

FOOD POISONING AND FOOD BORNE DISEASE

CAUSES AND PREVENTION



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**ENVIRONMENTAL HEALTH
EAST HAMPSHIRE DISTRICT COUNCIL**

ALL CASES OF FOOD POISONING OR SUSPECTED FOOD POISONING ARE LEGALLY NOTIFIABLE.

East Hampshire District Council investigates food poisoning cases notified to us by GP's and Public Health Laboratories as part of its role to protect public health. The investigation is carried out by the Food Safety Team (part of Environmental Health).

The purpose of our investigation is to:

- Determine the source of the infection
- Prevent the spread of infection
- Prevent a recurrence of the infection
- Fulfil the duty of enforcing food safety legislation
- Give appropriate advice

There has been a continual rise in notifications of food poisoning since 1987. Campylobacter infections are now the most common. Salmonella cases however have recently declined in number, mainly thought to be due to the vaccination of poultry flocks.

It is generally accepted that notified cases represent only a small proportion of the actual cases of food poisoning, with many people not visiting their GP's.

Food poisoning cases are estimated to cost millions of pounds annually in terms of absence from work, investigation, treatment and costs to the affected individual and their families.

By far the greatest number of food poisoning cases occur through travel abroad or in the home as a result of poor food handling practices.

This leaflet is therefore intended to provide the consumer with the basic facts about food poisoning and the main ways in which it can be prevented.

WHAT IS FOOD POISONING?

Food poisoning is a term used to describe an illness caused by consuming food or drink which has been contaminated by bacteria or the poisons they produce (toxins), viruses or chemicals.

The symptoms of food poisoning may include some or all of the following:-

- Diarrhoea
- Vomiting
- Nausea
- Abdominal pain
- Fever

It is important to remember that food which causes food poisoning looks, tastes and smells normal.

HOW DO YOU GET FOOD POISONING ?

The most common food poisoning cases result from eating food contaminated with particular bacteria or with their toxins. Bacteria can contaminate food in several ways:

Raw Food - Food poisoning bacteria can be present on or in many raw foods and also live in the gut of healthy animals. During slaughter and processing these bacteria can contaminate the whole carcass. It is therefore important that all raw food be treated as contaminated and kept separate from cooked and ready to eat food.

People - Food poisoning bacteria are found on the skin, in septic wounds, in the nose, mouth and sometimes the gut of man. If food hygiene practices are poor, bacteria can be transferred onto food, where they can multiply and cause food poisoning.

Rodents, Insects and other Pests feed amongst faeces, dirt or refuse transferring food poisoning bacteria on to food intended for human consumption.

The Environment - Food poisoning bacteria can also be found in soil and untreated water.

Type of Bacteria	Onset time and Duration	Symptoms	Source and method of spread
Campylobacter	3-5 days but may range from 1-10 days Duration 2 days to 1 week	Diarrhoea (possibly bloody) Abdominal pain Fever Nausea Rarely vomiting	Raw or undercooked meat (especially chicken), unpasteurised milk, bird pecked milk on doorsteps, untreated water and domestic pets with diarrhoea. Person to person spread if personal hygiene is poor.
Salmonella	12-36 hrs but may range between 6-72 hours. Duration 7 -10 days but may be up to 3 weeks.	Headache Abdominal pain Diarrhoea Nausea Dehydration Sometimes vomiting	Consumption of under cooked meats or eggs, contaminated milk and dairy products. Cross contamination of cooked food by raw food. Person to person spread by close contact or by contact with infected animals.
Staphylococcus aureus	1-6 hrs Duration 6-24 hrs	Acute vomiting Abdominal pains Chills	Found in human nose, throat, ears, hair, skin and septic wounds therefore easily spread to foods by poor hygiene practices, i.e. coughing, spitting, failing to wash hands. Likely foods implicated are handled cooked meats, milk products, or gravies.
Clostridium Perfringens	10-12 hrs Duration 12 - 48 hrs	Abdominal pain Diarrhoea Headaches Nausea Vomiting is rare	Found in the intestinal tract of man and animals. Its spores can survive in soil. Food poisoning usually occurs as a result of inadequate cooling and reheating. Cooked meats and stews, gravies and poor cooling of joints of meat are all associated with this bacteria.

Type of Organism	Onset time and Duration	Symptoms	Source and method of spread
E. Coli 0157	12-72 hrs Duration 3 -5 days	Bloody Diarrhoea Kidney complications in severe cases.	Found in the intestinal tract of cattle and some other domesticated animals. Likely foods include undercooked beef burgers, or steak pies, unpasteurised milk or milk products.
Bacillus cereus	1-6 hrs - vomiting 6-16hrs- diarrhoea Duration 12-24 hrs	Vomiting Nausea Diarrhoea Abdominal pain	Cooked rice, cooked meats, cereals, pasta, sauces, soups, puddings, vegetables, soil & dust.
Cryptosporidium	1-12 days average about 7 days. Duration about 2 weeks	Diarrhoea Loss of appetite Nausea Stomach cramps Abdominal pain Slight fever	This parasite infects cells in the intestine and is spread by the faecal-oral route from person to person, or from animals (particularly cattle) and domestic pets to people. Often transmitted by contaminated water or food.
Giardia	5-25 days or longer 7-10 days average. Duration is variable	Chronic diarrhoea Abdominal cramps Bloating Fatigue Weight loss.	Ingestion of Giardia eggs from faecally contaminated food or water. Secondary spread within families is common.
Viral Gastroenteritis	12-48 hrs Duration 24-48 hrs	Nausea Vomiting (sometimes severe) Diarrhoea	Associated with eating foods which are either uncooked (raw oysters) or handled after cooking especially by a food handler who has the virus. Direct person to person spread also occurs particularly in institutions. Risk of infection from projectile vomit aerosols.

TEN FACTORS CONTRIBUTING TO OUTBREAKS OF FOOD POISONING:

1. Preparation of food too far in advance
2. Storage of food at room temperature
3. Inadequate cooling of food
4. Inadequate re-heating of food
5. Cross contamination from raw to ready-to-eat foods
6. Inadequate thawing of food
7. Infected food handlers
8. Inadequate refrigeration
9. Inadequate cooking of food
10. Use of leftovers



FOOD SAFETY ADVICE

HANDWASHING

Handwashing and good standards of personal hygiene are important in preventing the spread of infectious diseases.

It is essential to wash your hands:-

- Before preparing food
- After using the toilet
- After handling raw foods
- After handling refuse
- After touching animals
- After handling soiled clothes

TIPS ON KEEPING FOODS SAFE TO EAT

Most bacteria that cause food poisoning need warm conditions to multiply, ideally between 5°C and 63°C (known as the danger zone). It is normally the number of bacteria (known as the infective dose) that determine whether or not you get symptoms and the severity of those symptoms. Under ideal conditions bacteria can double in number every 10 minutes. By the time you read this leaflet one bacteria could become two; in a matter of hours there would be millions. Following these simple guidelines will ensure that the food you prepare is safe to eat.

STORING FOODS SAFELY

- When buying chilled and frozen foods purchase them last and pack them together, preferably in an insulated bag. Do not leave food in the car but take it straight home and place into cold storage.
- Keep your fridge at 5°C and your freezer at -18°C. Use a thermometer to check the temperatures.
- Store raw foods below cooked and ready to eat items and keep raw meat, poultry and fish covered.

PREPARING FOODS SAFELY

- In order to prevent cross contamination remember not to use the same chopping boards, work surfaces and utensils for cooked and raw foods.
- Clean and disinfect all items in hot soapy water after preparing raw foods.
- Thoroughly rinse salads, fruit and vegetables in clean running water.
- Remember to wash your hands after handling raw foods.

COOKING FOODS SAFELY

- Defrost foods thoroughly before cooking.
- Follow food labels and instructions on cooking times and temperatures. Remember to preheat the oven properly.
- Cook all meat and poultry thoroughly, until the juices run clear.
- When using a microwave, follow the instructions. Check that the food is piping hot throughout.
- Do not cook foods too far in advance.
- Cool hot foods at room temperature for a maximum of 90 minutes before placing them in the fridge.
- Reheat foods until they are piping hot throughout. Do not reheat foods more than once.

ADVICE TO PERSONS WHO HAVE FOOD POISONING SYMPTOMS

If you or any of your family group work in the food industry or are engaged in other high risk occupations such as nursing or working with the elderly or very young, you must notify your employer and contact the Food Safety Team immediately on the direct line telephone number at the end of this leaflet.

WHAT YOU MUST DO

It is particularly important to observe the strictest personal hygiene, not only to prevent the spread of infection to other persons, but also to avoid re-infection of yourself. In particular, please remember the following rules:

- a If you have more than one WC, use a separate WC to those who are not infected.
- b After using the toilet, wash your hands immediately and thoroughly with soap (preferably bactericidal soap from your chemist) and hot water. A separate hand towel should be used by infected persons. Where the patient is a young child, then it may be necessary for a parent to supervise or assist in the proper washing of hands.
- c At regular intervals, clean the WC seat, handle, flush taps and door knobs with disinfectant.
- d If you are able to make alternative arrangements, do not prepare food for other people. If you cannot do this, wash your hands thoroughly before preparing or cooking any food or before touching any kitchen utensils and equipment.

YOUNG CHILDREN

Young children tend to be less strict in their personal hygiene and may therefore pass on this type of infection more readily. Babies and toddlers in nappies therefore need special attention. If possible you should use disposable nappies which, after use, should be disposed of by double bagging, (i.e. sealed in one bag and then placed in a second bag).

If towelling nappies are used they should be rinsed in the normal way and should be washed using a "boil wash".

Rubber gloves (separate from those used for washing up) should be used to handle soiled nappies/bed linen, etc.

As an added precaution you should, if possible, set aside a separate area just for nappy changing and this should not be an area where food is prepared. Make sure you wash your hands thoroughly after changing the baby.

If the investigating officer considers that it is advisable for you to be excluded from working in a high risk operation, you will be advised accordingly.

FURTHER INFORMATION:

If you would like any further information on food poisoning or any other food safety matter please contact:

The Food Safety Team:
Tel: (01730) 234307
Fax: (01730) 234330
Or email us on: ehealth@easthants.gov.uk

You can also write to us or visit us at the following address:

East Hampshire District Council
Food Safety Team
Health & Environmental Health
Penns Place
Petersfield
Hants
GU31 4EX

Further details can also be found on our website: www.easthants.gov.uk

Please note: Queries of a medical nature or regarding treatment should be made directly to your GP

FEEDBACK

Environmental Health are always striving to improve the service that we offer to you and as a result we would welcome your comments and views regarding this leaflet and more generally, the service we provide.

Please let us know your comments, whether good or bad. If we don't know how we are performing, we cannot make any changes or improvements!

	Yes	No	Not Really
1 Did you find the booklet helpful?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Would you like more information on this subject?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 When you contacted Environmental Health, did you find the staff friendly and knowledgeable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Would you like this information in another format e.g. large print/on tape/ in another language?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If so, please state below which format you would like the information in

5 Generally, please let us know below any comments you may have on the service, particularly how it may be improved

Thank you very much. If you have asked for more information, possibly in another format or would like us to contact you regarding your comments, please do fill in your details below

Name

Address

Telephone number

E-mail

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BUSINESS REPLY SERVICE
LICENCE No. SCE 12702

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