Acute Diarrhoea in Adults

Diarrhoea can be acute (sudden onset and lasts less than four weeks) or chronic (persistent). This leaflet deals with acute diarrhoea, which is common. In most cases, diarrhoea eases and goes within several days, but sometimes takes longer. The main risk is dehydration. The main treatment is to have lots to drink which aims to avoid dehydration. You should also eat as normally as possible. See a doctor if you suspect that you are dehydrating, or if you have any worrying symptoms such as those which are listed below.

What causes acute diarrhoea?
- **Infection** of the gut is the common cause. This is called acute infectious diarrhoea. Many bacteria, viruses, and other germs can cause diarrhoea. Sometimes the germs come from infected food (food poisoning). Infected water is a cause in some countries. Sometimes it is just "one of those germs going about". Viruses are easily spread from one person to another by close contact, or when an infected person prepares food for others.
- **Other causes** are uncommon and include: drinking lots of beer, side-effects from some medicines, and anxiety.
- **Gut disorders** that cause chronic (persistent) diarrhoea may be mistaken for acute diarrhoea when they first begin - for example, diarrhoea caused by ulcerative colitis.

The rest of this leaflet deals only with infectious causes of acute diarrhoea. There are also other leaflets that give more details about some of the different microbes (germs) that cause infectious diarrhoea.

What are the symptoms of acute infectious diarrhoea?
- The main symptom is diarrhoea, often with vomiting as well. Diarrhoea means loose or watery stools (faeces), usually at least three times in 24 hours. Blood or mucus can appear in the stools with some infections.
- Crampy pains in your abdomen (tummy) are common. Pains may ease for a while each time you pass some diarrhoea.
- A high temperature (fever), headache and aching limbs sometimes occur.

If vomiting occurs, it often lasts only a day or so, but sometimes longer. Diarrhoea often continues after the vomiting stops and commonly lasts for several days or more. Slightly loose stools may persist for a week or so further before a normal pattern returns. Sometimes the symptoms last longer.

Symptoms of dehydration
Diarrhoea and vomiting may cause dehydration (a lack of fluid in the body). Consult a doctor quickly if you suspect you are becoming dehydrated. Mild dehydration is common and is usually easily and quickly reversed by drinking lots of fluids. Severe dehydration can be fatal unless quickly treated. This is because the organs of your body need a certain amount of fluid to function.
- Symptoms of dehydration in adults include: tiredness, dizziness or light-headedness, headache, muscular cramps, sunken eyes, passing little urine, a dry mouth and tongue, weakness, and becoming irritable.
- Symptoms of severe dehydration in adults include: weakness, confusion, rapid heart rate, coma, and a greatly reduced amount of urine that you make. This is a medical emergency and immediate medical attention is needed.

Dehydration in adults with acute diarrhoea is more likely to occur in:
- Elderly or frail people.
- Pregnant women.
- People with severe diarrhoea and vomiting. In particular, if you are not able to replace the fluid lost with enough drinks.

Do I need any tests?
Most people with acute infectious diarrhoea do not need to see a doctor or seek medical advice. Symptoms are often quite mild and commonly get better within a few days without any medical treatment.

However, in some circumstances, you may need to see a doctor (see below about when to seek medical advice). The doctor may ask you various questions. For example: about recent travel abroad, if you have been in contact with someone with similar symptoms, if you have recently taken antibiotics, or been admitted to hospital. This is to look for possible causes of your diarrhoea. The doctor will also usually examine you, especially looking for signs of dehydration.

Tests are not usually needed. However, if you are particularly unwell, have bloody stools, have recently travelled abroad, are admitted to hospital, or your symptoms are not getting better, then your doctor may ask you to collect a stool sample. This can then be examined in the laboratory to look for the cause of the infection.

When should I seek medical advice?
Seek medical advice in any of the following situations, or if any other symptoms occur that you are concerned about
- If you suspect that you are becoming dehydrated.
- If you are vomiting a lot and unable to keep fluids down.
- If you have blood in your diarrhoea or vomit.
- If you have severe abdominal pain.
- If you have severe symptoms, or if you feel that your condition is getting worse.
- If you have a persisting high fever.
- If your symptoms are not settling - for example, vomiting for more than 1-2 days, or diarrhoea that does not start to settle after 3-4 days.
Infections caught abroad.

If you are elderly or have an underlying health problem such as diabetes, epilepsy, inflammatory bowel disease, kidney disease.

If you have a weakened immune system because of, for example, chemotherapy treatment, long-term steroid treatment, HIV infection.

If you are pregnant.

What is the treatment for infectious diarrhoea in adults?
Symptoms often settle within a few days or so as your immune system usually clears the infection. Occasionally, admission to hospital is needed if symptoms are severe, or if complications develop (see below).

The following are commonly advised until symptoms ease.

Fluids - have lots to drink
The aim is to prevent dehydration, or to treat dehydration if it has developed. (Note: if you suspect that you are dehydrated, you should contact a doctor.)

- As a rough guide, drink at least 200 mls after each bout of diarrhoea (after each watery stool).
- This extra fluid is in addition to what you would normally drink. For example, an adult will normally drink about two litres a day, but more in hot countries. The above advice of 200 mls after each bout of diarrhoea is in addition to this usual amount that you would drink.
- If you vomit, wait 5-10 minutes and then start drinking again, but more slowly. For example, a sip every 2-3 minutes, but making sure that your total intake is as described above.
- You will need to drink even more if you are dehydrated. A doctor will advise on how much to drink if you are dehydrated.

For most adults, fluids drunk to keep hydrated should mainly be water. But, ideally, include some soup. It is best not to have drinks that contain a lot of sugar, such as cola or pop, as they can sometimes make diarrhoea worse.

Rehydration drinks are recommended for people who are frail, or over the age of 60, or who have underlying health problems. They are made from sachets that you can buy from pharmacies. (The sachets are also available on prescription.) You add the contents of the sachet to water. Rehydration drinks provide a good balance of water, salts, and sugar. They do not stop or reduce diarrhoea. However, the small amount of sugar and salt helps the water to be absorbed better from the gut into the body. Do not use home-made salt/sugar drinks, as the quantity of salt and sugar has to be exact.

Eat as normally as possible
It used to be advised to not eat for a while if you had infectious diarrhoea. However, now it is advised to eat small, light meals if you can. Be guided by your appetite. You may not feel like food and most adults can do without food for a few days. Eat as soon as you are able - but don’t stop drinking. If you do feel like eating, avoid fatty, spicy or heavy food at first. Plain foods such as wholemeal bread and rice are good foods to try eating first.

Medication
Antidiarrhoeal medicines are not usually necessary. However, you may wish to reduce the number of trips that you need to make to the toilet. You can buy antidiarrhoeal medicines from pharmacies. The safest and most effective is loperamide. The adult dose of this is two capsules at first. This is followed by one capsule after each time you pass some diarrhoea, up to a maximum of eight capsules in 24 hours. It works by slowing down your gut's activity. You should not take loperamide for longer than five days.

Note: do not give antidiarrhoeal medicines to children aged under 12 years. Also, do not use antidiarrhoeal medicines if you pass blood or mucus with the diarrhoea or if you have a high temperature. People with certain conditions should not take loperamide. Therefore, read the leaflet that comes with the medicine to be safe. For example, pregnant women should not take loperamide.

Paracetamol or ibuprofen are useful to ease a high temperature or headache.

As explained above, if symptoms are severe, or persist more than several days, your doctor may ask for a sample of the diarrhoea. This is sent to the laboratory to look for infecting germs (bacteria, parasites, etc). Sometimes an antibiotic or other treatments are needed if certain bacteria or other infections are found to be the cause. Antibiotics are of no use for infectious diarrhoea caused by viruses, and may even make things worse.

Are there any complications that may occur?
Complications are uncommon in the UK. They are more likely in the very young, in pregnant women, or in the elderly. They are also more likely if you have a chronic (ongoing) disease such as diabetes, or if your immune system may not be working fully. For example, if you are taking long-term steroid medication or you are having chemotherapy treatment for cancer.

Possible complications include the following:

- **Dehydration and salt (electrolyte) imbalance in your body.** This is the most common complication. It occurs if the water and salts that are lost in your stools, or when you vomit, are not replaced by your drinking enough fluids. If you can manage to drink plenty of fluids then dehydration is unlikely to occur, or is only likely to be mild, and will soon recover as you drink. Severe dehydration can lead to a drop in your blood pressure. This can cause reduced blood flow to your vital organs. If dehydration is not treated, kidney failure may also develop. Some people who become severely dehydrated need a drip of fluid directly into a vein. This requires admission to hospital.

- **Reactive complications.** Rarely, other parts of the body may react to an infection that occurs in the gut. This can cause symptoms such as arthritis (joint inflammation), skin inflammation and eye inflammation (either conjunctivitis or uveitis). Reactive complications are uncommon if you have a virus causing infectious diarrhoea.

- **Spread of infection** to other parts of your body such as your bones, joints, or the meninges that surround your brain and spinal cord. This is rare. If it does occur, it is more likely if diarrhoea is caused by *Salmonella* spp. infection.

- **Persistent syndromes of diarrhoea** may rarely develop.

- **Irritable bowel syndrome** is sometimes triggered by a bout of infectious diarrhoea.

- **Lactose intolerance** can sometimes occur for a period of time after infectious diarrhoea. This is known as secondary or acquired lactose intolerance. Your gut lining can be damaged by the episode of diarrhoea. This leads to lack of an enzyme (chemical) called lactase.
lactase that is needed to help your body digest a sugar called lactose that is in milk. Lactose intolerance leads to bloating, abdominal pain, wind and watery stools after drinking milk. The condition gets better when the infection is over and the gut lining heals. It is more common in children.

- **Haemolytic uremic syndrome** is another potential complication. It is rare and is usually associated with infectious diarrhoea caused by a certain type of *Escherichia coli* infection. It is a serious condition where there is anaemia, a low platelet count in the blood, and kidney failure. It is more common in children. If recognised and treated, most people recover well.

- **Reduced effectiveness of some medicines.** During an episode of infectious diarrhoea, certain medicines that you may be taking for other conditions or reasons may not be as effective. This is because the diarrhoea and/or vomiting means that reduced amounts of the medicines are absorbed (taken up) into your body. Examples of such medicines are medicines for epilepsy, diabetes and contraception. Speak to your doctor or practice nurse if you are unsure of what to do if you are taking other medicines and have acute diarrhoea.

### Preventing spread of infection to others

Some infections causing diarrhoea are very easily passed on from person to person. If you have acute diarrhoea, the following are also recommended to prevent the spread to others:

- Wash your hands thoroughly after going to the toilet. Ideally, use liquid soap in warm running water, but any soap is better than none. Dry properly after washing.
- Don't share towels and flannels.
- Don't prepare or serve food for others.
- Regularly clean the toilets that you use. Wipe the flush handle, toilet seat, bathroom taps, surfaces and door handles with hot water and detergent at least once a day. Keep a cloth just for cleaning the toilet (or use a disposable one each time).
- Stay off work, college, etc, until at least 48 hours after the last episode of diarrhoea or vomiting.
- Food handlers: if you work with food and develop diarrhoea or vomiting, you must immediately leave the food-handling area. For most, no other measures are needed, other than staying away from work until at least 48 hours after the last episode of diarrhoea or vomiting. Some special situations may arise and sometimes longer time off is needed. Specialist advice may be needed for some uncommon causes of infectious diarrhoea. If in doubt, seek advice from your employer or GP.
- If the cause of acute diarrhoea is known to be (or suspected to be) a germ called *Cryptosporidium* spp., you should not swim in swimming pools for two weeks after the last episode of diarrhoea.

### Can infectious diarrhoea be prevented?

The advice given in the previous section is mainly aimed at preventing the spread of infection to other people. However, even when we are not in contact with someone with infectious diarrhoea, proper storage, preparation and cooking of food, and good hygiene help to prevent it.

In particular, always wash your hands:

- After you go to the toilet.
- Before you touch food.
- Between handling raw meat and food ready to be eaten. (There may be some bacteria on raw meat.)
- After gardening.
- After playing with pets (healthy animals can carry certain harmful bacteria).

The simple measure of washing hands regularly and properly is known to make a big difference to the chance of developing infectious diarrhoea.

You should also take extra measures when in countries of poor sanitation. For example, avoid water and other drinks that may not be safe, and avoid food washed in unsafe water.

### References

- **Gastroenteritis**, Prodigy (September 2009)
- **Diarrhoea - prevention and advice for travellers**, Prodigy (September 2009)

Disclaimer: This article is for information only and should not be used for the diagnosis or treatment of medical conditions. EMIS has used all reasonable care in compiling the information but make no warranty as to its accuracy. Consult a doctor or other health care professional for diagnosis and treatment of medical conditions. For details see our conditions.

The clinicians responsible for the production of this document are:

Original Author: Dr Tim Kenny  
Current Version: Dr Colin Tidy  
Peer Reviewer: Dr Tim Kenny  
Last Checked: 11 Jan 2012  
Document ID: 4521  
Version: 42  
© EMIS