drop-down options.

Has there ever been a period of time when you were not your usual self and… [DROPDOWN OPTIONS: Yes, No, Prefer not to say]

MDQ_1
- …you felt so good or so hyper that other people thought you were not your normal self or you were so hyper that you got into trouble?

MDQ_2
- …you were so irritable that you shouted at people or started fights or arguments?

MDQ_3
- …you felt much more self-confident than usual?

MDQ_4
- …you got much less sleep than usual and found you didn't really miss it?

MDQ_5
- …you were much more talkative or spoke faster than usual?

MDQ_6
- …thoughts raced through your head or you couldn't slow your mind down?

MDQ_7
- …you were so easily distracted by things around you that you had trouble concentrating or staying on track?

MDQ_8
- …you had much more energy than usual?

MDQ_9
- …you were much more active or did many more things than usual?

MDQ_10
- …you were much more social or outgoing than usual, for example, you telephoned friends in the middle of the night?

MDQ_11

- …you were much more interested in sex than usual?

MDQ_12

- …you did things that were unusual for you or that other people might have thought were excessive, foolish, or risky?

MDQ_13

- …spending money got you or your family into trouble?

ASK IF "YES" IN > 1 OF MDQ_1-13

MDQ_PERIOD

In the previous question, you said "Yes" to more than one example where you were not your usual self. Have several of these ever happened during the same period of time?

- Yes
- No
- Prefer not to say

ASK IF "YES" IN 1 OR MORE OF MDQ_1-13

MDQ_PROBLEM

You've told us of example(s) where you were not your usual self. How much of a problem did any of these cause you – like being unable to work; having family, money, or legal troubles; getting into arguments or fights?

- No problem
- Minor problem
- Moderate problem
- Serious problem
- Prefer not to say

Hirschfeld, R., Williams, J. B. W., Spitzer, R. L., Calabrese, J. R., Flynn, L., Keck Jr, P. E., et al. (2000). Development and validation of a screening instrument for bipolar spectrum disorder: The mood disorder questionnaire. American Journal of Psychiatry, 157(11), 1873.

PTSD

ASK ALL

TRAUMATIC_EVENT

Sometimes things happen to people that are unusually or especially frightening, horrible, or traumatic.

Below are some examples of such events. Please select all that apply to you:

1. A serious accident or fire
2. A physical or sexual assault or abuse
3. An earthquake or flood
4. A war
5. Seeing someone be killed or seriously injured
6. Having a loved one die through homicide or suicide
7. Hospitalised with a serious illness
8. Other (please write in) [free text]
9. None of the above [EXCLUSIVE]
10. Prefer not to say [EXCLUSIVE]

ASK IF 1 – 8 SELECTED IN TRAUMATIC_EVENT

TRAUMATIC_EVENT_time

When did you experience an event that was especially frightening, horrible, or traumatic? If you have experienced more than one, consider the event that troubles or troubled you the most.

- Less than 4 weeks ago
- 4 to 12 weeks ago
- 3 to 12 months ago
- 1 to 5 years ago
- More than 5 years ago
- Prefer not to say

ASK IF 1 – 8 SELECTED IN TRAUMATIC_EVENT

You said you've experienced at least one event that was especially frightening, horrible, or traumatic.

In the past month, have you...

[DROPDOWN OPTIONS: Yes / No / Prefer not to say]

PC_PTSD_5_A

Had nightmares about the event(s) or thought about the event(s) when you did not want to?

PC_PTSD_5_B

Tried hard not to think about the event(s) or went out of your way to avoid situations that reminded you of the event(s)?

PC_PTSD_5_C

Been constantly on guard, watchful, or easily startled?

PC_PTSD_5_D
Felt numb or detached from people, activities, or your surroundings?

PC_PTSD_5_E
Felt guilty or unable to stop blaming yourself or others for the event(s) or any problems the event(s) may have caused?

Prins, A., Bovin, M. J., Kimerling, R., Kaloupek, D. G., Marx, B. P., Pless Kaiser, A., & Schnurr, P. P. (2015). The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5).

If you have been affected by any of the mental health issues raised in this survey, the following NHS webpage may be able to provide help and advice: https://www.nhs.uk/mental-health/

SLEEP

Please complete this questionnaire regarding the quality of your sleep in the **past seven days**.

Please select one response to each statement.

SLEEP1

In the **past 7 days**…

- My sleep was restless
- I was satisfied with my sleep
- My sleep was refreshing
- I had difficulty falling asleep

[Not at all/A little bit/Somewhat/Quite a bit/Very much]

SLEEP2

In the **past 7 days**…

- I had trouble staying asleep
- I had trouble sleeping
- I got enough sleep

[Never/Rarely/Sometimes/Often/Always]

SLEEP3

In the **past 7 days**…

My sleep quality was… [Very poor/Poor/Fair/Good/Very good]

PROMIS® Sleep Disturbance 8b Short Form v1.0 © 2008-2022 PROMIS Health Organization

SECTION 3: HISTORY OF COVID-19

The next section will ask you about your history of COVID-19.

ASK ALL
HADCOVID
Have you **ever** had COVID-19 (including now)?

1. Yes
2. No
3. Don't know

IF HADCOVID == 1 AND IF CODES 1 TO 15 SELECTED AT SYMPTANY1 OR CODES 1 TO 17 SELECTED AT SYMPTANY2
SYMPTPREVCOVID
Below are the symptoms you told us you've had since January 2020 for **four weeks or more**. Please select which of these you think were due to you having had COVID-19:
[Pull through answers from SYMPTANY1 and SYMPTANY2]

- Yes
- No
- Maybe

IF HADCOVID == 1
COVIDNUM
How many times do you think you have had COVID-19?

1. One
2. Two
3. Three
4. Four
5. Five
6. Six or more
7. Don't know

IF HADCOVID == 1

COVIDTEST

How many of your separate episodes of COVID-19 were confirmed by a positive test, such as a swab for PCR or antigen (lateral flow) test?

[Set maximum as answer from COVIDNUM]

1. None
2. One
3. Two
4. Three
5. Four
6. Five
7. Six or more
8. Don't know

IF HADCOVID == 1

SYMDURATION_A

Have your COVID-19 symptoms resolved?

1. Yes
2. No
3. Not sure

SYMDURATION_B

What is the longest duration that any symptom lasted following an episode of COVID-19?

- Less than 4 weeks
- 4 to 7 weeks
- 8 to 11 weeks
- 12 weeks to 6 months
- 7 to 12 months
- One to two years
- More than two years
- Don't know

IF HADCOVID == 1

COVIDSEVERITY

Which of these options best describes your most severe episode of COVID-19 (i.e., that affected your daily life the most)?

- No symptoms
- Mild symptoms – didn't affect my daily life
- Moderate symptoms – some effect on my daily life
- Severe symptoms – significant effect on my daily life

IF HADCOVID == 1

COVIDRECENTDATE

When did your most recent COVID-19 episode start (either suspected or confirmed)?

If you are not sure, please give your best guess.

[MONTH/YEAR dropdown]

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

IF HADCOVID == 1

COVIDRECENTTEST

Was your most recent episode of COVID-19 confirmed by either PCR or lateral flow (antigen) test?

1. Yes
2. No
3. Not sure

IF HADCOVID == 1

COVIDHOSPITAL1

Have you ever attended Accident and Emergency (A&E) because you had COVID-19?

1. Yes
2. No

IF HADCOVID == 1

COVIDHOSPITAL2

Have you ever been admitted to hospital for COVID-19?

1. Yes

2. No

IF COVIDHOSPITAL2 == 1:

COVIDHOSPITAL3

Were you admitted to the intensive care unit (ICU)?

1. Yes
2. No

IF HADCOVID == 1

ANTIVIRAL1

Have you ever taken an antiviral or antibody treatment for COVID-19?

These can be given to people with COVID-19 who are at risk of severe illness or to some people hospitalised with COVID-19.

[INFO NOTE: Antivirals include remdesevir (Veklury), molnupiravir (Lagevrio) and nirmatrelvir/ritonavir (Paxlovid). Other treatments include monoclonal antibodies such as sotrovimab (Xevudy) and casirivimab plus imdevimab (Ronapreve).]

1. Yes
2. No
3. Not sure

IF ANTIVIRAL == 1

ANTIVIRAL2

Which of the following treatments for COVID-19 have you taken?

Please select all that apply:

- Nirmatrelvir/ritonavir (Paxlovid)
- Molnupiravir (Lagevrio)
- Sotrovimab (Xevudy)
- Remdesevir (Veklury)
- Casirivimab plus imdevimab (Ronapreve)
- Other (please write in) [free text]
- Don’t know

LONGCOVIDSELF

Do you think you have or have ever had Long COVID?

1. Yes
2. No
3. Not sure

IF LONGCOVIDSELF == 1

LONGCOVIDSELF_date

When do you think your Long COVID started?

If you are not sure, please give your best guess.

Date picker [lower limit January 2020; MONTH/YEAR]

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

LONGCOVIDDIAG

Has a doctor ever diagnosed you with Long COVID?

1. Yes
2. No
3. Not sure

IF LONGCOVIDDIAG == 1

LONGCOVIDDIAG_date

When did a doctor diagnose you with Long COVID?

If you are not sure, please give your best guess.

Date picker [lower limit January 2020; MONTH/YEAR]

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

IF LONGCOVIDSELF == 1 OR IF LONGCOVIDDIAG == 1

LONGCOVIDRESOLVE

Has your Long COVID resolved?

1. Yes
2. No
3. Not sure

IF LONGCOVIDRESOLVE == 1

LONGCOVIDRESOLVE_date

When did your Long COVID resolve?

If you are not sure, please give your best guess.

Date picker [lower limit January 2020; MONTH/YEAR]

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

IF LONGCOVIDSELF == 1 OR IF LONGCOVIDDIAG == 1

LONGCOVIDSEVERITY

How much does/did your Long COVID reduce your ability to carry out day-to-day activities?

- A lot
- Quite a bit
- Somewhat
- A little bit
- Not at all
- Don't know

IF LONGCOVIDSELF == 1 OR IF LONGCOVIDDIAG == 1

LONGCOVIDCLINIC

For your Long COVID symptoms, have you attended any of the following?

Please select all that apply:

1. GP
2. Long COVID clinic
3. Occupational health
4. Other outpatient clinic

5. Private clinic
6. Other (please write in) [free text]
7. None of the above

SECTION 4: MEDICAL HISTORY

We would now like to ask you about your medical history.

ASK ALL

SEX

Some medical conditions are specific to biological sex. What sex were you registered with at birth?

A question about gender identity will follow later in the questionnaire.

Please select one from:

- Male
- Female
- Intersex
- Prefer not to say

ASK ALL

HEALTHCOND1

Have you ever been diagnosed with any of these health conditions?

Please select all that apply:

- Hypertension (high blood pressure)
- Hyperlipidaemia (high level of cholesterol or triglycerides in your blood)
- Coronary heart disease [INFO NOTE: Coronary heart disease can cause angina or heart attacks]
- Peripheral arterial disease, also known as peripheral vascular disease
- Heart failure
- Atrial fibrillation/flutter
- Other arrythmia (irregular heartbeat)
- Myocarditis (inflammation of the heart)
- Pericarditis (inflammation of the sac around the heart)
- Postural orthostatic tachycardia syndrome (POTS)
- A blood clot in your lung (pulmonary embolus, PE)
- A blood clot in a deep vein (deep vein thrombosis, DVT)
- Stroke due to a blocked vessel (ischaemic stroke)

- Stroke due to a bleed (haemorrhagic stroke)
- Transient ischaemic attack (TIA, sometimes called a mini stroke)
- None of these [EXCLUSIVE]
- Prefer not to say [EXCLUSIVE]

IF ANY CONDITION IN HEALTHCOND1

When were you first diagnosed with: <each condition selected from HEALTHCOND1>

If you are not sure, please give your best guess.

Date picker (MONTH/YEAR; the date limit is restricted by the age of the participant if available)

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

HEALTHCOND2

How about these? Have you been diagnosed with any of the following?

Please select all that apply:

- Asthma
- Chronic Obstructive Pulmonary Disease (COPD, chronic bronchitis or emphysema) or bronchiectasis
- Interstitial Lung Disease (ILD), pulmonary fibrosis or pulmonary hypertension
- Mast cell activation syndrome (MCAS)
- Reactive arthritis
- Other spondyloarthropathy (e.g. psoriatic arthritis, ankylosing spondylitis)
- Rheumatoid arthritis
- Systemic lupus erythematosus (SLE)
- Sjögren's syndrome
- Other connective tissue disease (please write in) [free text box]
- Inflammatory bowel disease (Crohn's disease or ulcerative colitis)
- Other autoimmune condition (please write in) [free text box]
- Primary immunodeficiency (inborn problem of the immune system)
- HIV or AIDS
- Other cause of a weakened immune system/reduced ability to deal with infections (whether due to disease or treatment)
- None of these [EXCLUSIVE]
- Prefer not to say [EXCLUSIVE]

IF ANY CONDITION IN HEALTHCOND2

When were you first diagnosed with: <each condition selected from HEALTHCOND2>

If you are not sure, please give your best guess.

Date picker (MONTH/YEAR; the date limit is restricted by the age of the participant if available)

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

HEALTHCOND3

How about these? Have you had or been diagnosed with any of the following?

Please select all that apply:

- Cancer (including blood cancers)
- Chronic liver disease (liver cirrhosis)
- Solid organ transplant (including lung, liver, stomach, pancreas, spleen, heart)
- Bone marrow transplant
- Diabetes [DROPDOWN MENU: Type 1, Type 2]
- Chronic kidney disease [DROPDOWN MENU: CKD 1-2, CKD 3, CKD 4, CKD 5 without dialysis or renal transplant, CKD 5 with dialysis in the last 12 months, CKD 5 with renal transplant]
- Hypothyroidism (underactive thyroid gland)
- Anaemia
- Fibromyalgia or other chronic pain
- Post-viral fatigue/Chronic fatigue syndrome (CFS)/Myalgic encephalomyelitis (ME)
- Sickle cell disease
- Had a prior fracture of hip, wrist, spine or humerus
- A diagnosis of or treatment for erectile dysfunction [SHOW IF SEX == MALE, INTERSEX OR PREFER NOT TO SAY]
- None of these [EXCLUSIVE]
- Prefer not to say [EXCLUSIVE]

IF ANY CONDITION IN HEALTHCOND3

When were you first diagnosed with: <each condition selected from HEALTHCOND3>

If you are not sure, please give your best guess.

Date picker (MONTH/YEAR; the date limit is restricted by the age of the participant if available)

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

IF HEALTHCOND3 == "Cancer (including blood cancers)":

HEALTHCONDCANCER

You told us you'd been diagnosed with cancer. Could you tell us more about your cancer diagnosis?

Please select all that apply:

- Cancer of the blood or bone marrow such as leukaemia, myelodysplastic syndromes, lymphoma or myeloma (at any stage of treatment)
- Lung cancer
- Breast cancer
- Colon/rectal cancer
- Skin cancer
- Kidney cancer
- Prostate cancer [SHOW PROSTATE CANCER IF SEX == MALE, INTERSEX, OR PREFER NOT TO SAY]
- Brain/other central nervous system cancer
- Head/neck cancer
- Other (please write in) [free text]

HEALTHCONDCANCER_date

When were you first diagnosed with: <each condition selected from HEALTHCONDCANCER>

If you are not sure, please give your best guess.

Date picker (MONTH/YEAR; the date limit is restricted by the age of the participant if available)

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

ASK IF SEX == FEMALE, INTERSEX OR PREFER NOT TO SAY

WOMENS_HEALTH

How about these? Have you had or been diagnosed with any of the following?

Please select all that apply:

- Polycystic ovary syndrome (PCOS)
- Endometriosis
- Premenstrual dysphoric disorder (PMDD)
- None of these [EXCLUSIVE]
- Not applicable [EXCLUSIVE]

- Prefer not to say [EXCLUSIVE]

ASK IF ANY CONDITION IN WOMENS_HEALTH

WOMENS_HEALTH_date

When were you first diagnosed with: <each condition selected from WOMENS_HEALTH>

If you are not sure, please give your best guess.

Date picker (MONTH/YEAR; the date limit is restricted by the age of the participant if available)

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

ASK IF SEX == FEMALE, INTERSEX OR PREFER NOT TO SAY
PREGNANCY
Are you pregnant now or have you been pregnant in the last two years?

1. Not applicable
2. Yes
3. No
4. Don't know
5. Prefer not to say

ASK IF PREGNANCY == 2
PREGNANT_NOW
Are you pregnant now?

1. Yes
2. No
3. Don't know
4. Prefer not to say

ASK IF SEX == FEMALE, INTERSEX OR PREFER NOT TO SAY

MENOPAUSE

Which of the following best describes your current menstrual status? Please select one answer:

1. Before the menopause
2. Going through the menopause
3. Past the menopause
4. Not sure – had a hysterectomy
5. Not sure – other reason [free text]
6. Not applicable
7. Prefer not to say

ASK IF MENOPAUSE == 3

LAST_PERIOD

How old were you when you had your last period?

- ___ years old [INTEGER, LOWER LIMIT == 13; UPPER LIMIT == AGE IF KNOWN, OTHERWISE 70]
- Don't know [EXCLUSIVE]
- Prefer not to say [EXCLUSIVE]

HEALTHCOND4

How about these? Have you been diagnosed with any of the following? Please tick in the left-hand column all that apply.

Please also tick in the right-hand column if a first-degree relative (parent, sibling, child) has been diagnosed with any of these conditions.

Please select all that apply:

- Migraine
- Dementia
- Mild cognitive impairment
- REM Sleep Behaviour Disorder
- Parkinson's disease
- Huntington's chorea
- Multiple sclerosis
- Motor Neuron Disease (MND)
- Cerebral palsy
- Myasthenia gravis
- Epilepsy
- Traumatic Brain Injury
- Meningitis or Encephalitis
- Other condition affecting the brain and nerves
- None of these [EXCLUSIVE]
- Prefer not to say [EXCLUSIVE]

IF ANY CONDITION IN HEALTHCOND4

When were you first diagnosed with: <each condition selected from HEALTHCOND4>

If you are not sure, please give your best guess.

Date picker (MONTH/YEAR; the date limit is restricted by the age of the participant if available)

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

IF "Dementia" SELECTED FROM HEALTHCOND4:

DEMENTIA

What type of dementia do you have? Please tick in the left-hand column all that apply.

Please also tick in the right-hand column if a first-degree relative (parent, sibling, child) has been diagnosed with any of these conditions.

Please select all that apply:

- Alzheimer's dementia
- Vascular dementia
- Lewy body dementia
- Frontotemporal dementia
- Other dementia (please write in) [free text]
- Not sure

HEALTHCOND5

How about these? Have you been diagnosed with any of the following? Please tick in the left-hand column all that apply.

Please also tick in the right-hand column if a first-degree relative (parent, sibling, child) has been diagnosed with any of these conditions.

Please select all that apply:

- Depression/Major depressive disorder
- Bipolar disorder
- Other depressive disorder
- Anxiety/Generalised Anxiety Disorder
- Obsessive Compulsive Disorder (OCD)
- Post-Traumatic Stress Disorder (PTSD)
- Schizophrenia
- Other psychotic or schizoaffective disorder
- Personality disorder
- Alcohol use disorder

- An eating disorder
- Substance use disorder
- None of these [EXCLUSIVE]
- Prefer not to say [EXCLUSIVE]

IF ANY CONDITION IN HEALTHCOND5

When were you first diagnosed with: <each condition selected from HEALTHCOND5>

If you are not sure, please give your best guess.

Date picker (MONTH/YEAR; the date limit is restricted by the age of the participant if available)

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

HEALTHCOND6

How about these? Have you been diagnosed with any of the following? Please tick in the left-hand column all that apply.

Please also tick in the right-hand column if a first-degree relative (parent, sibling, child) has been diagnosed with any of these conditions.

- Attention Deficit Hyperactivity Disorder (ADHD)
- Dyslexia
- Dyspraxia/Developmental Co-ordination Disorder (DCD)
- Dyscalculia
- Autism Spectrum Disorder (ASD)
- None of these [EXCLUSIVE]
- Prefer not to say [EXCLUSIVE]

IF ANY CONDITION IN HEALTHCOND6

When were you first diagnosed with: <each condition selected from HEALTHCOND6>

If you are not sure, please give your best guess.

Date picker (MONTH/YEAR; the date limit is restricted by the age of the participant if available)

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

ASK ALL

EYE_CONDITION

Have you ever been diagnosed with any of the following eye or visual problems by a doctor or other health professional? Please select all that apply:

1. Glaucoma
2. Visual impairment including blindness
3. Double vision
4. Night blindness
5. Colour blindness
6. Macular degeneration
7. Cataracts
8. Retinal detachment
9. Diabetic retinopathy
10. Other (please write in) [free text]
11. None of these [EXCLUSIVE]
12. Prefer not to say [EXCLUSIVE]

ASK IF EYE_CONDITION == 1-10

EYE_CONDITION_date

When were you first diagnosed with: <each condition selected from EYE_CONDITION>

If you are not sure, please give your best guess.

Date picker (MONTH/YEAR; the date limit is restricted by the age of the participant if available)

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

ASK ALL

HEARING_DIFFICULTY

Do you have any difficulty with your hearing? Please select one answer:

1. Yes, I'm hard of hearing
2. Yes, I'm completely deaf
3. No
4. Don't know
5. Prefer not to say

ASK IF HEARING_DIFFICULTY == 1 OR 2

HEARING_DIFFICULTY_date

When did your hearing difficulty or deafness start?

If you are not sure, please give your best guess.

Date picker (MONTH/YEAR; the date limit is restricted by the age of the participant if available)

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

ASK ALL EXCEPT HEARING_DIFFICULTY == 2

HEARING_AID

Do you use a hearing aid most of the time?

- Yes
- No
- Prefer not to say

ASK ALL EXCEPT HEARING_DIFFICULTY == 2

COCHLEAR_IMPLANT

Do you have a cochlear implant?

- Yes
- No
- Prefer not to say

ASK ALL

FAMILYHISTORY

Was your mother, father, sister or brother diagnosed with cardiovascular disease before the age of 60?

- Yes
- No
- Not sure

[INFO NOTE: The 3 types of cardiovascular disease (disease of the heart or the blood vessels) are: coronary heart disease (this can cause angina or heart attacks), stroke, and peripheral arterial disease (also known as peripheral vascular disease).]

ASK ALL

MEDICATIONS

Do you take any medicines regularly?

1. Yes
2. No
3. Don't know

ASK IF MEDICATIONS == 1

MEDICATIONS1

Are you taking any of the following regularly?

Please select all that apply:

- Anti-hypertensive treatment (for high blood pressure)
- Statins or other lipid-lowering medication
- Metformin
- Beta blocker [INFO NOTE: e.g. metoprolol, bisoprolol, atenolol, carvedilol]
- Blood thinning medication (anticoagulants) [INFO NOTE: e.g. warfarin, apixaban, dabigatran, edoxaban, rivaroxaban]
- Antiplatelet [INFO NOTE: e.g. clopidogrel, aspirin, prasugrel, dipyridamole, ticagrelor, cangrelor]
- Anti-leukotriene (e.g. for asthma/COPD) [INFO NOTE: e.g. montelukast, zafirlukast]
- Bronchodilator (e.g. for asthma/COPD) [INFO NOTE: e.g. long-acting beta2-agonist (LABA)]
- GLP-1 agonist (e.g. for diabetes/weight loss) [INFO NOTE: e.g. semaglutide (Ozempic/Wegovy/Rybelsus), tirzepatide (Mounjaro/Zepbound), exenatide (Bydureon), liraglutide (Victoza), lixisenatide (Lyxumia), dulaglutide (Trulicity)]
- Ivabradine (e.g. for angina, heart failure)
- Antihistamines [INFO NOTE: e.g. loratadine, cetirizine hydrochloride, fexofenadine]
- Vitamin D supplement
- Omega-3 fatty acid supplement
- N-Acetyl Cysteine (NAC) supplement
- Hormone replacement therapy (HRT)
- None of the above [EXCLUSIVE]
- Prefer not to say [EXCLUSIVE]

MEDICATIONS2

How about these? Which of these medicines do you take regularly?

Please select all that apply:

- Steroid tablets
- Non-biologic disease-modifying antirheumatic drug (DMARDs) [INFO NOTE: e.g. methotrexate, leflunomide, hydroxychloroquine, sulfasalazine, Janus kinase (JAK) inhibitor such as baricitinib]
- Biologic disease-modifying antirheumatic drug (DMARDs) [INFO NOTE: e.g. adalimumab, etanercept, infliximab, rituximab]
- Other immunosuppressant
- Nonsteroidal anti-inflammatory drugs (NSAIDs) [INFO NOTE: e.g. ibuprofen, indomethacin, mefenamic acid, naproxen, diclofenac]
- Colchicine
- Proton pump inhibitor (PPI) [INFO NOTE: e.g. omeprazole, lansoprazole, pantoprazole, esomeprazole]
- Selective serotonin re-uptake inhibitors (SSRIs) [INFO NOTE: e.g. fluvoxamine, escitalopram, paroxetine, sertraline]
- Other antidepressant
- Atypical antipsychotic medication [INFO NOTE: e.g. amisulpride, aripiprazole, clozapine, lurasidone, olanzapine, paliperidone, quetiapine, risperidone, sertindole, orzotepine]
- Lithium
- Naltrexone
- CBD (cannabidiol)
- Other (please write in) [free text]
- None of the above
- Prefer not to say

MEDICATIONS_date

When did you start taking: <each selected from MEDICATIONS1 or MEDICATIONS2>
If you are not sure, please give your best guess.

Date picker [MONTH/YEAR]

- Can’t remember

[When “Can’t remember” selected, display “Are you sure? You can just give your best guess.” as a pop-up on same page]

BLOODPRESSURE

Have you had a blood pressure measurement in the last five years?

1. Yes
2. No
3. Don’t know

IF BLOODPRESSURE == 1

Please enter the most recent measurement taken:

Systolic (top number)
- Don’t know

Diastolic (bottom number)
- Don’t know

TBI

For the following questions, please think about injuries you have had during your entire lifetime, especially those that affected your head or neck. It might help to remember times you went to the hospital or emergency department. Think about injuries you may have received from a car or motorcycle collision, bicycle crash, being hit by something, falling down, being hit by someone, playing sports or an injury during military service.

ASK ALL

HEAD_INJURY

Have you had any injuries to your head or neck in your lifetime?

- Yes
- No
- Don’t know
- Prefer not to say

ASK IF HEAD_INJURY == YES

HEAD_INJURY_CAUSE

Which of the following caused or contributed to any of the injuries to your head or neck over your lifetime? Please select all that apply:

- A fall [INFO NOTE: e.g., down stairs, from a ladder or horse, on a slippery surface, in the bath]
- A vehicle-related collision [INFO NOTE: e.g., a car, motorcycle, or all-terrain vehicle (ATV) crash; being hit by a vehicle as a pedestrian or cyclist]
- Violence or an assault [INFO NOTE: e.g., being hit by someone, pushed, shaken violently, shot, or mugged]
- A sports or recreational activity [INFO NOTE: e.g., a contact sport like football or rugby, or an activity like skateboarding, skiing, or cycling]
- Being struck by an object [INFO NOTE: e.g., a falling object, a piece of equipment, or being hit with a weapon or rock]
- Military combat or training [INFO NOTE: e.g., from an explosion, blast, gunshot, or training-related accident]
- Other (please specify) [free text]
- Don't know [EXCLUSIVE]

- Prefer not to say [EXCLUSIVE]

ASK IF HEAD_INJURY == YES

HEAD_INJURY_N

Approximately how many injuries to your head or neck have you had in total over your lifetime? If you are not sure, please give your best guess.

- [INTEGER, 1-100]
- Don't know

ASK IF HEAD_INJURY == YES

TBI_ABI_1A

Thinking about any injuries to your head or neck in your lifetime, were you ever knocked out or did you lose consciousness?

- Yes
- No
- Don't know
- Prefer not to say

ASK IF TBI_ABI_1A == YES

TOTAL_N_LOC

How many times have you been knocked out or lost consciousness due to an injury? If you are not sure, please give your best guess.

- [INTEGER, LOWER LIMIT == 1, UPPER LIMIT == ANSWER FROM HEAD_INJURY OR 100 IF UNAVAILABLE] time(s)
- Don't know

ASK IF TBI_ABI_1A == YES

TBI_ABI_1B

What was the longest time you were knocked out or unconscious? Please choose one option; if you are not sure, please give your best guess.

- Knocked out or lost consciousness for less than 30 min
- Knocked out or lost consciousness between 30 min and 24 hours
- Knocked out or lost consciousness for 24 hours or longer

- Don’t know

ASK IF TBI_ABI_1A == YES

TBI_ABI_1C

How old were you the first time you were knocked out or lost consciousness? If you are not sure, please give your best guess.

- __ years old [INTEGER, UPPER LIMIT == AGE IN YEARS IF KNOWN, OTHERWISE 125]
- Don’t know

ASK IF TBI_ABI_1A == YES

LOC_HOSPITAL_ADMITTED

In your lifetime, have you ever been admitted to hospital due to an injury causing you to be knocked out or lose consciousness?

- Yes
- No
- Don’t know
- Prefer not to say

ASK IF LOC_HOSPITAL_ADMITTED == YES

LOC_HOSPITAL_ADMITTED_N

In your lifetime, how many times have you been admitted to hospital due to an injury causing you to be knocked out or lose consciousness? If you are not sure, please give your best guess.

- [INTEGER, LOWER LIMIT == 1, UPPER LIMIT == ANSWER FROM TOTAL_N_LOC OR, IF UNAVAILABLE, HEAD_INJURY, OR 100 IF UNAVAILABLE] time(s)
- Don’t know

ASK IF HEAD_INJURY == YES

HEAD_INJURY_AMNESIA

Thinking about any injuries to your head or neck in your lifetime, did you ever have gaps in your memory (amnesia) afterwards?

- Yes
- No
- Don’t know

- Prefer not to say

ASK IF HEAD_INJURY_AMNESIA == YES

HEAD_INJURY_AMNESIA_N

How many times has an injury to your head or neck led to a gap in your memory (amnesia)? If you are not sure, please give your best guess.

- [INTEGER, LOWER LIMIT == 1, UPPER LIMIT == ANSWER FROM HEAD_INJURY OR 100 IF UNAVAILABLE] time(s)
- Don't know

ASK IF HEAD_INJURY == YES

HEAD_INJURY_DAZED

Thinking about any injuries to your head or neck in your lifetime, were you ever dazed afterwards?

- Yes
- No
- Don't know
- Prefer not to say

ASK IF HEAD_INJURY_DAZED == YES

HEAD_INJURY_DAZED_N

How many times have you been dazed following an injury to your head or neck? If you are not sure, please give your best guess.

- [INTEGER, LOWER LIMIT == 1, UPPER LIMIT == ANSWER FROM HEAD_INJURY OR 100 IF UNAVAILABLE] time(s)
- Don't know

ASK ALL

REPEATED_HEAD_IMPACT

Have you ever had a period of time in which you experienced multiple, repeated impacts to your head (e.g. history of abuse, contact sports, military duty)?

- Yes
- No
- Don't know

- Prefer not to say

ASK IF REPEATED_HEAD_ IMPACT == YES

REPEATED_HEAD_IMPACT_CAUSE

What caused these repeated impacts to your head? Please select all that apply:

- Contact and collision sports
- Intimate partner violence
- Other physical violence
- Military service
- Other (please specify) [free text]
- Don't know [EXCLUSIVE]
- Prefer not to say [EXCLUSIVE]

ASK IF REPEATED_HEAD_ IMPACT == YES

REPEATED_HEAD_ IMPACT_LOC

What was the most typical or usual effect from these repeated impacts to your head? Would you typically get knocked out, i.e., lose consciousness?

- Yes
- No
- Don't know
- Prefer not to say

ASK IF REPEATED_HEAD_ IMPACT_LOC == NO OR DON'T KNOW

REPEATED_HEAD_ IMPACT_MEMORY

Would these repeated impacts to your head typically cause you to be dazed or have a gap in your memory?

- Yes
- No
- Don't know
- Prefer not to say

ASK IF REPEATED_HEAD_ IMPACT == YES

REPEATED_HEAD_ IMPACT_AGE_START

How old were you when these repeated impacts to your head began? If you are not sure, please give your best guess.

- __ years old [INTEGER, UPPER LIMIT == AGE IN YEARS IF KNOWN, OTHERWISE 125]
- Don't know

ASK IF REPEATED_HEAD_ IMPACT == YES

REPEATED_HEAD_ IMPACT_AGE_END

How old were you when these repeated impacts to your head ended? If you are not sure, please give your best guess.

__ years old [INTEGER, UPPER LIMIT == AGE IN YEARS IF KNOWN, OTHERWISE 125; MUST BE > REPEATED_HEAD_ IMPACT_AGE_START]

- They are still ongoing
- Don't know

ASK ALL

OTHER_LOC

Have you ever lost consciousness due to any other reason? For example, due to drug or alcohol overdose, being choked or strangled, near-drowning, heart attack, a breathing problem, blood loss, or complications from anaesthesia?

- Yes
- No
- Don't know
- Prefer not to say

ASK IF OTHER_LOC == YES

OTHER_LOC_N

How many times have you lost consciousness due to any other reason? If you are not sure, please give your best guess.

- ____ [INTEGER, LOWER LIMIT ==1, UPPER LIMIT == 100] time(s)
- Don't know
- Prefer not to say

Traumatic and acquired brain injury questions adapted from: Corrigan, J. D., & Bogner, J. A. (2007). The Ohio State University TBI Identification Method. Copyright reserved 2018, The Ohio Valley Center for Brain Injury Prevention and Rehabilitation.

VACCINATION STATUS

We would now like to ask you about your vaccination history.

ASK ALL
VACCINE
Have you ever received a vaccine for COVID-19?

1. Yes
2. No
3. Don't know
4. Prefer not to say

IF VACCINE == 1
VACCDOSE
How many doses (injections) of a COVID-19 vaccine have you had so far?

1. One
2. Two
3. Three
4. Four
5. Five
6. Six or more

IF HADCOVID == 1 AND IF VACCINE == 1
COVIDVAC
Do you think you had COVID-19 before your first COVID-19 vaccine?

1. Yes
2. No
3. Not sure

ASK IF AGE >= 50 YEARS
SHINGLES_VACCINE
Have you ever received a vaccine for shingles (herpes zoster)?

1. Yes
2. No
3. Don't know
4. Prefer not to say

IF SHINGLES_VACCINE == 1
SHINGLES_VACCINE_N
How many doses of the shingles vaccine have you received?

- 1

- 2
- Don't know

IF SHINGLES_VACCINE == 1

SHINGLES_VACCINE_date

When did you receive your most recent shingles vaccine dose? If you are not sure, please give your best guess:

[MONTH/YEAR DATE PICKER]

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

HEIGHT AND WEIGHT

ASK ALL
HEIGHT_WEIGHT
What is your current height and weight? If you are unsure, please give an estimate.
[Toggle between metric and imperial units; toggling is independent between height and weight]
FEET (NUMBER RANGE 2 to 9) INCHES (NUMBER RANGE 0 to 11)
CENTIMETRES (NUMBER RANGE 60 to 275)
STONES (NUMBER RANGE 3 to 40) POUNDS (NUMBER RANGE 0 to 13)
KILOGRAMS (NUMBER RANGE 20 to 250)

- Cannot give estimate
- Prefer not to say

[LIMIT CALCULATED BMI TO 10-80]

HGTCHK
Your height is [^insert feet^] and [^insert inches^]/[^insert centimetres^], is that correct?

- Yes
- No – you will be taken back to change your answer (RETURN TO HEIGHT_WEIGHT)

WGTCHK
Your weight is [^insert stones^] and [^insert pounds^]/[^insert kgs^], is that correct?

- Yes
- No – you will be taken back to change your answer (RETURN TO HEIGHT_WEIGHT)

SECTION 5: EMPLOYMENT, ALCOHOL AND SMOKING

We would now like to ask you about your work. If you feel uncomfortable answering a question, you do not have to answer.

EMPLOYMENT

ASK ALL
EMP1
Which of the following best describes your current situation?
If more than one applies, please choose the one you do for the most hours.

1. Employee in full time-job (30+ hours a week)
2. Employee in part-time job (less than 30 hours a week)
3. Self-employed
4. Government supported training
5. Unemployed and available for work
6. Wholly retired from work
7. Full-time education at school, college or University
8. Looking after home/family
9. Unable to work because of sickness or disability
10. Doing unpaid or voluntary work
11. Other (please specify) [free text]
12. Prefer not to say

IF EMP1==1,2,3
WORKSECTOR
Which sector do you currently work in? If you have more than one job, please select your main job.

- Business, consultancy or management
- Accountancy, banking or finance
- Charity and voluntary work
- Creative arts or design
- Education and training
- Energy and utilities
- Engineering or manufacturing
- Environment or agriculture
- Healthcare
- Hospitality or events
- Computing or IT
- Law
- Law enforcement and security
- Leisure, sport or tourism
- Marketing, advertising or PR
- Media or digital
- Property or construction
- Public services or administration
- Recruitment or HR
- Retail
- Sales

- Science or pharmaceuticals
- Social care
- Transport or logistics
- Other (please specify) [free text]

IF EMP1==1,2,3
WORKTYP2
Does your job involve interacting with the public in any of the following public facing roles?

- Healthcare
- Social care
- Delivery
- Retail/shop work
- Hospitality – e.g. pubs, restaurants, cafés, hotels
- Personal care – e.g. hairdresser, beauty therapist, personal trainer
- Policing, prisons, fire & rescue, coastguard
- Public transport (including taxis)
- Education, school, nursery
- Childcare
- Armed forces
- Another public facing role (please specify) [free text]
- No, I do not have a public facing role

IF EMP1==1,2,3
EMPLHOURS
In a typical WEEK, how many hours do you work? (Do not include hours travelling to and from work)

- Enter INTEGER in hours
- Prefer not to say

[Require: > 0; ≤ 120]

IF EMP1==1,2,3
WFH
Do you work from home at all?

1. Yes
2. No
3. Prefer not to say

IF WFH == 1
WFHHOURS
In a typical WEEK, how many hours do you work from home?

- Enter INTEGER in hours
- Prefer not to say

[LIMIT TO MAX FROM EMPLHOURS IF AVAILABLE]

IF EMP1==1,2,3

SHIFTWORK

Does your work involve shift work?

1. Never
2. Rarely
3. Sometimes
4. Usually
5. Always
6. Do not know
7. Prefer not to say

INFO: If you have more than one 'current job' then answer this question for your MAIN job only. Shift work is a work schedule that falls outside of the normal daytime working hours of 8am-6pm. This may involve working late afternoons, evenings or nights or rotating through these kinds of shifts.

IF SHIFTWORK == 2,3,4,5

NIGHTSHIFT

Does your work involve night shifts?

- Never
- Rarely
- Sometimes
- Usually
- Always
- Do not know
- Prefer not to say

INFO: If you have more than one 'current job' then answer this question for your MAIN job only. Night shifts are a work schedule that involves working at least 3 hours between 11pm and 6am.

IF EMP1==1,2,3

EMP2

The next questions are about the past seven days, not including today.

During the past seven days, how many hours did you miss from work because of health problems? Include hours you missed on sick days, times you went in late, left early, etc., because of health problems.

_____HOURS

EMP3

During the **past seven days**, how many hours did you miss from work because of any other reason, such as vacation, holiday?

_____HOURS

EMP4

During the **past seven days**, how many hours did you actually work?

_____HOURS (If "0", skip to question EMP6.)

EMP5

During the **past seven days**, how much did health problems affect your **productivity while you were working**?

[INFO NOTE: Think about days you were limited in the amount or kind of work you could do, days you accomplished less than you would like, or days you could not do your work as carefully as usual. If health problems affected your work only a little, choose a low number. Choose a high number if health problems affected your work a great deal.]

Consider only how much health problems affected productivity while you were working.

Health problems had no effect on my work	0	1	2	3	4	5	6	7	8	9	10	Health problems completely prevented me from working

TICK ONE NUMBER

ASK ALL

EMP6

During the **past seven days** (not including today), how much did health problems affect your ability to do your regular daily activities, other than work at a job?

[INFO NOTE: By regular activities, we mean the usual activities you do, such as work around the house, shopping, childcare, exercising, studying, etc. Think about times you were limited in the amount or kind of activities you could do and times you accomplished less than you would like. If health problems affected your activities only a little, choose a low number. Choose a high number if health problems affected your activities a great deal.]

Consider only how much health problems affected your ability to do your regular daily activities, other than work at a job.

Health problems had no effect on my daily activities	0	1	2	3	4	5	6	7	8	9	10	Health problems completely prevented me from doing my daily activities

TICK ONE NUMBER

Reilly, M. C., Zbrozek, A. S., & Dukes, E. M. (1993). The validity and reproducibility of a work productivity and activity impairment instrument. PharmacoEconomics, 4(5), 353–365.

ASK ALL
LIMITK
Since January 2020, has your physical or mental health affected the kind of paid work that you can do?

1. Yes
2. No
3. Don’t know
4. Not applicable

LIMITA
Since January 2020, has your physical or mental health affected the number of hours of paid work that you can do?

1. Yes
2. No
3. Don’t know
4. Not applicable

ASK IF LIMITK ==1 OR LIMITA ==1
LIMIDATE
When did your physical or mental health start to affect the paid work that you can do?

If you are not sure, please give your best guess.
[Date picker – lower limit January 2020] MONTH/YEAR

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

ASK ALL
TRANSPORT
What is your main means of transport?

- Walking
- Bike
- Motorbike/scooter
- Car
- Public transportation (bus, train, tube, etc)
- Other (please write in): [free text]

ALCOHOL

We would now like to ask you about drinking alcohol and smoking. If you feel uncomfortable answering a question, you do not have to answer.

ASK ALL
DRINK2
Do you currently drink alcohol?

1. Yes
2. No
3. Prefer not to say

ASK IF DRINK2 == 2 OR 3
TT2
Did you ever drink alcohol?

1. Yes
2. No
3. Prefer not to say

ASK IF TT2 == 1 AND IF DRINK2 == 2
DRINKSTOP2
Why did you stop drinking alcohol? If more than one applies, please select your main reason.

- Ill health/doctor's advice
- Healthy lifestyle
- Financial reasons
  Other (please write in) [free text]

ASK IF DRINK2 == 1
DRINKOFT2
How often do you have a drink containing alcohol?

- Monthly or less
- Two to four times a month
- Two or three times a week
- Four or five times a week
- Daily or almost daily

SMOKING

ASK ALL
SMOKENOW
Do you smoke cigarettes at all nowadays?

1. Yes
2. No
3. Prefer not to say

IF SMOKENOW == 2 or 3
SMOKECIG
Have you ever smoked cigarettes?

1. Yes
2. No
3. Prefer not to say

IF SMOKECIG==1 AND SMOKENOW==2
SMOKECIGDATE
When did you stop smoking cigarettes?
If you are not sure, please give your best guess.
[Do not allow date before participants age]
MONTH/YEAR

- Can't remember

[When "Can't remember" selected, display "Are you sure? You can just give your best guess." as a pop-up on same page]

IF SMOKENOW == 1 OR IF SMOKECIG==1
SMOKEDURN
In your lifetime, for how many years have you smoked?
If you are not sure, please give your best guess.

- [Enter INTEGER – limit to age of participant]

ASK ALL
VAPNOW
Do you vape/use e-cigarettes at all nowadays?

1. Yes
2. No
3. Prefer not to say

IF VAPNOW == 2 or 3

SMOKEVAP

Have you ever vaped/used e-cigarettes?

1. Yes
2. No
3. Prefer not to say

IF VAPNOW == 1 OR IF SMOKEVAP == 1
VAPDURN
In your lifetime, for how many years have you vaped/used e-cigarettes?
If you are not sure, please give your best guess.

- [Enter INTEGER – limit to max. 25 or age of participant, whichever is less]

SECTION 6: ENVIRONMENT

ASK ALL

NATURE
In the last 12 months, how often, on average have you spent free time outside in green and natural spaces? Please select one answer:
[INFO NOTE: This includes any visits to green spaces in towns and cities (e.g. parks, canals); the countryside (e.g. farmland, woodland, hills and rivers); the coast (e.g. beaches, cliffs) and activities in the open sea. Please include visits of any duration (including short trips to the park, dog walking, etc). However, DO NOT include time in your garden or time outside as part of your job.]

1. Every day
2. More than twice a week, but not every day
3. Twice a week
4. Once a week
5. Once or twice a month
6. Once every 2-3 months
7. Less often
8. Never
9. Don’t know
10. Prefer not to say

ASK ALL

GARDEN
Do you have access to a garden, allotment, or other private or shared outdoor space?

- Yes
- No
- Don’t know

- Prefer not to say

IF GARDEN == YES
GARDEN_2
How often do you typically spend time in this garden, allotment or other outdoor space?

- Every day
- Most days
- Some days
- Occasionally
- Never
- Don’t know

ASK ALL

MOULD

In any frequently used room in your home, is there a smell of damp or any visible mould growth on windows, walls or other surfaces (such as in the photos below)?

- Yes
- No
- Don’t know

ASK ALL

HEATING

When you heat your home, which of the following methods do you use, and how often?

1. Gas boiler
2. LPG boiler – bottle or tank
3. Oil boiler
4. Electric boiler
5. Heat pump
6. Gas heater
7. Electric heater
8. Coal/coke burner
9. Wood burner
10. Traditional open fire

Dropdown options:

- Never
- Rarely
- Sometimes
- Often
- Always
- Don’t know

ASK ALL

COOKAPPLI

How many days in a typical week are the following cooking appliances used in your home?

1. Gas hob
2. Induction/electric hob
3. Gas oven
4. Electric oven
5. Coal/coke cooking appliance
6. Wood cooking appliance

- [0 – 7] days
- Don't know

ASK ALL

INDOORPOLL

How often do you ventilate your home (i.e. open a window or use an extractor fan) during/after cooking?

- Never
- Rarely
- Sometimes
- Often
- Always
- Don't know

ASK ALL
TOXIC

Have you ever been exposed to toxic hazards? This could result from exposure to lead, mercury, uranium/radiation, environmental hazards, or carbon monoxide.

- Yes
- No
- Don't know
- Prefer not to say

SECTION 7: DEMOGRAPHICS AND CONTACT DETAILS

We would like to make sure we have your preferred and most up-to-date contact details. This information will be kept strictly confidential and will not be made available to researchers. We would also like to ask

you about some of your personal characteristics. If you feel uncomfortable answering a question, you do not have to answer.

ASK ALL

PHONENUMB

Are these the last 3 digits of your current mobile phone number?

[SHOW PARTIALLY OBSCURED MOBILE PHONE NUMBER]

- Yes
- No
- I do not have a mobile number

IF NO:

Please enter your current mobile phone number:

[number]

Please re-enter your mobile phone number

[number]

- Prefer not to say

EMAIL

Is this your preferred email address?

[SHOW PARTIALLY OBSCURED EMAIL ADDRESS]

- Yes
- No
- I do not have an email address

IF NO:

What is your preferred email address?

[XXX@XXXX]

Please re-enter your preferred email address.

[XXX@XXXX]

- Prefer not to say

POSTCODE

We would like to check your current address to update our records and look at neighbourhood factors that might impact your health.

Are these the last 3 characters of your current postcode?

[SHOW PARTIALLY OBSCURED POSTCODE]

- Yes
- No

IF POSTCODE == NO:

Please provide your current postcode:

XXXX-XXXX

Please re-enter your postcode

XXXX-XXXX

- I no longer live in the UK
- Prefer not to say

IF POSTCODE == NO:

MAP WIDGET

ADDRESS
Please select your current address based on your postcode.

Address picker

- Prefer not to say

Other, please add below [manual entry]

DOB

We would like to check your date of birth. Please enter as shown below:

[DAY/MONTH/YEAR – Date picker; Limit year to 1900--2006]

- Prefer not to say

ASK IF DOB DOES NOT MATCH D.O.B. ON RECORD [EXCLUDING "Prefer not to say"]

DOB_check

Please re-enter your date of birth.

[DAY/MONTH/YEAR – Date picker; Limit year to 1900--2006]

GENDER

Which of the following best describes you?

- Female
- Male
- Non-binary
- Prefer to self-describe, please write in [free text]
- Prefer not to say

ASK ALL
HOUSEHOLD_NADULTS
Including yourself, how many adults aged 18 and over currently live in your household? Include people who regularly spend part of the week in your household.

[INTEGER 1-20]

ASK ALL
HOUSEHOLD_NCHILD
How many children or young people aged 0 to 17 years currently live in your household?

Include everyone aged 0-17 years, whether or not they are your own children. Include infants and babies and children/young people who regularly spend part of the week in your household.

[INTEGER 0-20]

ASK ALL
LANGUAGE
Is English your main language (i.e. your first or preferred language)?

- Yes
- No

ASK ALL

LANGUAGE_PROF
How well can you read English?

- Very well
- Well
- Not well
- Not at all

ASK ALL
SURVEY_HELP
Did you need help to fill out this survey (e.g. from a friend or relative)?

- Yes
- No

EDUC

What is your highest educational qualification? This means any educational, professional, vocational or other work-related qualifications for which you received a certificate. Please select one answer.

- Degree level or above
- Other Higher Education below degree level
- A levels, NVQ level 3 and equivalents INFO includes AS level, SVQ and GNVQ level 3, BTEC National
- GCSE/O level grade A*-C or 4-9, NVQ level 2 and equivalents INFO: includes SVQ and GNVQ level 2, BTEC first or general diploma
- Qualifications at level 1 and below INFO: includes GCSE or O level below grade C or 4, CSE below grade 1, NVQ, SVQ and GNVQ level 1, BTEC first or general certificate
- Another type of qualification [INFO: includes other vocational or professional or foreign qualifications]
- No qualification
- Prefer not to say

DISAB1

Do you consider yourself to have a disability?

1. Yes
2. No
3. Prefer not to say

ASK IF DISAB1 =1

DISAB2 [MULTICODE]

Does this disability or illness affect you in any of the following areas?

Please select all that apply:

- Long term pain
- Chronic health condition
- Mobility
- Dexterity
- Mental health
- Visual
- Breathing
- Memory
- Hearing
- Learning
- Speech
- Behavioural
- Energy levels
- Cognitive function
- Other (please write in) [free text]
- None of these [EXCLUSIVE]
- Prefer not to say [EXCLUSIVE]

ASK IF DISAB1 =1

DOWNS

Have you been diagnosed with Down's syndrome?

- Yes
- No
- Prefer not to say

ASK ALL

ORIENTATION

What is your sexual orientation?

- Straight/Heterosexual
- Homosexual/Gay/Lesbian
- Bisexual
- Asexual
- Pansexual
- Other (please write in) [free text]
- Prefer not to say

ASK ONLY IF MISSING NHS LINKAGE PERMISSION

NHSLINK

Imperial College would like your permission to link data held by NHS England and other UK NHS bodies to information we hold about you, so we can follow your health status for up to 20 years. All such data will be held securely and kept confidential. Do you give permission for Imperial College to do this?

- Yes
- No

ASK ONLY FOR THOSE AGED LESS THAN 25 YEARS AT TIME OF REGISTRATION AT BASELINE

CYPEDULINK

Imperial College would like your permission to link your education records, held by the English Department for Education and other relevant public bodies, to information we hold about you. All such data will be held securely and kept confidential. Do you give permission for Imperial College to do this?

- Yes
- No

ASK ALL

UKCOHORT_1

There are other large national studies looking at health and disease. Are you taking part in the following health studies?

UK Biobank

1. Yes
2. No
3. Don’t know

UKCOHORT_2

Our Future Health

1. Yes
2. No
3. Don’t know

UKCOHORT_3

100,000 Genomes Project

1. Yes
2. No
3. Don’t know

UKCOHORT_4

The Great British Intelligence Test

1. Yes
2. No
3. Don’t know

IF UKCOHORT_1 == 1

COHORTCONSENT1

Do you agree for us to link your data from UK Biobank to information we hold about you?

- Yes
- No

IF UKCOHORT_2 == 1

COHORTCONSENT2

Do you agree for us to link your data from Our Future Health to information we hold about you?

- Yes
- No

IF UKCOHORT_3 == 1

COHORTCONSENT3

Do you agree for us to link your data from the 100,000 Genomes Project to information we hold about you?

- Yes
- No

IF UKCOHORT_4 == 1

COHORTCONSENT4

Do you agree for us to link your data from The Great British Intelligence Test to information we hold about you?

- Yes
- No

OPENTEXTBOX

If you would like to go back and change any of your answers, please do so now.

Is there anything else you would like to tell us about your health or experience of COVID-19? If so, please type in the box below.

[MAX 100 WORDS/600 characters]

- There's nothing I'd like to add.

SECTION 8: HEARING, COGNITION AND MEMORY

ASK ALL

HEARING

We would like to invite you to take an online hearing test, which will be available shortly. The test requires headphones and should take less than 5 minutes to complete. Once finished, you'll be able to see how your hearing compares with other people's.

Would you be willing to take an online hearing test?

1. Yes
2. No

IF HEARING == 1

Thank you. We will contact you when the hearing test is available.

ASK ALL

COGNITIVE

We would also like to invite you to take an online cognitive test, which takes roughly 20 minutes to complete. Once finished, you can compare your results with other people's.

[INFO NOTE: This involves measuring your reasoning skills, working memory, attention and emotional processing through a series of interactive games and challenges.]

You don’t have to complete it now. You can return later at a convenient time.

Would you be willing to take an online cognitive test?

1. Yes, I’ll do it now
2. Yes, but I’ll do it later
3. No

IF COGNITIVE == 1

[Continue to the cognitive test]

IF COGNITIVE == 2

Thank you. When you are ready to take the cognitive test, please return using the same link as in your invitation.

IF COGNITIVE == 3

Thank you for completing the survey.

You may now close your browser.