

# Paediatric Pearls

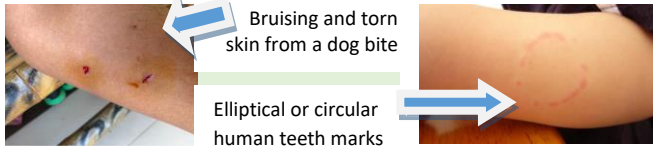
by Dr Julia Thomson, Paediatrician

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Monthly paediatric update newsletter for all health professionals working with children – put together by Dr Julia Thomson, Paediatric Consultant at Homerton University Hospital, London, UK. Housed at [www.paediatricpearls.co.uk](http://www.paediatricpearls.co.uk) where comments and requests are welcome!

## Human and animal bites: antimicrobial prescribing.

NICE guideline [NG184] November 2020



Bruising and torn skin from a dog bite

Elliptical or circular human teeth marks

### Antibiotic prophylaxis for an uninfected bite

Type of bite	Bite has not broken the skin	Bite has broken the skin but not drawn blood	Bite has broken the skin and drawn blood
Human bite	Do not offer antibiotics	Consider antibiotics if it is in a high-risk area or person at high risk	Offer antibiotics
Cat bite	Do not offer antibiotics	Consider antibiotics if the wound could be deep	Offer antibiotics
Dog or other traditional pet bite	Do not offer antibiotics	Do not offer antibiotics	Offer antibiotics if it has caused considerable, deep tissue damage or is visibly contaminated (for example, with dirt or a tooth). Consider antibiotics if it is in a high-risk area or person at high risk

Children 1 month to 12 years: co-amoxiclav or cotrimoxazole if penicillin allergic.

Older children and adults: co-amoxiclav or doxycycline and metronidazole if penicillin allergic

<https://www.nice.org.uk/guidance/ng184/resources/visual-summary-pdf-8897023117>

High-risk areas include the hands, feet, face, genitals, skin overlying cartilaginous structures or an area of poor circulation. People at high risk include those at risk of a serious wound infection because of a co-morbidity (such as diabetes, immunosuppression, asplenia or decompensated liver disease)

## FROM THE FRONT LINE: DKA in children with a high BMI

Current BSPED guideline for the management of children with DKA (April 2020): <https://www.bsped.org.uk/media/1798/bsped-dka-guideline-2020.pdf>  
The main changes from the previous guideline are detailed at <https://www.paediatricpearls.co.uk/wp-content/uploads/2020/04/April-2020.pdf>.

The DKA calculator IS ON A SEPARATE WEBSITE: <https://www.dka-calculator.co.uk/> - an excellent tool which fills in all the boxes for you to work out the fluids for a child with diabetic ketoacidosis.

Just before Christmas, we had a new presentation of type 1 diabetes in a 9-year-old weighing 68KGS.

The first section of the BSPED guideline says "A maximum weight of 80kg should be used for the calculation of fluid replacement and deficit as this ensures that excessive volumes of fluids are not given" but that is not the end of the story. Hidden on page 8 is a recommendation that "consideration be given to using a maximum weight of 80kg or 97th centile weight for age (whichever is lower) when calculating both deficit and maintenance requirements." The DKA calculator reminds you of this when you try to fill in the weight of a significantly overweight child. For our patient, the 97th Centile for weight was (see [RCPC growth charts](https://www.rcpch.org.uk/growth-charts)) 40kgs – a lot less than his actual 68kgs.

A salutary reminder from the BSPED of the importance of fluid prescriptions:

Remember, children in DKA can die from:

**Cerebral oedema** This is unpredictable, occurs more frequently in younger children and newly diagnosed diabetes and has a mortality of around 25%. The causes are not known and evolution of cerebral oedema can be unpredictable.

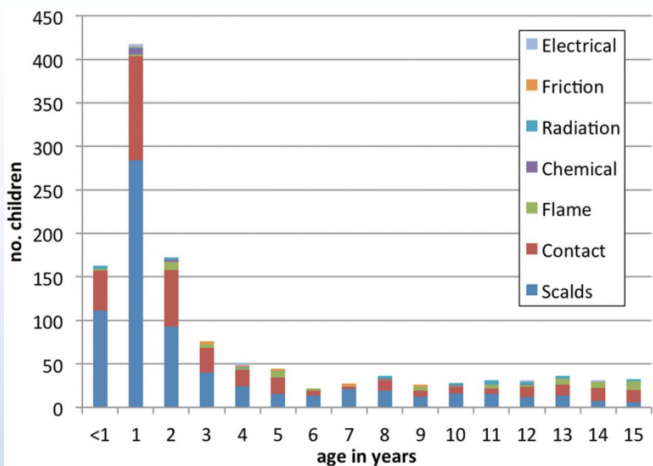
**Hypokalaemia** This is preventable with careful monitoring and management

**Aspiration pneumonia** Use a naso-gastric tube if semi-conscious or unconscious

**Inadequate resuscitation** It is important to ensure that children with DKA receive adequate resuscitation if they are shocked. Inadequate resuscitation increases the risk of brain injury. Cerebral perfusion is influenced both by the circulatory perfusion pressure (blood pressure) and the intracranial pressure in incipient cerebral oedema.

## Hot drinks are the leading cause of children's burns in the UK

30 babies and toddlers go to hospital with a hot drink burn in the UK every day, and only 1 in 4 of these children have received the correct first aid when they arrive at the ED (<https://safetea.org.uk/about-safetea/>).



<https://safetea.org.uk/first-aid/> has excellent advice and video for parents on preventing and treating burns. No toothpaste, butter, honey or ice in sight. Just 20 minutes of **cool** running water, **call** for help and **cover** with cling film.

### Can you display the video in your waiting room?

**Cool**

Run lots of **COOL** running water over the burn

**Call**

CALL for medical help. 999 or NHS Direct (111 or 0845 4647 in Wales)

**Cover**

COVER the burn with loose strips of clingfilm or clean non-fluffy material to stop it getting infected

In common with many other hospitals in London, we have lost our paediatric ward again to the adult services because of the number of adult in-patients with Covid-19 at the Homerton. Our paediatric ED and urgent clinics are open and we have a makeshift facility for observing children for up to 12 hours.

The Royal College of Paediatrics and Child Health (RCPC) has produced posters for parents and carers of children of all ages, in all the UK nations, on urgent care during coronavirus.

Please display [them](#) on your websites and in your emergency departments and hubs.

Coronavirus is a mild illness for most children; if you are assessing an unwell child with a fever and cough, think "sepsis" before "covid" please and don't delay decisions/action to wait for a covid swab result.

**Advice for parents/carers during coronavirus**

It can be confusing to know what to do when your child is unwell during the coronavirus pandemic. Remember that the NHS is still providing care.

GP practices and hospitals have made changes to help reduce the risk of infection. Only one parent/carer will be able to attend A&E with their child. Please use the contact guidance, wear a face covering to enclosed spaces and maintain social distancing. Remember if your child is unwell, seek advice and medical attention.

Here is some advice to help:

**RED**

If your child has any of the following signs:

- Pink, swollen (bloated) skin that feels unusually hot
- Swollen, bright red lips, tongue or throat (strawberry tongue)
- Swollen, bright red or itchy hands or feet (red, swollen, itchy)
- Swollen, bright red or itchy face
- Swollen, bright red or itchy genital area
- Swollen, bright red or itchy skin elsewhere
- Swollen, bright red or itchy skin elsewhere
- Swollen, bright red or itchy skin elsewhere
- Swollen, bright red or itchy skin elsewhere

You need urgent help. Go to the nearest A&E department or call 999.

**AMBER**

If your child has any of the following signs:

- Feeling tired or lethargic, including sleeping or resting more than usual
- Swollen, bright red or itchy skin elsewhere
- Swollen, bright red or itchy skin elsewhere
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- Swollen, bright red or itchy skin elsewhere

Immediately contact your GP and make an appointment for your child to be seen. If you cannot get an appointment, contact your GP surgery or the NHS 111. During the coronavirus pandemic, at each time, access to a GP surgery or the NHS 111 may be limited. If you have a GP surgery or the NHS 111, please contact them to find out what a member of staff from your GP surgery or the NHS 111 can do to help you.

**GREEN**

Your child has none of the RED or AMBER signs above, but you are worried about their health or you are unsure.

If your child has any symptoms that might be COVID-19 (high temperature, new cough or sore throat, loss of taste or smell, fatigue) or if you are worried about their health, please contact your GP surgery or the NHS 111. You and your child should wear a face covering when you visit your GP surgery or the NHS 111. If your child has been unwell, wear a face covering when you visit your GP surgery or the NHS 111.

Continue providing your child's care at home. If you are worried about your child's health, contact your GP surgery or the NHS 111.

**MENTAL HEALTH**

If you are worried and your child is known to child or adolescent mental health services (CAMHS), please contact them. If you are worried and your child is not known to CAMHS, please contact your GP surgery or the NHS 111. If you are worried and your child is not known to CAMHS, please contact your GP surgery or the NHS 111. If you are worried and your child is not known to CAMHS, please contact your GP surgery or the NHS 111.

RCPC