Public Health England

Managing suspected infectious diarrhoea
Quick reference guidance for primary care: Appendix A

OVERVIEW

B/C
- **Acute diarrhoea is usually defined as:** 3 or more episodes a day, <14d and stool takes shape of pot.[1,2,3,4,5 B+, 11 C]
- **Infectious diarrhoea is common (affecting a quarter of us annually[7B+]) BUT, should be viewed as a differential diagnosis** [4] with other potential causes of diarrhoea as in 60% of diarrhoeal illnesses no infectious agent is found[25]
- **Most infectious diarrhoea is a self-limited, usually viral illness**[3, 7 B+]. Nearly half of episodes last less than one day[2]
- **If diarrhoea has stopped, culture is rarely indicated unless there is a public health indication**[7]
- **Do not give empirical antibiotics unless *Clostridium difficile*[13, 16, 27] or *Campylobacter spp.*[20] are suspected.**

C WHEN TO SEND A FAECAL SPECIMEN IN CASES OF DIARRHOEA [6,9, 10,11, 12, 26]

C

1. SYMPTOMS/SIGNS OR CLINICAL INDICATIONS

- Patient systemically unwell needs hospital admission and/or antibiotics OR is immunocompromised [26, 31]
- Blood, mucus or pus in stool. [4]
- In children who have acute painful, or bloody diarrhoea to exclude verotoxigenic E.coli infection including O157. [8 12]
- Recent antibiotics [27] PPI or hospitalisation (C. difficile)[11, 13]
- Diarrhoea after "exotic" foreign travel (state countries); you should request ova, cysts and parasites (OCP) [1,2]
- Specifically when amoebae, Giardia or cryptosporidium are suspected [21, 29] especially if there is recurrent or prolonged diarrhoea (over 14 days) or travel to at risk areas.
- To exclude infectious diarrhoea in the differential diagnosis, e.g. patient has severe abdominal pain, exacerbations of inflammatory bowel disease or irritable bowel syndrome. [4]
- Request virology where a definitive diagnosis is needed[12,26]

2. PUBLIC HEALTH INDICATIONS [9, 10, 11, 12]

- Suspected food poisoning e.g. barbecue, restaurant, eggs, chicken, shellfish,[9] and give details
- Diarrhoea in high-risk situations for example: food handlers, health or child care workers, children at nurseries or after farm visits (E.coli O157)[8] elderly residents in care homes. [9, 10, 11, 12]
- Contact with other affected individual or outbreaks of diarrhoea in: care home (norovirus), community, family, etc when isolating an organism may help pinpoint cause.[9]
- Contacts of patients where there may be serious sequelae[9] (E.coli 0157 or C. difficile)
- Close household contacts of giardia cases

WHAT TO SEND (see next page for patient information on how to collect)
Only send loose stools as formed stools will not be examined by the laboratory
To ensure correct tests are performed please include travel & reason for sending sample on laboratory request form

C
- For routine microbiology investigation send a single specimen, (a quarter full specimen pot is the minimum needed)

B
- If the diarrhoea is post exotic foreign travel, prolonged or recurrent, you should give details and specifically request ova, cysts and parasites (OCP) **and** send three specimens at least two days apart, [28 B-] as OCP are shed intermittently.

INTERPRETING THE LABORATORY REPORT

B+
- A bacterial pathogen is found in only 2–5% of specimens submitted.[1,5,7] OCP reported ONLY if looked for.

C
- ***Salmonella, shigella, clostridium, campylobacter, E.coli O157& cryptosporidium*** are routinely sought and reported.[26] As viruses, OCPs, and other uncommon but potential pathogens are not routinely sought a negative report does not mean that all infections have been excluded.[26] e.g. there are no routine methods for detecting enterotoxigenic *E. coli*, the commonest cause of traveller's diarrhoea.

ANTBIOTIC MANGEMENT OF SUSPECTED AND PROVEN INFECTIOUS DIARRHOEA

B
- Antibiotics are not usually recommended for adults with diarrhoea of unknown pathology[19] **The lab will happily advise**.
- Most patients in whom pathogens are detected including salmonella and shigella will NOT require specific treatment [19] unless systemically unwell or treatment is advised by a microbiologist or consultant in communicable disease control.

A
- ***VTEC E. coli* e.g. O157:** Can cause Haemolytic Uraemic Syndrome, recommend urgent referral to secondary care all previously healthy children with acute painful, bloody diarrhoea or confirmed cases. Do *not* give antibiotics for ***E. coli*** 0157 as increases risk HUS [8,10,12]

B/C
- ***Clostridium difficile**:* Discuss with microbiologist. Stop unnecessary antibiotics and/or PPIs to re-establish normal flora. Prescribe 10-14 days metronidazole 400mg oral three times/day. 70% of patients respond after 5 days; 94% in 14 days. Monitor >85 year olds as mortality double**.**[11, 13, 16]
- If severe *C. difficile* (characterised by T >38.5; WCC >15; rising creatinine or signs/symptoms of severe colitis), or if recurrent within 30days AND +ve *C. diff* toxin prescribe vancomycin 125mg oral qds for 10-14 days**.** [13, 16]

A+
- **Campylobacter**: Antibiotic therapy shortened duration of symptoms by 41 hours: if given within 3 days of illness (course duration 2.4 versus 4.1 days).[20] If still unwell consider clarithromycin 250-500mg oral BD for 5-7days. [24]

A+
- ***Giardia lamblia***: metronidazole 400mg oral TDS for 7-10 days' [21, 29, 30 A+]. ***Entamoeba histolytica:*** metronidazole 800mg every 8 hours for 5 days followed by diloxanide furoate, 500mg oral TDS for 10 days. [19, 21]

C
- **Blastocystis**, **Cryptosporidium** and ***Dientamoeba fragilis*** do not usually require treatment in otherwise healthy adults unless symptoms persist. [21,22,23C]

WHEN TO SEND A REPEAT SPECIMEN

C
- Usually **unnecessary** unless OCP suspected, or advised by a microbiologist or consultant in public health, e.g. Management of *E. coli* O157or *Salmonella typhi*, or to confirm clearance in high risk situations above.[9, 12]

KEY A B C D Indicates grade of recommendation

First Produced 2007 – Latest Review November 2014 – Next Review November 2017.
Published January 2015. PHE publications gateway number: 2014526.
Main document: https://www.gov.uk/government/collections/primary-care-guidance-diagnosing-and-managing-infections

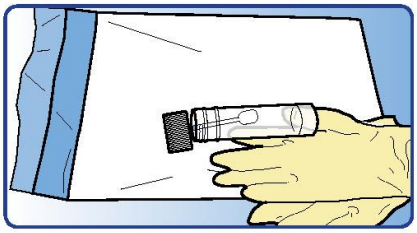
Stool/Poo Sample Collection Instructions

Before you start:

You may wish to purchase a pair of disposable plastic gloves from your local supermarket/pharmacist (not essential).

Step 1

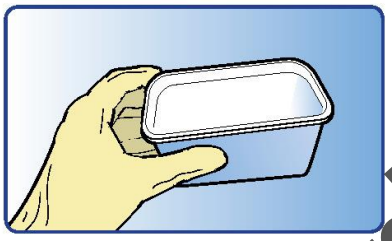
Fill in your name, address and date of birth on the label on the outside bottle **using a permanent pen**.



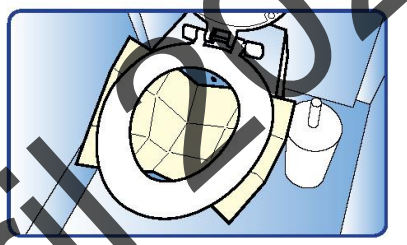
Step 2

To prevent the poo sample from falling into the toilet either

Option A
Place a wide mouth container (clean empty plastic food container e.g. margarine tub) in the toilet bowl.

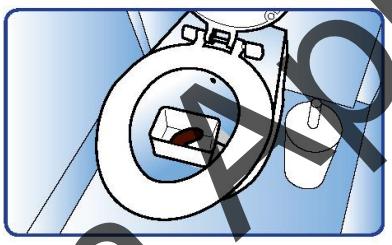


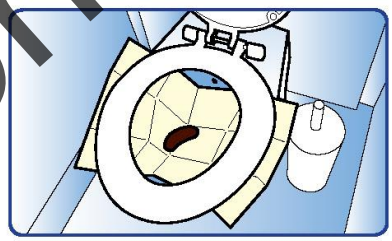
or Option B
Place clean newspaper over the toilet seat opening under the lid (this might not be suitable for a runny sample).



Step 3

Pass the poo sample either into the container or onto the newspaper.

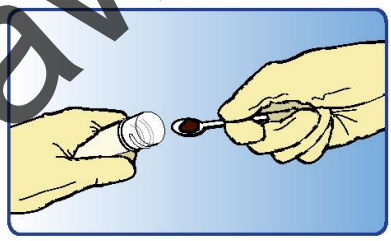




Step 4

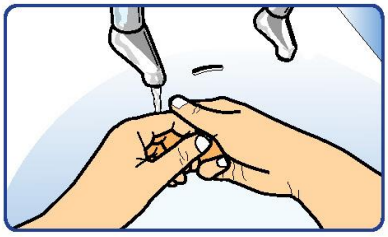
Using the spoon built into the cap of the collection tube, collect small scoops of stool from each end and the middle. **Half fill the tube**. Replace cap and make sure it is tightly closed.

Disposal: Dispose of remaining stool down the toilet. Wrap the container or newspaper and gloves in clean newspaper and dispose of in a plastic bag.



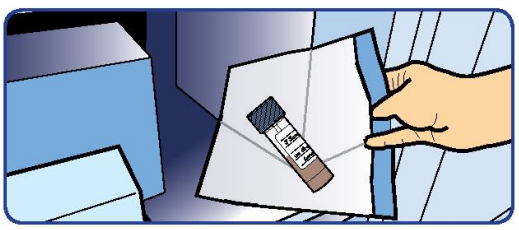
Step 5

Wash hands with soap and warm water.



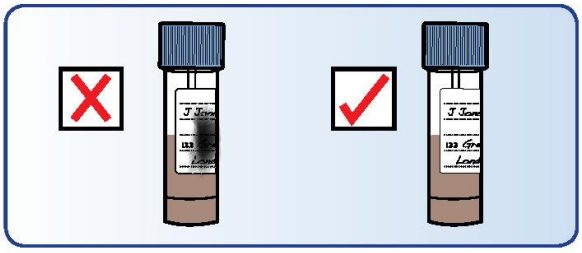
Step 6

Place the sample container in the bag provided and then place the sealed envelope in a cool place until you are able to get to your GP practice or hospital laboratory. **The sample must be returned within 24hrs of collection**.



Step 7

Please check that your details are still clearly visible on the outside of the collection bottle before returning the sample. If not, ask the receptionist for a new label, write your details on this clearly and stick over the old label.



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