

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 Hypoadrenalism, 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 information about coronavirus (COVID-19) available online at www.gosh.nhs.uk/news/coronavirus-covid-19-information-hub

Does COVID-19 affect children?

The evidence to date shows that although children do develop COVID-19, very few children will develop severe infections.

None of the endocrine conditions described above are classified as disorders associated with particular susceptibility to COVID-19.

Therefore, there is no particular need for self-isolation with any of these conditions, with the exception of those patients on immunosuppression (rare in endocrine conditions).

Self isolation means not leaving your home for any reason other than to exercise once a day, including not going out to buy food or collect medicine. For more information visit nhs.uk/conditions/coronavirus-covid-19/self-isolation-advice/.

Whether self isolating or not, we recommend that all patients and their families follow the Public

Health England guidance with respect to social distancing, available on the gov.uk website.

Please note: If a parent is a front line NHS worker and required to be at work, unfortunately we are not able to state whether this poses additional risk to their child as this is currently unknown.

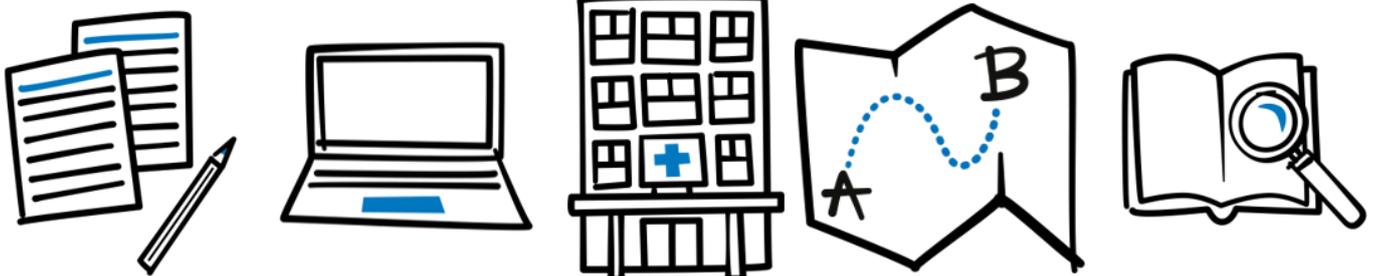
Specific advice about endocrine conditions

The Endocrinology team advises the following for specific conditions.

Hypoadrenalism

Children with adrenal insufficiency are at no greater risk of developing COVID-19. There is no particular requirement for self-isolation.

They are on replacement doses of hydrocortisone (that is, not high dose steroids which is what is being referred to in government guidance) which are generally low and calculated to keep your child well. Please ensure that the normal doses of hydrocortisone are taken regularly.



If your child were to develop 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).

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

Children may have a gastrointestinal upset; if mild then ensure a good fluid intake. If your child has severe diarrhoea and/or vomiting, then please contact the on-call team at GOSH who can give you further advice. Please note that if your child is very unwell, then you can give intramuscular hydrocortisone and glucose as previously advised, and call an ambulance.

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 vulnerable unless they are on sirolimus medication (a minority). There is no particular requirement for self-isolation.

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

Children may have a gastrointestinal upset; 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.

Diabetes

Children with well-managed diabetes are expected to have the same course of illness as their peers if they develop symptoms of COVID-

19. 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 a gastrointestinal upset; if mild then ensure a good fluid intake. If your child has severe diarrhoea and/or vomiting, then please contact the on-call team at GOSH who can give you further 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)

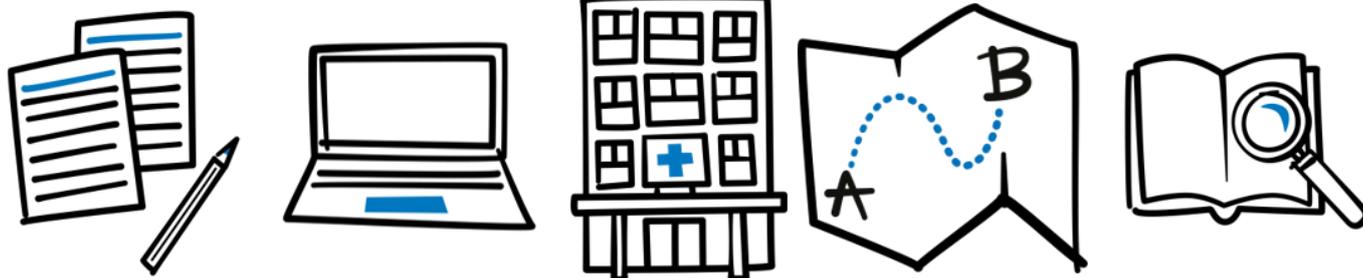
Children with cortisol deficiency due to hypopituitarism/SOD are at no greater risk of developing COVID-19. There is no particular requirement for self-isolation.

They are on replacement doses of hydrocortisone which are generally low (that is, not high dose steroids which is what is being referred to in government guidance) and calculated to keep your child well. Please ensure that the normal doses of hydrocortisone are taken regularly.

If your child were to develop COVID-19, then please ensure that you follow the sick day rules carefully, as per the flow chart, and increase the dose of hydrocortisone as per previous advice (double dose of hydrocortisone with an extra double morning dose at 4am).

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

Children may have a gastrointestinal upset; if mild then ensure a good fluid intake. If your child has severe diarrhoea and/or vomiting, then please



contact the on-call team at GOSH who can give you further advice.

Please note that if your child is very unwell, then you can give intramuscular hydrocortisone and Glucose as previously advised, and call an ambulance.

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

Children with both cortisol deficiency and diabetes insipidus who are receiving both hydrocortisone and DDAVP should be particularly well-supported. Hydrocortisone is essential for clearing excess water from the body through the kidneys. If there is an inadequate amount of cortisol in the body, fluid may accumulate, particularly if the child continues to receive DDAVP. Hence, it is absolutely critical that the dose of hydrocortisone is doubled immediately if the child is unwell with fever during a COVID-19 infection.

Allow the child to drink what they want but please keep an eye on the volume of fluid they are drinking. If the child is passing urine, then the DDAVP should be continued at the prescribed doses. If, on the other hand, the child is not passing urine, then please stop the DDAVP, continue the increased dose of hydrocortisone, and 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 developing COVID-19. There is no particular requirement for self-isolation.

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. 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 self isolate purely on the basis of carbimazole treatment.

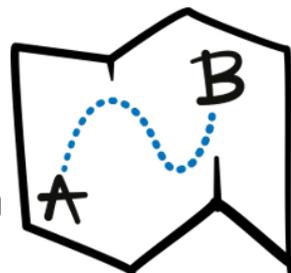
However, carbimazole can sometimes affect the white cell count and therefore they should get their blood counts checked and seek medical advice if unwell.

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?

Clinicians are looking to remove the need for patients to attend face-to-face appointments wherever possible. This might involve moving to telephone appointments or exploring video consultations.

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.

If your child has an upcoming clinic appointment, we will be in touch with you to discuss how we can best carry this out remotely.

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 020 7813 8214 (voicemail, which will be answered as soon as is feasible). 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: www.eurospe.org/

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

