

# Exploring the psychological impact of the COVID-19 pandemic on adults with asthma: A quantitative study

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## Introduction

Coronavirus disease 2019 (COVID-19) was declared a pandemic in early 2020, and some people living with asthma may be at an increased risk of severe disease with COVID-19.

We wanted to explore the psychological impact of the COVID-19 pandemic in those living with asthma across the UK.



## Methods

People living with asthma were invited to participate in an anonymous online survey via the **REgister for Asthma research (REACH)** database and **Asthma UK social media**.

The survey collected demographic information and assessed psychological impact using validated measures including:

- **Impact of Events Scale-Revised (IES-R)**
- **General Anxiety Disorder-7 (GAD-7)**
- **Patient Health Questionnaire-9 (PHQ-9)**

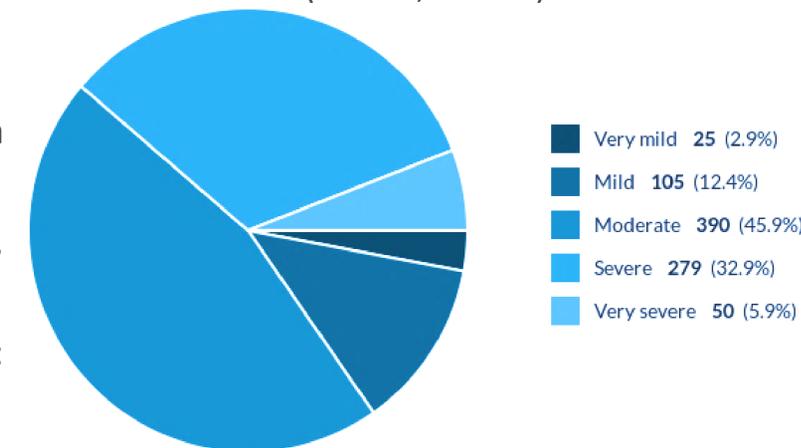
The survey also explored the views of COVID-19 health information provision and the experiences of managing asthma during the pandemic.

## Results

From May-June 2020, 849 people living with asthma completed the survey. Most were aged between 36-45 years (n=254, 30%); female (n=753, 89%). The majority perceived their asthma as moderate (n=390, 45.9%).

Psychological impact measures identified:

- **Post-traumatic stress disorder (PTSD) was a clinical concern in 61.4% of the sample (IES-R: *Mdn*=30, range=0-88)**
- **76.6% were experiencing anxiety symptoms (GAD-7: *Mdn*=9, range=0-21),**
- **77.3% were experiencing depression symptoms (PHQ-9: *Mdn*=10, range=0-27).**



Over half felt that as someone with asthma, they had not been given adequate health information about COVID-19 (n=495, 58%). Two thirds also felt that the pandemic had changed the way they thought about or managed their asthma day-to-day (n=568, 67%).

*“I’m much better at remembering to take my brown inhaler!”*

(Female, 26-35 years, moderate asthma)

*“I updated my will at the beginning certain I was going to die, the first few months I was highly anxious and sad knowing I was vulnerable.”*

(Female, 56-65 years, severe asthma)

*“A phone call from [an] asthma nurse or GP would have been reassuring although [I] know they are busy.”*

(Female, 56-65 years, severe asthma)

## Conclusions

Early indications suggest that those with asthma are experiencing greater levels of anxiety and depression compared to the general UK population, as research has found rates of anxiety and depression to be 21.6% (GAD-7) and 22.1% (PHQ-9) respectively in a UK sample during COVID-19 (Shevlin et al., 2020).

Our study highlights that those living with asthma may be experiencing psychological distress in response to the COVID-19 pandemic. Psychological intervention and provision of asthma specific COVID-19 information may help alleviate distress.



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