Immune Deficiencies Foundation Australia

PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

COVID-19 FAQS

Last updated 10th March 2022

IDFA has compiled the following FAQ document to address some of the most asked questions around COVID-19.

This information is current as of the 10th March 2022. Please note that recommendations around COVID-19 are rapidly changing and the advice contained in this document may no longer be current when you read it. IDFA will update this document periodically. The information contained within this document is general in nature and is not intended to replace advice from your treating specialist.

PREVENTION

What other measures can prevent the spread of COVID-19?*

Until we know more about how vaccines prevent the spread of COVID-19, and how long immunity lasts due to the vaccine, it is important that the following measures continue to be followed, even if you are vaccinated.

If you follow the actions listed below this will help reduce the spread of COVID-19 and other infections.

- **Get vaccinated**
  Vaccination reduces the risk of developing COVID-19 and the spread of COVID-19. People over the age of 18 who are severely immunocompromised due to certain treatments or conditions are recommended to have a third dose 2 - 6 months after the second dose to achieve a high level of protection against COVID-19. A booster (fourth) dose is then recommended 4 months after the third primary dose.**

- **Wash hands regularly**
  It is important to wash hands regularly to reduce the spread of COVID-19 and other infections, even if you are vaccinated.
- **Cover your mouth when you cough or sneeze and practice physical distancing**
  Cover your mouth when you cough or sneeze and keep a physical distance from other people, to reduce the risk of inhaling droplets or aerosols that contain virus.
- **Stay home if you are unwell and follow regulations**
  People who are unwell should stay home, avoid contact with other people and follow local health regulations.

Immune Deficiencies Foundation Australia

PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

- **Be aware of COVID-19 symptoms**
  If you have COVID-19 symptoms or have had contact with a person who has COVID-19, get tested and follow local health regulations.
- **Seek medical help**
  If you have a positive COVID-19 test result, seek medical help and follow local health regulations.

For further information go to www.allergy.org.au/members/covid-19

*Source: ASCIA: COVID-19 Vaccination FAQ - Australasian Society of Clinical Immunology and Allergy (ASCIA)

**Source: NSW Health Booster vaccination - frequently asked questions - Vaccination (nsw.gov.au)

What can my family members do to protect me from COVID-19 if I have an immunodeficiency?

The recommendations for family members of people with immunodeficiency is generally much the same as for others with respect to reducing risk of transmission to others in the family including vulnerable people such as the elderly and the unvaccinated.

Importantly, they need to ensure all eligible members of the family are vaccinated.

We'd recommend the following website for practical tips and information: https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/how-to-protect-yourself-and-others-from-coronavirus-covid-19

Are there any additional protection measures for PID patients?

It's difficult to know what the exact risks of COVID-19 are in PID patients. Some studies have shown more severe disease whilst other studies have reported PID patients with mild illness only. It is likely that the risk is dependent on the exact form of PID, the age of the patient and the presence of other known COVID-19 risk factors (e.g advanced age, diabetes, hypertension, obesity, respiratory disease or immunosuppressive medications). In the absence of more precise data, patients with PID need to take extra care to prevent infection.

Even after full vaccination, patients with immunodeficiency should remain vigilant and continue to follow the general guidelines provided above.

For more information about specific PIDs at higher risk: Read the Joint statement on COVID-19 (published 28.10.2021).

IDFA Immune Deficiencies Foundation Australia

PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

It is essential to continue immunoglobulin replacement (IVIG or SCIG). It is likely that effective immunoglobulin replacement provides some protection against COVID19 infection.

*Source: https://ipopi.org/pids/covid-19-and-pids-faqs/ and IDFA Medical Advisory Panel

Should PID patients reduce their IVIG frequency and/or increase the dose?

There is no evidence to date that more frequent dosing of immunoglobulin will offer more protection.

There is no recommendation to give immunoglobulins to the general population to protect or treat people against COVID-19.

*Source: https://ipopi.org/pids/covid-19-and-pids-faqs/ and IDFA Medical Advisory Panel

Some countries have started to ease on confinement measures. Should PID patients continue to stay at home as a precaution?

In most cases PID patients should follow their national guidelines but continue with the recommended hygiene measures.

For PID patients with a higher risk for severe disease it may be reasonable to continue working from home. However, it's important to bear in mind that these measures may adversely affect quality of life.

It is important to understand that the relaxation of restrictions does not mean that the virus has been extinguished. Confinement has been the strategy in many countries to "flatten the curve" of infections and to avoid overwhelming the health care systems. In many of these countries there is still only a small proportion of the population that has been exposed to the virus so far and relaxation of restrictions may lead to a further increase in infections. Hygiene measures and social distancing are still key to protect PID patients after de-confinement.

*Source: https://ipopi.org/pids/covid-19-and-pids-faqs/ and IDFA Medical Advisory Panel

What should PID patients do if someone they live with gets infected?

If someone in your family gets infected the likelihood that the disease will be transmitted to the patient increases despite properly following hygiene measures.

It is encouraged to clean and disinfect high-touch surfaces daily in household common areas (e.g. tables, hard-backed chairs, doorknobs, light switches, phones, tablets, touch screens, remote controls, keyboards, handles, desks, toilets, sinks).

In the bedroom/bathroom dedicated for an ill person: consider reducing cleaning frequency to as-needed (e.g., soiled items and surfaces) to avoid unnecessary contact with the ill person.

Immune Deficiencies Foundation Australia

PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

An ill person should stay in a specific room as much as possible and away from other people in their home.

More information available at the Center for Disease Control and Prevention website
*Source: https://ipopi.org/pids/covid-19-and-pids-faqs/ and IDFA Medical Advisory Panel

Do I need to wear an N95 mask? Do I need to wear an N95 mask outdoors?
N95 masks offer the best protection against COVID-19 but their main role is high risk scenarios, predominantly healthcare. In lower risk scenarios where you are outdoors and/or socially distanced an N95 is not required.

Source: IDFA Medical Advisory Panel

VACCINES

Do vaccines work in primary immunodeficiency?

Yes. It is likely that the response is not as good as in immunocompetent individuals, but there have been many recent studies published that demonstrate that vaccines offer protection against COVID-19 in PID, even for those patients who do not have their own antibody production. Importantly, the COVID-19 vaccinations have been shown to be safe in PID, with a similar safety profile to the rest of the population.*

*Source: IDFA Medical Advisory Panel

Are COVID-19 vaccines safe for people with immunodeficiencies or autoimmune conditions?*

The Pfizer, Moderna and AstraZeneca vaccines are safe for people with immunodeficiencies and autoimmune conditions, who are not considered to be at greater risk of vaccine allergy compared to the general population.

People with immunodeficiencies and/or autoimmune conditions should follow the usual advice from their clinical immunology/allergy specialist or rheumatologist regarding vaccinations or ask for specific advice regarding the COVID-19 vaccine.

People with immunodeficiencies should have a third dose after completion of their primary vaccination course, followed by a fourth dose as a booster as outlined above.

The ATAGI recommendations have been prepared in consultation with ASCIA, and are available at: https://www.health.gov.au/news/atagi-statement-on-the-use-of-a-3rd-primary-dose-of-covid-19-vaccine-in-individuals-who-are-severely-immunocompromised

IDFA Immune Deficiencies Foundation Australia

PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

The recommended interval for the third dose is two to six months after the second dose of vaccine. People with PID/IEI who had a second dose more than six months ago should receive a third dose whenever this is feasible and a fourth dose following this.

ATAGI also recommends a third and fourth COVID-19 vaccine dose for recipients of haematopoietic stem cell transplant (HSCT) or chimeric antigen receptor T-cell (CAR-T) therapy (within 2 years of transplantation), people on some Immunosuppressive therapies and some people with advanced or untreated HIV.

*Source: ASCIA: COVID-19 Vaccination FAQ - Australasian Society of Clinical Immunology and Allergy (ASCIA)

Should immunodeficiency or autoimmune treatments be stopped to have a COVID-19 vaccine?*

It is important that regular treatments for immunodeficiencies and autoimmune conditions are continued, because stopping these treatments can place people with these conditions at greater risk from COVID-19.

Vaccination should occur on a different day (if possible) from regular infusion treatments, such as immunoglobulin (Ig) or immunosuppressant infusions. This avoids confusion about the cause of side effects or allergic reactions. If you have concerns about the timing of vaccination around immunoglobulin or other biologic/immunosuppressive therapy, then discuss with your specialist. The American College of Rheumatology has released a guideline around vaccination and immunosuppressive medications available at https://www.rheumatology.org/Practice-Quality/Clinical-Support/COVID-19-Guidance#VaccineClinicalGuidance

*Source: ASCIA: COVID-19 Vaccination FAQ - Australasian Society of Clinical Immunology and Allergy (ASCIA)

Are there any people who should not receive the COVID-19 vaccine?*

People who have anaphylaxis in response to the first dose of the COVID-19 vaccine should be referred to a clinical immunology/allergy specialist to be assessed before they consider receiving a second dose. In most cases, an alternative vaccine can be tolerated.

People with a confirmed allergy to ingredients in a vaccine (such as PEG) should discuss having another type of vaccine that does not contain that ingredient with their clinical immunology/allergy specialist.

Immune Deficiencies Foundation Australia

PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

*Source: ASCIA: COVID-19 Vaccination FAQ - Australasian Society of Clinical Immunology and Allergy (ASCIA)

Why is a booster needed?*

Studies show that the immunity created by COVID-19 vaccines begins to wane over time.

A booster dose strengthens your immune system and helps to maintain a high level of protection against serious illness from the COVID-19 virus.

*Source: NSW Health Booster vaccination - frequently asked questions - Vaccination (nsw.gov.au)

What is the difference between a third dose and a booster?*

A primary course of a vaccine is the number of doses it takes to achieve a good level of protection against a disease.

- For the COVID-19 vaccines available in Australia, a primary course is two doses for most people.
- For people who received a recognised overseas vaccine, a primary course could be one or two doses, depending on the type of vaccine.
- For some people who are severely immunocompromised due to certain treatments or conditions, a third dose and fourth dose are recommended as part of a primary course to achieve similar levels of protection.

A booster is an extra dose of a vaccine, given sometime after the primary course. It 'boosts' the immune system and helps to maintain a high level of protection from the disease.

- You may be familiar with other vaccines that have boosters, such as tetanus and whooping cough (pertussis).

*Source: NSW Health Booster vaccination - frequently asked questions - Vaccination (nsw.gov.au)

Who is eligible for a booster vaccination?*

Eligibility for booster vaccination includes people aged 18 years and over who received their second dose of a COVID-19 vaccine at least 4 months ago.

People who are severely immunocompromised due to certain treatments or conditions are recommended to have a third dose 2 - 6 months after the second dose to achieve a high level of protection against COVID-19. A booster (fourth) dose is then recommended 4 months after the third primary dose.

*Source: NSW Health Booster vaccination - frequently asked questions - Vaccination (nsw.gov.au)

IDFA Immune Deficiencies Foundation Australia

PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

I'm immunocompromised and have had/am having a third dose of a COVID-19 vaccine. Do I still need a booster?

Your third dose helps to build an immune response similar to those people who are not immunosuppressed.

People who are severely immunocompromised and are recommended to receive a third primary dose of a COVID-19 vaccine are now also recommended to have an additional booster (fourth) dose.

*Source: NSW Health Booster vaccination - frequently asked questions - Vaccination (nsw.gov.au)

What is the best duration between COVID-19 vaccinations for children (5 – 11 year olds) with an immunodeficiency?*

It is important that your child receives 2 doses of the Pfizer COVID-19 vaccine, 8 weeks apart, for their primary course. The dosing interval can be shortened to a minimum of 3 weeks in certain situations, e.g. as part of a local outbreak response or before your child starts any immunosuppressive treatment. Your provider will advise if your child's second dose should be given earlier.

The second dose is likely to prolong the duration of protection against COVID-19. Unless there are special circumstances, it is better for your child to get their second dose 8 weeks after the first (rather than a shorter interval) because better immune responses are more likely after a longer interval.

*Source: Australian Government Fact Sheet, Last updated 20 December 2021

Severely immunocompromised children aged 5 to 11 years are now recommended to receive a 3rd primary dose of COVID-19 vaccine, 2 to 4 months after their second dose, in line with other severely immunocompromised age cohorts.

*Source: ATAGI, Last updated 17 January 2022, Recommendations on the use of a 3rd primary dose of COVID-19 vaccine in individuals who are severely immunocompromised (health.gov.au)

Are children (5-11 year olds) with an immunodeficiency able to have booster shots?*

Booster doses are not currently recommended for those aged under 18 years, including those who are immunocompromised.

There are currently only very limited data on the safety of repeated mRNA vaccine doses in this age group.

ATAGI will advise if a booster dose is required for children and young people (aged under 18) in the future.

*Source: NSW Health Booster vaccination - frequently asked questions - Vaccination (nsw.gov.au)

IDFA Immune Deficiencies Foundation Australia

PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

PLASMA SUPPLY

Is there a risk of supply issues of plasma/immunoglobulin in Australia due to the current situation with COVID-19?*

Although there is no current overall shortage of immunoglobulin (Ig) products in Australia, the NBA is actively managing the allocation of Ig products to ensure no shortage emerges. This reflects the status of global supply issues for plasma derived products together with national arrangements put in place by the NBA for products from a number of suppliers that are intended to mitigate supply risks that have been exacerbated by the impacts of COVID-19.

*Source: National Blood Authority, Australia

ADVOCATING FOR YOUR HEALTH

What are some tips that vulnerable people can use to advocate for themselves and keep safe when they need to get a PCR test or attend ER?*

Wear a mask (surgical if possible, not cloth), practice social distancing, communicate your medical condition to the medical staff. Bring a letter from your GP or specialist if possible.

*Source: IDFA Medical Advisory Panel

How can you advocate for your health?
It is important to provide treating health professionals with your health history, your condition/s, procedures & current medications. The way you present this information will vary depending on your individual preference e.g. hard or soft copy letters from your treating health professional/specialist, hard copy health diary, health diary app, MyGov app, emails and/or content saved to your device – phone, ipad, laptop.

*Source: IDFA Medical Advisory Panel

TESTING

Do rapid antigen tests work in primary immunodeficiency?
Yes. These tests rely on detection of antigen which is produced by viral replication, not detection of antibody like some diagnostic tests (these traditional serologic tests can be difficult to interpret in PIDs with antibody deficiency).

Immune Deficiencies Foundation Australia
PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

PID patients still produce the same COVID-19 antigen if they are infected and therefore RATs work just as well in immunodeficiency as they do for the rest of the population. These tests don't perform quite as well as PCR testing and sometimes a PCR test will still be required.*

*Source: IDFA Medical Advisory Panel

How effective / reliable are RAT results for trying to identify and reduce risk of immediate exposure?

RAT testing does not have the same sensitivity as PCR but is suitable for community-based testing. If the symptoms you are experiencing are very suggestive of COVID-19 or you are a known contact and have symptoms but a RAT is negative you still may have to get a PCR test.

*Source: IDFA Medical Advisory Panel

Is it possible to test alpha interferon levels?

There is some research that suggests that defects of production of interferon may result in more severe COVID-19. However, this testing is not routinely available for clinical use at this point.

*Source: IDFA Medical Advisory Panel

The TGA has done a post market review of RAT tests and some have not proven (to the TGA standard) to test OMICRON. Are these RATs reasonable to use?

The TGA has an extensive list of approved RAT test manufacturers listed on their website. Whilst most of these have been shown to satisfactorily detect Omicron, there are a handful where testing has not been performed by the manufacturer. This does not mean that these tests don't detect Omicron, only that these have not been specifically tested against Omicron. The TGA has commissioned the Doherty Institute to perform Australian studies validating these kits against the variants most of concern in Australia i.e Delta and Omicron. The list of RAT testing kits is available on the TGA website at: Post-market review of antigen and rapid antigen tests | Therapeutic Goods Administration (TGA)

*Source: IDFA Medical Advisory Panel

What's the purpose of COVID-19 antibody tests/serology?

At this point in time it's difficult to be entirely sure how serology (antibody testing for COVID-19) correlates with future risk of disease. The testing is dependent on the underlying individual or PID, past infections with COVID-19, and prior vaccination history. We do know that it has been observed that PID patients with no antibody response still have T cell response to vaccination that provide protection. This may be more important than antibodies.

Immune Deficiencies Foundation Australia

PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

*Source: IDFA Medical Advisory Panel

ADDITIONAL SUPPORT

What medicine support service is available for me if I'm isolating at home due to COVID-19?

The COVID-19 Home Medicines Service is available for people in home isolation and for vulnerable patient groups who wish to limit their potential exposure to novel coronavirus (COVID-19) in the community.

This service supports the use of home medicines delivery options available through pharmacies enabling patients to have their Pharmaceutical Benefits Scheme (PBS) and Repatriation Pharmaceutical Benefits Scheme (RPBS) prescriptions delivered to their home.

The service is available to:

· people isolating themselves at home on the advice of a medical practitioner, for confirmed COVID-19 cases;

· people who meet the current national triage protocol criteria for suspected COVID-19 infection after consultation with either the national COVID-19 hotline, state COVID-19 hotlines, a registered medical or nursing practitioner or COVID-19 trained health clinic triage staff;

· people aged over 70;

· Aboriginal and Torres Strait Islander people aged over 50;

· people with chronic health conditions or who are immunocompromised;

· parents with new babies and people who are pregnant.

On 16 December 2021 a further extension to the COVID-19 Home Medicines Service was announced to 30 June 2022, with eligibility reset to the evolving pandemic situation. From 1 February 2022 the service is available to:

· People directed to quarantine or isolate under public health orders because they are either,

o COVID-positive; or

o a close contact of a COVID-positive patient; or

PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

o receiving COVID treatment; or

o Those who are immunocompromised.

In the case where there are existing contracts in place for the delivery of medicines to residential aged care facilities, Home Medicines Service deliveries cannot be made to residents of residential aged care facilities. Otherwise, this service is available to all patients meeting the above eligibility criteria.

If you receive your PBS or RPBS medicines in a Dose Administration Aid, you will be eligible for this service. Speak to your prescriber or pharmacist if you are unsure.

The service is available for home delivery of medicines from any pharmacy approved to dispense and supply PBS and RPBS medicines.

Speak with your pharmacist if you are unsure.

To qualify for the COVID-19 Home Medicines Service each single delivery to an eligible person's home must include at least one of the following items:

· a PBS medicine or

· a RPBS medicine.

You can order other items to be delivered to you from the pharmacy, if it is part of the same order.

You can receive the service no more than once per month.

For more information: covid-19-national-health-plan-home-medicines-services-information-for-consumers.docx (live.com)

Are IDFA working with any stakeholders or are there any plans to support members' mental health eg health plans or perhaps a service dog programme to help those that have been isolated for years?

IDFA is currently looking to conduct research to understand the mental health impacts COVID-19 has had on the Australian immunodeficient community. We recently met with a like organisation in the US who conducted research with their immunodeficient community in December 2021 to understand their findings. We will provide members with an update on our plans in the very near future.

There are a number of Free Mental Health Support Services available
Mental health support | Australian Government Department of Health
Mental health helplines | healthdirect

Immune Deficiencies Foundation Australia

PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

Our Clinical Psychologist on the IDFA Board provided details during our COVID-19 information session detailing Free Online Courses through Mindspot. There have been a number of IDFA members who have provided positive feedback from their experience of the program and IDFA is currently looking at how we can work with them.
https://www.mindspot.org.au/courses/chronic-condition-course

Your GP can also work with you on a Mental Health Care Plan (MHCP) & referral
https://www1.health.gov.au/internet/main/publishing.nsf/Content/5DB6692978BC3395CA257BF0001C10D7/$File/factsheetforpatients.pdf

To find a Psychologist service by location. https://psychology.org.au/find-a-psychologist

*Source: IDFA Medical Advisory Panel

TREATMENT

What treatment options are available for children under 12 years with an immunodeficiency who have contracted COVID-19?

Most children with primary or secondary immunodeficiency, including those with antibody deficiencies have not required either antivirals such as remdesivir or monoclonal antibodies such as sotrovimab, and have been managed at home, with uneventful resolution.

A small number of children with very complex illnesses, most not involving primary immunodeficiency, have required treatment, and that was readily available regardless of age or federal medication approval status if it was deemed medically appropriate after specialist advice was sort, as would occur for other medications not usually available to paediatric patients.

*Source: IDFA Medical Advisory Panel

When will Evusheld be available in Australia?

Our Medical Advisory Panel (MAP) have advised that Evusheld has emergency FDA approval based on an as yet unpublished randomised controlled trial, so our MAP haven't seen the finer details around this drug yet. Based on the recent drug approvals around COVID-19 the TGA does seem to require more robust evidence of benefit and safety prior to approving these therapeutics. Our MAP believe that this is

PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

a good thing. Like the other recent oral therapies and sotrovimab, the effect of this medication is likely to be a modest decrease in COVID-19 related hospitalisations. None of these new therapies will change the recommendations around vaccination (for those that are eligible), masks and social distancing.

The government takes advice from specialist organisations such as TGA and ATAGI regarding the evaluated safety and effectiveness for new treatments. There are ongoing rapid developments in the COVID-19 space which will result in increasing availability of various treatments, some of which may be indicated for some people with immunodeficiencies. Once available, decisions regarding whether patients require and/or certain therapies at certain times are usually made by their treating clinicians, and when the situation is complex, multiple sources of advice and assistance are usually sought.

*Source: IDFA Medical Advisory Panel

What is the recommended treatment for a PID patient infected with COVID-19?

The majority of infected individuals will experience a mild form of the disease.

If a PID patient gets infected with COVID-19 it is important to be diagnosed early. If the symptoms are significant or worsening, then seek medical attention as soon as possible. PID patients may be eligible for early treatment to prevent worsening of COVID-19. It is important to contact your treating specialist or general practitioner to discuss the diagnosis of COVID-19 and if any special treatment is required.

*Source: https://ipopi.org/pids/covid-19-and-pids-faqs/ and IDFA Medical Advisory Panel

Are all of the COVID-19 treatments available in regional hospitals?
Regional hospitals should have these treatments available within the required timeframe i.e 5 days after symptom onset. It's important to get tested early to enable these treatments to be given within the appropriate timeframe.

Source: IDFA Medical Advisory Panel

I am a carer for an adult PID patient with complex care needs. I'm concerned that if my child contracts COVID-19 I will not be able to attend to provide care and support during hospitalisation. What can I do?
The policy around carers and COVID-19 patients is likely to vary on a hospital-by-hospital basis. Most hospitals have restrictions on unvaccinated visitors so visiting carers should be triple vaccinated and be prepared to wear PPE and an N95 mask. Where applicable, it would be reasonable to reach out to your local health service to enquire about your ability to visit as a carer should your relative be hospitalised with COVID-19 in order to be prepared.

Source: IDFA Medical Advisory Panel

Immune Deficiencies Foundation Australia

PO Box 742, Wollongong, NSW 2520
1800 100 198
info@idfa.org.au

When will Australian IVIG have COVID-19 antibodies?

International studies from Italy and the USA have shown that there were COVID-19 antibodies present in immunoglobulin products several months after the onset of the pandemic. In Australia we have had high population levels of vaccination since late 2021. The turnaround time between a plasma donation and the appearance of this plasma within immunoglobulin products is approximately 6-9 months for Australian products (of course, there are also products available in Australia that are produced from overseas donors). It is therefore reasonable to conclude from this and information provided to IDFA by the National Blood Authority and immunoglobulin suppliers that there are varying levels of COVID-19 antibodies present in the immunoglobulin products that we have in Australia. It is likely that this provides some degree of protection.

However, it is likely that COVID-19 antibodies will vary from batch to batch of immunoglobulin, and at the moment we don't know how these levels might correlate with the degree of protection required.

Source: IDFA Medical Advisory Panel