

Coronavirus (COVID-19) – information for children, young people and families from the Endocrinology team

We understand that you might be worried about coronavirus – also known as COVID-19 – particularly if your child has a long-term health condition, such as Cortisol Deficiency/ Adrenal Insufficiency, Congenital Hyperinsulinism, Diabetes, Hypopituitarism, Septo-optic Dysplasia, and Hypo- or Hyperthyroidism. This information sheet from the Endocrine team at Great Ormond Street Hospital (GOSH) sets out our advice for children and young people who use our services.

Please read this alongside our general FAQs for families at gosh.nhs.uk/covid-19-FAQ. You can also find the latest news, information and resources in our COVID-19 information hub at gosh.nhs.uk/coronavirus-hub.

Does COVID-19 affect children?

The evidence to date shows that although children can be infected with COVID-19, very few children will develop severe infections.

All children aged >12 years are now being offered the COVID-19 vaccine. However, the Joint Committee on Vaccination and Immunisation (JCVI) have recommended that 12-15 year olds with diabetes, cortisol deficiency/ adrenal insufficiency and hypopituitarism be prioritised for vaccination and their GP will be in touch with you about this. This list of conditions is continuously being updated and is available [here](#).

We recommend that all patients and their families follow Public Health England's guidance around social distancing and hand hygiene, available on the www.gov.uk website.

Specific advice about endocrine conditions

If you, your child or anyone else in your household has symptoms of COVID-19, please do not visit your doctor or pharmacist – stay at home and use the NHS 111 online service at 111.nhs.uk for urgent medical advice. You should also contact your clinical team at GOSH to let them know.

However, if you are worried about your child's health or feel their life is at risk, you should call 999 or go to your local A&E or urgent care centre as you normally would.

The Endocrinology team advises the following for specific conditions.



Cortisol Deficiency/ Adrenal Insufficiency

Children with adrenal insufficiency are not at significantly greater risk of COVID-19 infection.

They are on replacement doses of hydrocortisone which are generally low and carefully calculated to keep your child well. Please ensure that the normal doses of hydrocortisone are taken regularly.

If your child develops symptoms of COVID-19, then please ensure that you follow the sick day rules carefully, as per the flow chart. You should increase the dose of hydrocortisone as per previous advice (double dose of hydrocortisone with an extra double morning dose at 4am). Children who are asymptomatic do NOT need to follow the sick day rules.

Please note that if your child is given the COVID-19 vaccination they should double their hydrocortisone doses (with an extra double morning dose at 4 am) for 48 hours.

Drinking plenty of fluids is important, particularly during a fever. Offering small volumes of fluid at frequent intervals is usually effective.

Children may have gastrointestinal symptoms; if mild then ensure a good fluid intake. If your child has severe diarrhoea and/or vomiting, then please contact your local hospital for advice. Please note that if your child is very unwell, then you can give intramuscular hydrocortisone and oral glucose as previously advised, and call 999 or go to your local A&E or urgent care centre as you normally would.

Congenital Hyperinsulinism (CHI)

Please ensure that you follow the advice provided by the CHI team in your Care Plan. Medication must be taken regularly, and blood glucose monitored as advised.

Most children with CHI are not considered more vulnerable to severe infection with COVID-19, and do not need to shield.

If your child develops COVID-19 symptoms, adequate hydration is important, particularly during a fever. Offering small volumes of fluid at frequent intervals is usually effective.

Children may have gastrointestinal symptoms; if mild then ensure a good fluid intake. If your child has severe diarrhoea and/or vomiting and is not keeping down their medication, then please contact the on-call team at GOSH who can give you further advice.

However, if you are worried about your child or feel their life is at risk, you should call 999 or go to your local A&E or urgent care centre as you normally would.

Diabetes

Children with well-controlled diabetes are generally expected to have the same course of illness as their peers if they develop symptoms of COVID-19. Adults with diabetes may be at higher risk, but it does not seem to be the case for children.

We recommend following the general advice for "sick day" management provided by the Diabetes team. Do not stop the insulin treatment, increase the dose as needed and frequently measure blood glucose and ketones.

Adequate hydration is important, particularly during a fever. Offering small volumes of fluid at frequent intervals is usually effective.

Children may have gastrointestinal symptoms; if mild then ensure a good fluid intake. If your child has severe diarrhoea and/or vomiting, then please contact local hospital for advice.

The ISPAD webpage has detailed guidelines on "sick day" management of type 1 diabetes during coronavirus illness at www.ispad.org/page/CoronavirusinfectionCOVID-19



Hypopituitarism/Septo-optic Dysplasia (SOD)

Children with cortisol deficiency/ adrenal insufficiency due to hypopituitarism/SOD are not at significantly greater risk of developing COVID-19.

They are on replacement doses of hydrocortisone which are generally low and calculated carefully to keep your child well. Please ensure that the normal doses of hydrocortisone are taken regularly.

If your child develops symptoms of COVID-19, then please ensure that you follow the sick day rules carefully, as per the flow chart. You should increase the dose of hydrocortisone as per previous advice (double dose of hydrocortisone with an extra double morning dose at 4am). Children who are asymptomatic do NOT need to follow the sick day rules.

Please note that if your child is given the COVID-19 vaccination they should double their hydrocortisone doses (with an extra double morning dose at 4 am) for 48 hours.

Adequate hydration is important, particularly during a fever. Offering small volumes of fluid at frequent intervals is usually effective.

Children may have gastrointestinal symptoms; if mild then ensure a good fluid intake. If your child has severe diarrhoea and/or vomiting, then please contact your local hospital for advice.

Please note that if your child is very unwell, then you can give intramuscular hydrocortisone and oral glucose as previously advised, and call 999 or go to your local A&E or urgent care centre as you normally would.

The rest of your child's medication (growth hormone, thyroxine, testosterone/oestrogen replacement) should be continued as recommended.

If your child has both cortisol deficiency and diabetes insipidus and are receiving both

hydrocortisone and DDAVP, you need to be extra vigilant if they develop COVID-19 symptoms.

Hydrocortisone is essential for clearing excess water from the body through the kidneys. If there are low levels of cortisol in the body, then fluid may build up, particularly if the child continues to receive DDAVP. So it is critical that the dose of hydrocortisone is doubled immediately if the child is unwell with fever during a COVID-19 infection.

Allow your child to drink what they want but please keep an eye on the volume of fluid they are drinking. If your child is passing urine, then the DDAVP should be continued at the prescribed doses. If, on the other hand, your child is not passing urine, then please stop the DDAVP, but continue the increased dose of hydrocortisone. Contact the GOSH on call Endocrine team for further advice.

Remember, if your child has a normal thirst mechanism, they will drink enough fluids for their need if they are not on DDAVP.

If they do not have a normal thirst mechanism, you will have to give their normal maintenance fluids and give extra fluids to make up for what they pass out as urine.

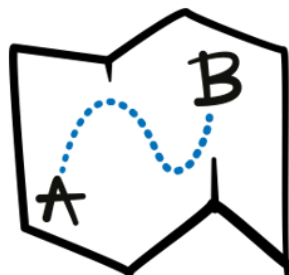
Hypothyroidism

Children with hypothyroidism are at no greater risk of COVID-19 infection.

They should continue to take their normal dose of thyroxine, and if they have a gastrointestinal upset with vomiting, then the dose may need to be repeated.

Hyperthyroidism

Children with hyperthyroidism are at no greater risk of COVID-19 infection. They should continue to take their normal dose of medication, and if they have a gastrointestinal upset with vomiting, then the dose may need to be repeated.



Most young people on carbimazole treatment have no additional risk and there is no indication to shield purely on the basis of carbimazole treatment. However, carbimazole can sometimes affect the white cell count. If your child is taking carbimazole, and they have a fever, they should contact their clinical team to get their blood counts checked and seek medical advice if unwell.

Specific advice about medicines from the Endocrinology team

Please ensure that your child takes all of their medication regularly and at the correct dose and frequency.

Although you should always have enough supplies of insulin/hydrocortisone/other medications for at least a week in advance, we do not recommend stocking up larger quantities of insulin or other medications, since this could endanger the supply chain and lead to regional or global shortages.

At the present time, there have been no reports on the shortage of insulin or other medications. Please maintain the usual amount of back-up insulin/medications and follow the local regulations and announcements. If you have run out of emergency hydrocortisone packs please contact our CNS team who can organise for our pharmacy to post these out to you.

Should we make alternative clinic appointments?

Our clinical teams are looking at each patient carefully to work out which patients absolutely need to come into hospital, which clinics and consultations can be done another way such as by video or phone calls, and which appointments, procedures and admissions can be rescheduled safely. Endocrinology can be particularly well-suited to telephone and/or video consultations,

and your consultant's team will be contacting you with a view to making an appropriate appointment with you at a suitable time.

Your consultation may be with a Specialist Registrar who will then discuss the consultation with the relevant consultant. The timing of the consultations may be approximate as our working practices need to become more flexible with the evolving national situation. We appreciate your patience with this as we work on getting our services up and running safely and smoothly. If your child has an upcoming clinic appointment, we will be in touch with you to discuss how we can best carry this out

Further information and support

We recommend that you sign up to MYGOSH – this will allow better contact between our patients and their families and the staff looking after them.

Endocrinology Clinical Nurse Specialist team: call 0207 813 8214 (voicemail).

Diabetes Clinical Nurse Specialist team: call 0207 405 9200 extension 1597 (voicemail).

Congenital Hyperinsulinism Clinical Nurse Specialist team: call 0207 405 9200 extension 0360 (voicemail)

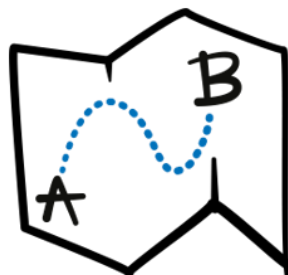
In an emergency or out of hours, call 020 7405 9200 and ask for the on call doctor for Endocrinology.

Information from the NHS is available at www.nhs.uk/conditions/coronavirus-covid-19/

Information for children is available on the following websites:

BBC Newsround website at www.bbc.co.uk/newsround

Royal College of Paediatrics and Child Health RCPCH: www.rcpch.ac.uk/resources/covid-19-resources-general-public



European Society for Paediatric Endocrinology

(ESPE) Website:

<https://www.eurospe.org/patients/espe-covid-19-hub/>

British Thyroid Foundation (BTF): [www.btf-](http://www.btf-thyroid.org/news/thyroid-disease-and-coronavirus-covid-19)

[thyroid.org/news/thyroid-disease-and-coronavirus-covid-19](http://www.btf-thyroid.org/news/thyroid-disease-and-coronavirus-covid-19)

