



# Health & Safety – Animal manure

Over the past few months we have received a number of enquiries relating visits to farms and the use of well-rotted manure in school grounds and gardens.

Farm animal faeces can be a potential source of pathogens such as *Salmonella* and *E. coli* (including *E. coli* 0157). General advice on school visits to farms where such hazards may be encountered and the control measures that can be taken to reduce risk of infection is provided by the Royal Highland Educational Trust (<http://www.rhet.org.uk/Home>), the Health and Safety Executive (<http://www.hse.gov.uk/>) and the Scottish Government (<http://home.scotland.gov.uk/home>).

1. Animal manure should be treated as a possible source of infection.
2. Manure which has been composted is likely to have a reduced or negligible level of contamination. In a risk assessment composting the manure would be a control measure to reduce risk. 'Well rotted' is a subjective although commonly used term but should mean that the manure has been composted for a period of weeks and been aerated (i.e. not composted in anaerobic conditions). It is recommended that fields used for grazing should be left for three weeks before recreational use as a control measure.

3. Infection is by the faecal/oral route so control measures should reduce the risk of that occurring by sensible hygiene procedures. If students are using well rotted manure to improve soil quality they must cover any exposed cuts and wash hands with hot soap and water afterwards (para 3.10 of Materials of Living Origin applies [1]). Footwear should be changed or cleaned after use. Food and/or drink should not be consumed unless hands are washed first. If clothes are contaminated they should be changed and washed.
4. Children under five should not be involved as they are particularly vulnerable to *E. coli* 0157 infection.
5. Samples from manure should not be used for microbiological culture.

In summary suitable control measures to reduce the risk of the potential hazards include:

- Using well composted animal manure as described in 2 opposite
- Applying the hygiene measures described in 3 above.

Further published information in the form Guidance Notes is available from both Health Protection Scotland [2] and the Health and Safety Executive [3].

## References

- [1] SSERC (2005) Materials of Living Origin – A Code of Practice for Scottish Schools. This document can be downloaded from the SSERC website (<http://tinyurl.com/7wd8376>) [Accessed February 2012]. Please note that to access resources on the SSERC website you will need to register and be provided with a log-on ID and password.
- [2] *E. coli* O157 and Open Farms (Guidance Note 17) Update of SCIEH Guidance Note originally published February 2000 (2007). Available at: <http://www.documents.hps.scot.nhs.uk/environmental/guidance-notes/ecoli-open-farms.pdf> (accessed October 3rd 2011), Health Protection Scotland.
- [3] Preventing or controlling ill health from animal contact at visitor attractions (2011). Agriculture Information Sheet 23 (rev 2). Available at: <http://www.hse.gov.uk/pubns/ais23.pdf> (accessed February 2012), Health & Safety Executive.