

generation scotland

Before, During and After the Pandemic

Professor David Porteous and Dr Chloe Fawns-Ritchie

Our Mission

To improve the **health** and **wellbeing**
of **current** and **future** generations
through **partnership** between
researchers and **volunteers**.

Our Vision

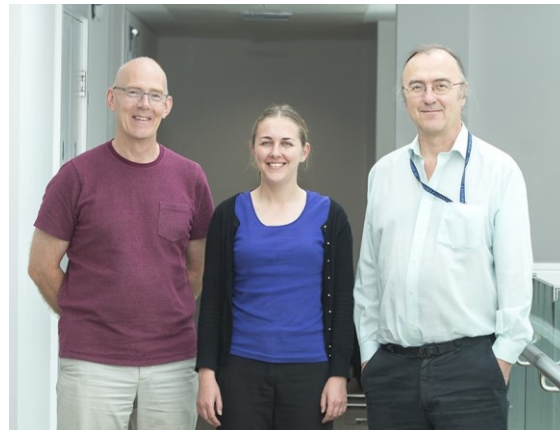
1. A **longitudinal** study that follows the lives of **people in Scotland**, as individuals and families, from **childhood** to **old age**.
2. A **partnership** between our **volunteers** and **researchers** on pressing issues of **health** and **wellbeing**.
3. Combining responses to **questionnaires**, and detailed historic **NHS records** with innovative **laboratory science** and **data analytics**.
4. Keeping **samples** and **data safe** and **secure**.
5. Supporting **open science** and sharing our findings to influence **health policy** and **improve lives**.

- Who we were then

- 2006-2011



- 2017-2019



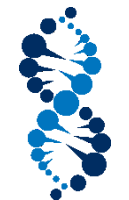
- Who we are now



generation scotland



- 24,000 adults in 7,000 family groups between 2006-2011
- Baseline **clinic measures** and detailed **health** and **wellbeing** questionnaires
- Blood and urine for **genetics** and **biochemistry**
- **Linkage** to **NHS Scotland health records**
- Consent to **recontact**



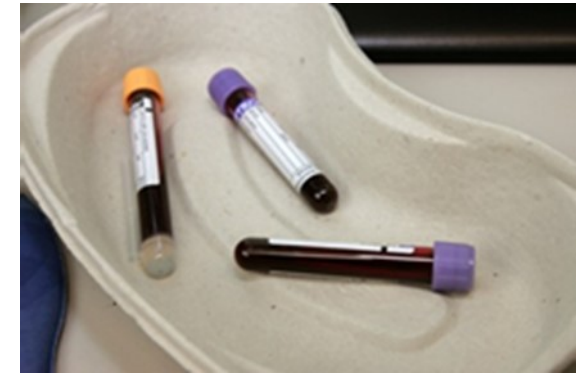


Over 200,000
person years
worth of health
data

Tens of millions
of data points



Safe and Secure
Valued and Trusted
Transparent
Public benefit

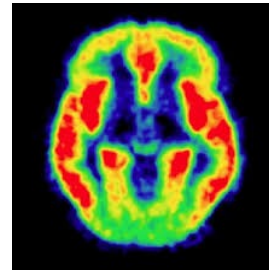
The NHS Scotland logo, featuring the letters 'NHS' in a large, bold, blue sans-serif font. Below 'NHS' is a stylized blue wave or swoosh that curves upwards at both ends. Underneath the wave is the word 'SCOTLAND' in a smaller, bold, blue sans-serif font.

The Next Generation 2019-2024



Wellcome Trust funding to expand the Generation Scotland cohort.

- Increase to 40,000 or more volunteers
- **Age 12 and up**
- NHS Scotland data, health and relevant **administrative records**
- **On-line** health and wellbeing questionnaires
- **Passive** data collection
- **Postal** sample collection



Feeling and coping under lockdown and beyond

co:vidlife

teen
co:vidlife

rural
co:vidlife

- CL** CovidLife
- TCL** TeenCovidLife
- RCL** RuralCovidLife

Lockdown 1

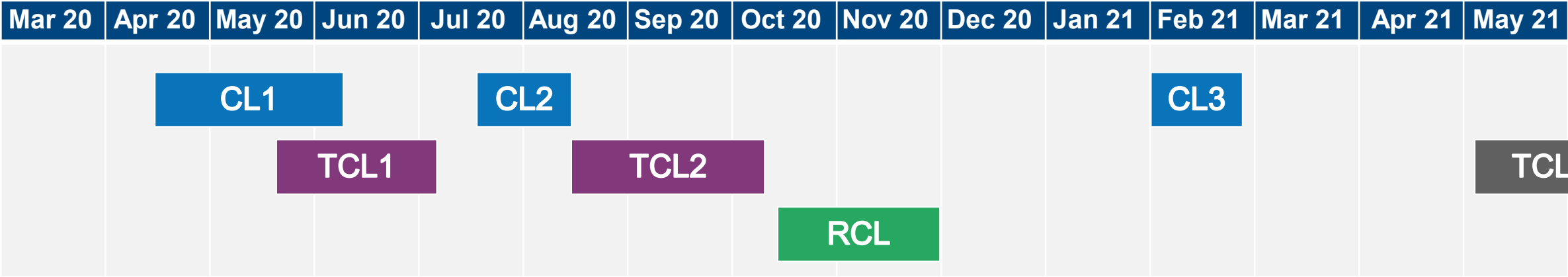
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Lockdown 2

↓

Now

↓



Access to healthcare

COVID-19 tests

Health literacy

COVID-19 knowledge & information

Financial situation & worries

Community

Wellbeing

COVID-19 symptoms

Exam cancellations

Childcare

Stress

COVID-19 restrictions: attitudes

Health behaviours

Isolation

Transport & accessibility

Sociodemographics

Employment status

Anxiety symptoms

Personality

Social support & contact

Long-COVID

Trust in science & medicine

Vaccine hesitancy

COVID-19 vaccination

General health

Sleep

Loneliness

Resilience

Depressive symptoms

Tourism

Schooling

Connectivity

COVID-19 status

COVID-19 restrictions: adherence

Life satisfaction



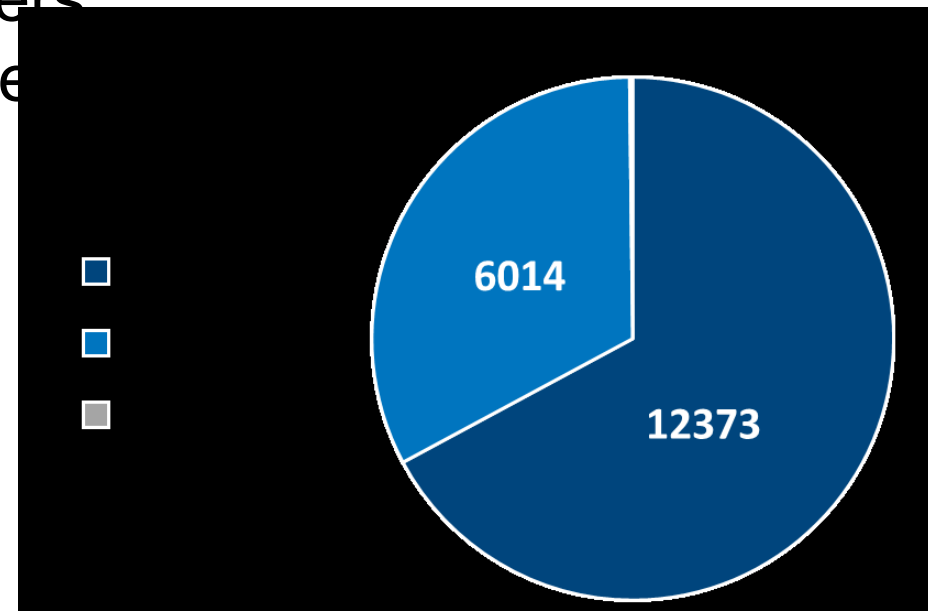
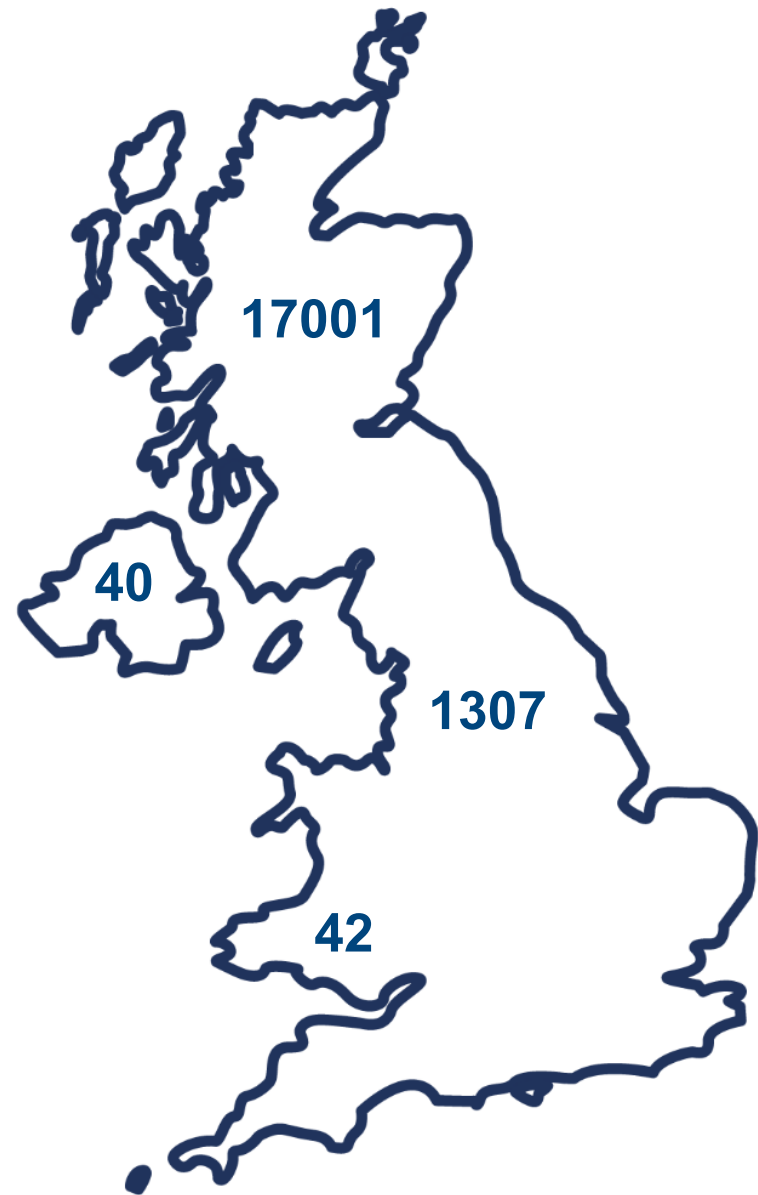
covidlife

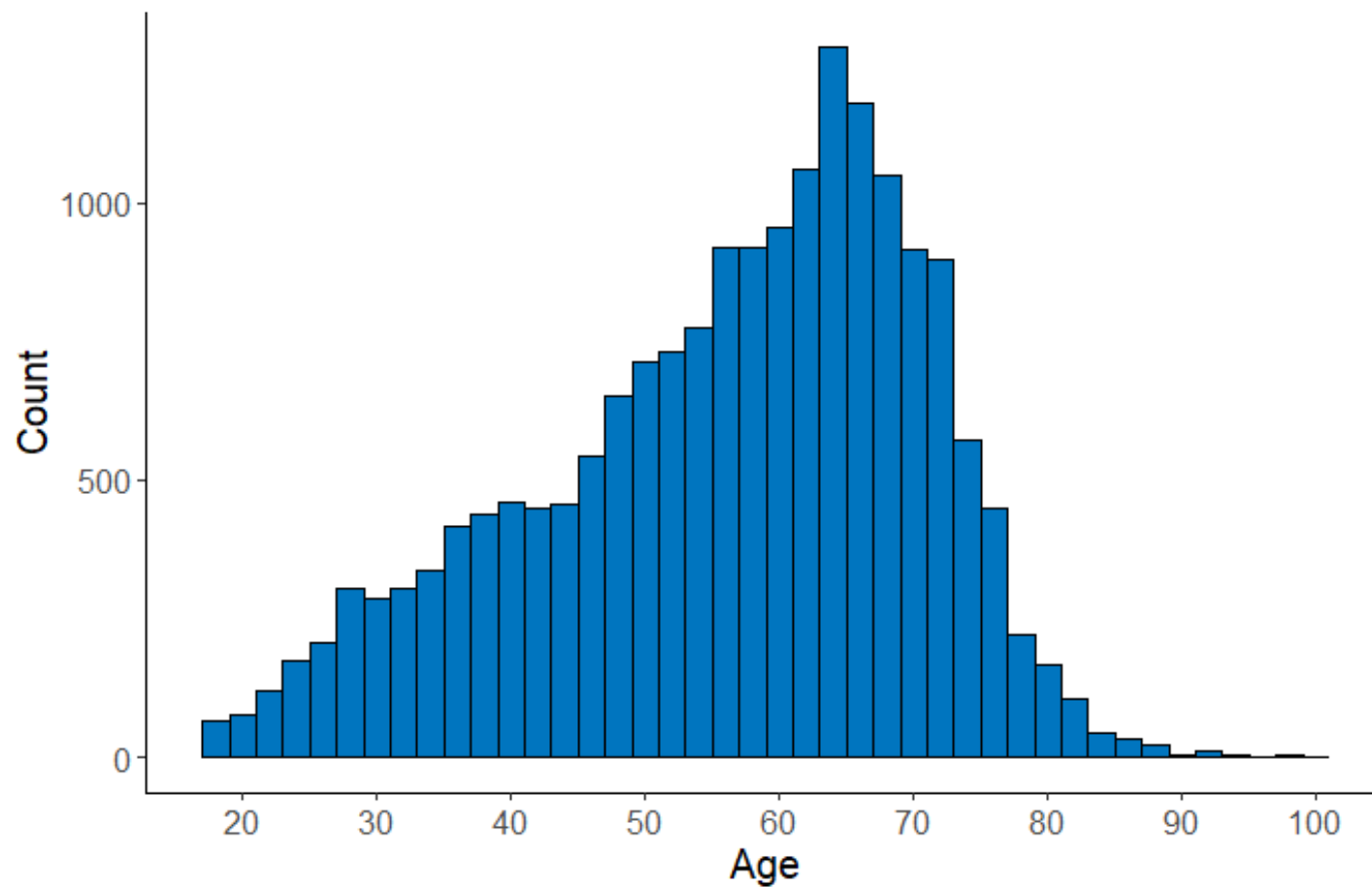
Longitudinal study to understand the **psychological, social and economic impact of COVID-19** in adults

CovidLife1: 18,423 volunteers

CovidLife2: 11,312 volunteers

CovidLife3: 10,475 volunteers





Mar 20	Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	
		CL1			CL2						CL3				



- 4,750 **Generation Scotland** participants
- Can link to pre-pandemic data
 - Baseline clinic measures
 - Detailed health and wellbeing questionnaires
 - Genetic and biochemistry data
 - NHS Scotland health records



teen co:vidlife

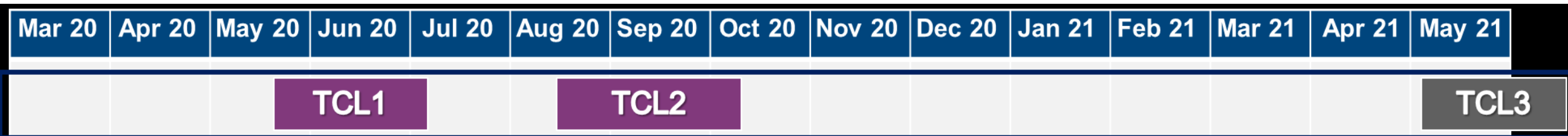
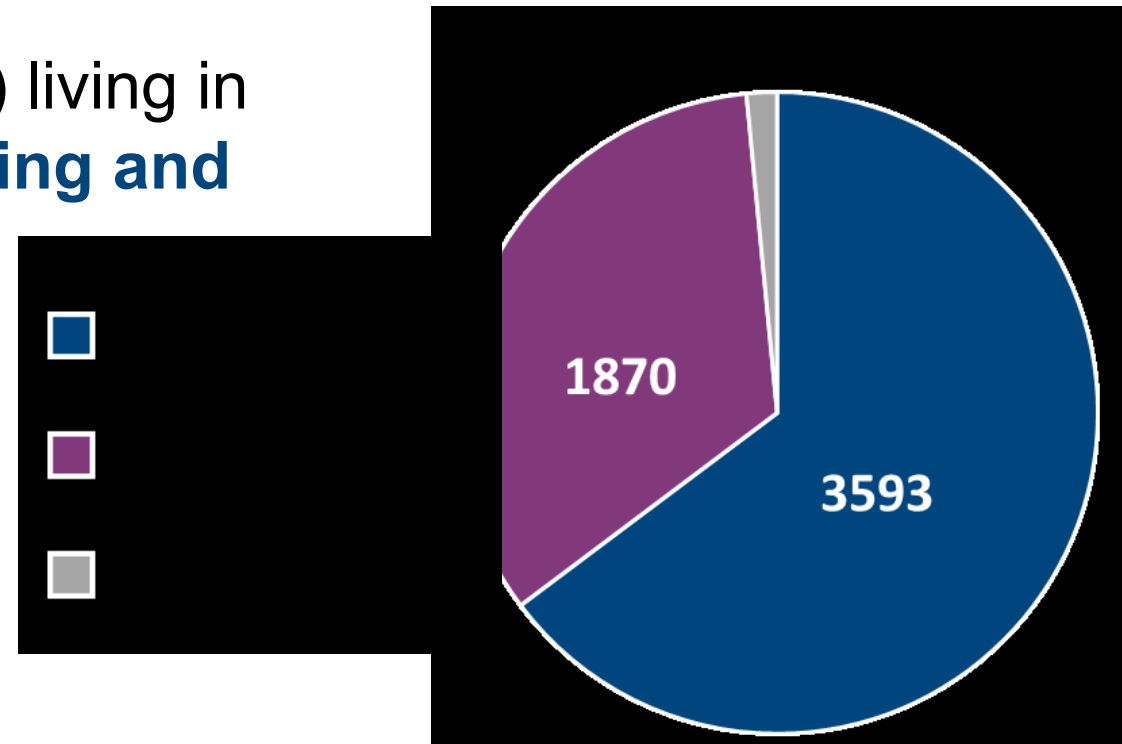


Designed to give **young people** (aged 12-17) living in Scotland a **voice** to tell us **how they are coping and adapting during COVID-19**

TeenCovidLife1: 5,548 volunteers

TeenCovidLife2: 2,232 volunteers

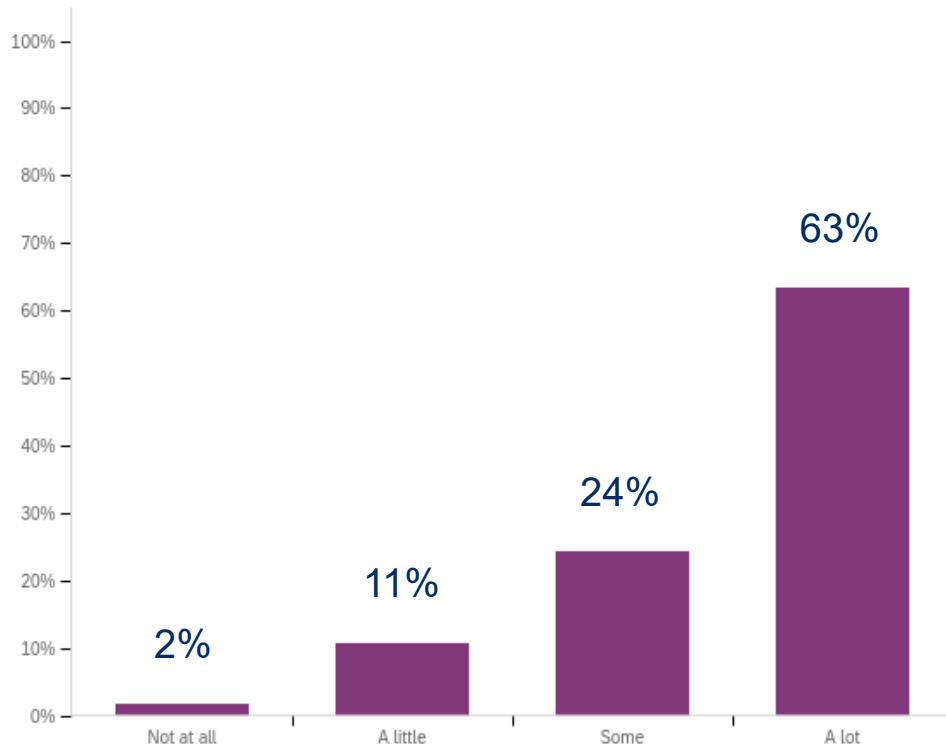
761 did TeenCovidLife1 & 2



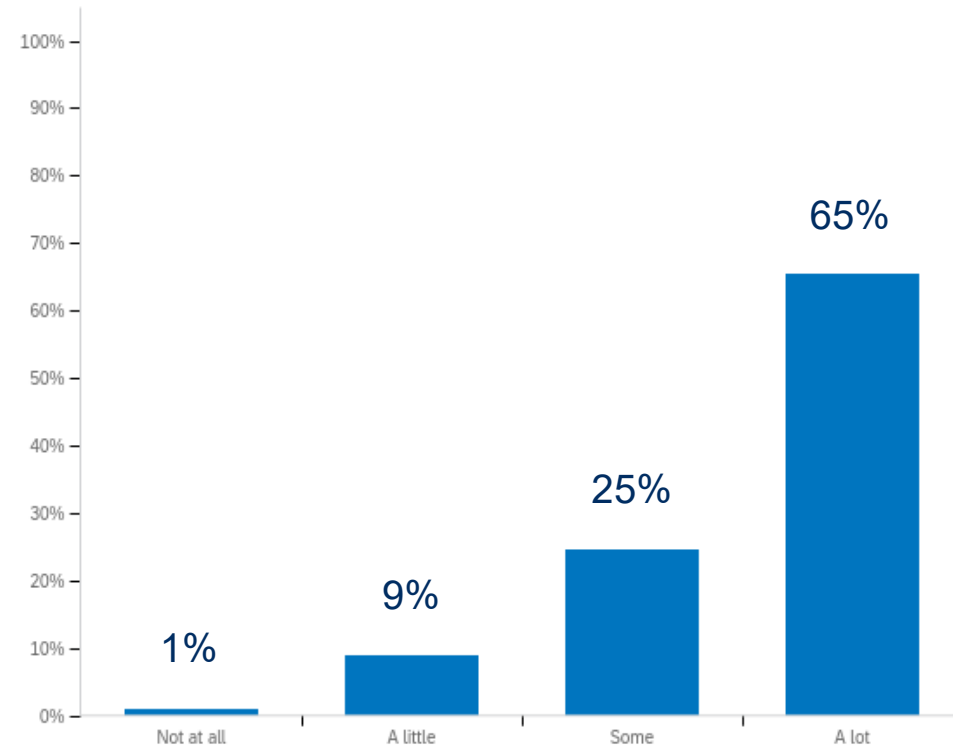
Impact of COVID-19

How much has COVID-19 changed your daily routine?

teen
covidlife



covidlife



rural covidlife

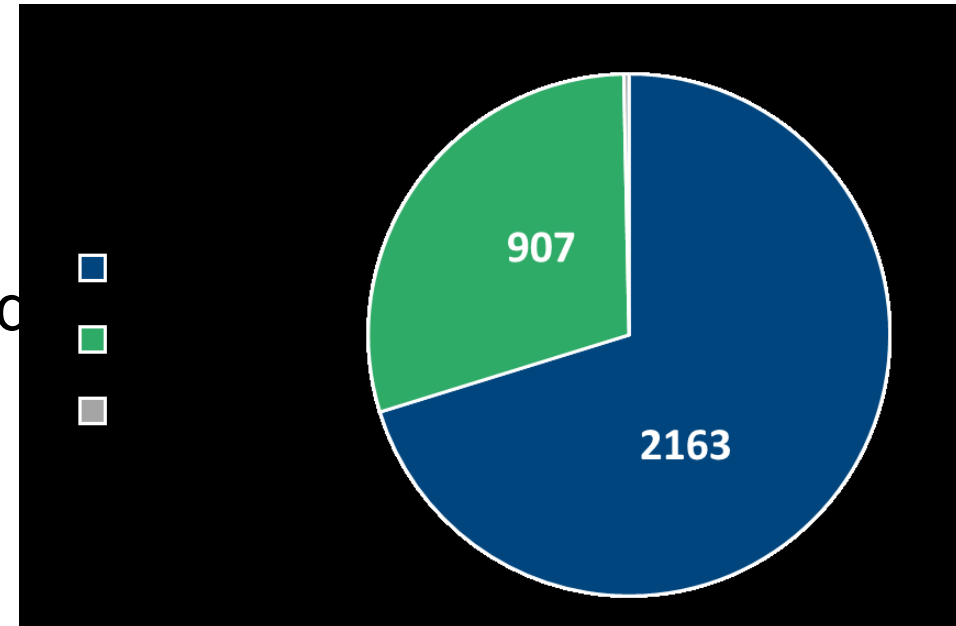
Rural communities make up 17% of Scottish population

Often under-represented in health research

Designed **in partnership with rural communities**

Understand the issues facing rural communities and how these are changing during COVID-19

RuralCovidLife: 3,080 volunteers



Some findings

co:vidlife

Rates of loneliness are higher in lockdowns than when restrictions ease.

Life satisfaction was lower in lockdown 1, compared to previous national levels.

teen co:vidlife

Young people went to bed later during lockdown 1 and had poorer quality sleep.

Young people followed rules on face coverings and were in support of these rules.

rural co:vidlife

Connectivity is important for working and socialising during the pandemic.

Sense of community improved for some living in rural communities during COVID.

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Apply for access at:

**generationscotland.org/
for-researchers**

generation
scotland 

co:vidlife 

teen
co:vidlife 

rural
co:vidlife 

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What next?

- We are **back on track** to transform GS from an adult-only study to actively involve **adolescents**.
- Supporting **inclusive, longitudinal** and **transgenerational** studies that combine **genetic, sociodemographic, education, lifestyle**, and **behavioural** measures of **health and wellbeing**.

REC approval for

- **On-line consent**, aged **12** and up
- **Postal** sample collection
- Health and administrative **data linkage**
- **Passive** data collection

EoSREC approval in
December 2020

Recruitment of new younger members
of GS starting in Q2/3 2021

Recruitment of new families and
age 12 up planned for Q3/4 2021

Team Science and Open Science Funders and Partners

**generation
scotland**

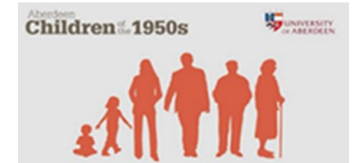


THE UNIVERSITY
of EDINBURGH

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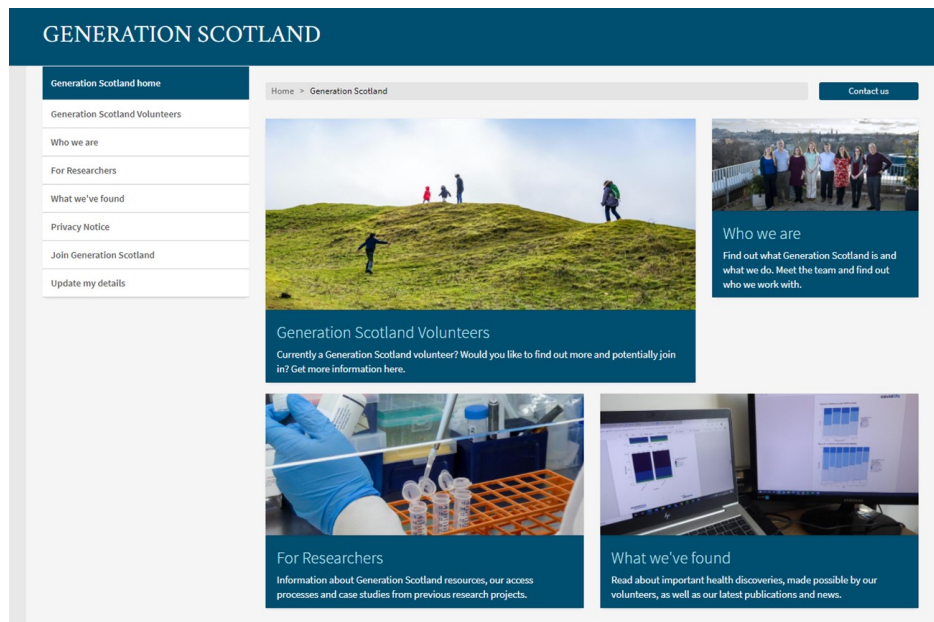
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To find out more..



www.generationscotland.org



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Thank you for listening!

Any questions?