



Memory and Concentration



Managing the effects on memory and thinking

Most people who have had COVID will recover with no long-term impact on their memory and concentration. Some people experience mild difficulties that don't last for long.

Other people, particularly those who have had a severe illness and been admitted to intensive care may find problems last longer.

People who had some memory problems before becoming ill may find that they worsen afterwards, these changes may be mild and may not last for long.

How can COVID affect memory and thinking?

Memory: If your memory is affected, you may find it difficult to hold information in your head in order to use it to make decisions based on that information, you may struggle to recall something that has happened, or forget to take medication on time.

Attention and concentration: Problems with attention/concentration can make it hard to focus and ignore distractions. So, it may be difficult to find the can opener in the cluttered utensil drawer, help your child/grandchild with homework, or hold a conversation, whilst the TV is on, or keep up with conversations that are fast-paced or involve more than one other person. It may be more difficult to do two things at the same time and not be distracted when trying to concentrate on a task.

Executive functions: Executive functions are the mental processes that allow us to solve problems, make decisions, plan ahead, and see tasks thorough to completion.

For example, executive functions are needed to deal with problems, organise a holiday, get the car fixed, find a new job or a new place to live.

People with executive functioning problems often seem disorganised, impulsive, and not thinking things through. They may find it difficult to get going on tasks, or start a task but not see it through, perhaps getting distracted by something irrelevant and not noticing that they have drifted off-task.

Why does COVID affect memory and thinking?

There are several reasons why people who have been ill with coronavirus might experience difficulties in their memory and thinking skills.

Fatigue

Fatigue is common after viral infections and can affect your ability to concentrate. You may feel that you don't have the mental energy needed to

pay attention to things, even when you think something is important. If you can't concentrate on something, it is harder to remember it. If you have returned to work it may be difficult to concentrate on work tasks, especially the less interesting tasks, as trying to concentrate can feel exhausting.

More information about managing fatigue can be found here.

Getting a good night's sleep is important for helping your memory and thinking. More information on improving your sleep can be found here.

Fear and Anxiety

The COVID pandemic has been a worrying time and for some people it may have caused high levels of anxiety and even panic attacks. Being in hospital will have been a stressful experience for many people.

If you spent time in an Intensive Care Unit, this may have been distressing, and you may find that you keep thinking about your experience, and find that unpleasant memories pop into your mind, you may also have nightmares about your experiences.

Anxiety, worry, intrusive thoughts and images can all affect concentration, and as we talked about with fatigue, if you can't concentrate it is difficult to remember things, to think through problems, and make decisions.

More information about managing fear and anxiety can be found here.

Low mood

Low mood can affect memory and thinking. During the Coronavirus pandemic many people have faced situations that may have become overwhelming and lead to low mood. Like anxiety, low mood affects the ability to concentrate and remember things.

More information about managing low mood can be found here.

Brain inflammation

In a small number of people, COVID causes inflammation in the brain. If this was this case, your team of health care professionals will have told you that tests showed evidence of brain inflammation known as "encephalitis"; its effects depend on which parts of the brain have been affected. These often

include difficulties with attention/concentration, memory and the ability to solve problems, make decisions, plan and organise.

Acute-respiratory distress syndrome (ARDS)

Some people with COVID develop a type of respiratory failure caused by severe inflammation of the lungs called ARDS. Patients who develop ARDS are usually admitted to intensive care and often their breathing is supported by a mechanical ventilator. The brain is very dependent on oxygen and if oxygen levels are low for a period of time there can be damage to the brain. The effects on memory and thinking will depend on which parts of the brain are involved.

Stroke

Your health care team may have told you that you have suffered a stroke as a result of having COVID. Although it is rare, COVID can affect blood vessels, and this may have caused blood clots to form which travelled to the brain and interrupted the blood flow to a part of the brain. The consequences of this depend on which part of the brain is damaged, but could include physical, cognitive or emotional problems.

How to manage memory or thinking difficulties

The first step to managing problems with memory and thinking is to accept that you have them. Particularly if you haven't had any formal testing or explanation, which is common, it can be hard to accept that the problems you are having are real. Sometimes this leads people to constantly be trying to test themselves in order to show they are ok or not. However, problems with memory and thinking are normal for many people who have been in hospital or had COVID.

If you ask people in your family they will probably have noticed changes as well, asking them might help in two ways firstly it might help you accept that there is a problem and secondly, it will help you and your family to feel that you can talk about it and think together about ways of coping rather than trying to avoid the subject. This will almost certainly relieve pressure on

both you and them; recovering from COVID is enough to cope with, without the added pressure of trying to keep problems hidden.

Discussing the problems with those around you, family, friends or colleagues, also allows you to ask them to help you at home, you can ask family or friends to remind you to do a task on a particular day or time. At work you may be able to ask colleagues to do the same.

An important part of managing the impact of memory and thinking problems is managing your daily activities, in particular applying the 3 P's – Pacing, Planning and Prioritising.

You can read more about this here – managing daily activities.

There are also a few specific techniques that can help manage each type of problem:

1 Managing attention and concentration problems

If your attention capacity is limited, it can be very helpful to reduce distractions. If you are trying to do something demanding like fill out a complicated form, find a time and place that is quiet and ask others around you not to disturb you. You might also find listening to gentle instrumental music helps. Check out music streaming platforms for "focus" or "concentration" playlists and see what works for you. Also make sure that you plan regular breaks and try to keep things interesting by adding in interesting tasks with others that are a bit more dull and reward yourself for getting through the tasks you are less interested in.

2 Managing memory problems

If you find that you have problems remembering to do things or if you struggle to remember things you have done or information you've been told then it can really help to use an external aid to share the load. You might wonder where you can get one from but in fact you probably have one within arm's reach – can carry out most of the same tasks that our memories do, but much more reliably.

 Remembering to do things – You can use your phone's calendar app to automatically remind you when you have to do things – from sending a birthday card to putting the rubbish bins out! If you don't have a mobile phone, or your phone doesn't have a calendar app or reminders. Then get yourself a good old-fashioned paper calendar, make sure it has plenty of space for each day then add things to it and get into the habit of checking it at regular times of the day, say first thing in the morning and last thing at night.

• Remembering things that you have done – You can enter notes into your phone, either by typing a note in or, even easier by using a voice recorder. You'll probably be having most appointments with health professionals via phone – this can pose a problem as you can't ask them to write something down for you, however you can ask them to repeat some important piece of information while you are recording using your phone.

You can also use the phone's camera to capture visual information that you need to remember. If you don't have your phone to hand, or you don't have a mobile phone, then good old-fashioned paper and pencil can be a great help; get into the habit of carrying a small pad and pen around with you.

3 Managing executive problems

- Setting up a regular routine that works well for you, will reduce the demands on your brain. Think through all the things you want to do regularly every day, or every week, put them into a schedule, and practice this routine until it becomes second nature.
- Planning Make a clear plan before approaching any new or complicated problem or situation, break the problem down into all the steps you need to take, write each one down and what you need for it, and then follow it. Keep checking back to your plan to check you haven't gone off course and also to check if you need to change your plan.
- Stop and think try and establish a habit of pausing during any complicated activity and taking a moment to think. Ask yourself "what did I set out to do?", "how am I getting on?"

"do I need to change my approach? or do I need to take a break?"

What if I'm continuing to have problems?

Healthcare professionals can help you;

- You can talk with your GP to identify what support is available.
 Your doctor can discuss whether referral to an occupational therapist or psychologist for cognitive rehabilitation and is available in your area. may be useful to help you manage your cognitive difficulties.
- If are being followed up by the hospital, do let your health professional know that you are experiencing these problems. Your doctor can discuss whether referral to an occupational therapist or psychologist for "cognitive rehabilitation" may be useful to help you manage your difficulties.