

Reptiles in schools

Recently the issue of whether reptiles should be kept in schools has been raised with SSERC. The concern on this occasion was that reptiles can be a source of *Salmonella* infection. It should be assumed that all reptiles carry *Salmonella* as part of their normal gastrointestinal flora.

The issue then becomes as reptiles present a *Salmonella* hazard, what is the risk of harm and can the risk be reduced to an acceptable level through a risk assessment that provides a suitable and sufficient set of control measures?

The Health Protection Agency (HPA) in its *Guidance on infection control in schools and other childcare settings* [1] states that "reptiles are not suitable as pets in schools and nurseries as all species carry *Salmonella*". Health Protection Scotland (HPS) in its equivalent guidance [2] makes no reference to reptiles although it is reasonable to assume that if asked they would concur with the advice from HPA.

SSERC's Code of Practice *Materials of Living Origin* [3] states that reptiles should not normally be kept in schools. If reptiles are to be kept in schools *Materials of Living Origin* requires three considerations need to be taken into account. These are:

- There should be sound educational reasons for keeping the animals in school.
- A member of staff must have an understanding of the biology and natural history of the animal and thus be able to cater for its needs and ensure its well being.
- Any hazards associated with keeping the animal in school must be identified and a suitable risk assessment carried out and the control measures applied.

Be safe! The Association for Science Education (ASE) guide for health and safety in school science and technology for 3 to 12 year olds [4] considers garter snakes and leopard geckos as examples of suitable reptiles to be kept in schools. This is probably based on these species being less demanding to maintain than some other reptile species.

Infection by *Salmonella* from reptiles is through a hand to mouth oral route. Handling reptiles, cleaning cages and vivaria, contact with water from swimming species can all



Figure 1 - Image taken from <http://www.telegraph.co.uk/lifestyle/pets/>.

result in *Salmonella* shed in reptile faeces contaminating hands. Transmission of *Salmonella* can be controlled by effective hand washing and hygiene measures. Soap, running water and disposable paper towels is the preferred means of hand washing, wipes and hand gels are not an acceptable substitute for proper hand washing.

Reptiles should not be allowed to roam freely, surfaces that have been in contact with reptiles should be cleaned with a surface cleanser containing a non-ionic surfactant disinfectant or equivalent (e.g. Dettol Antibacterial Surface Cleanser). Useful advice on preventing *Salmonella* infection from reptiles is provided by the Health Protection Agency [5] and the British Veterinary Zoological Society [6].

Salmonella presents a greater hazard to under-fives than it does to older children. Individuals whose immune system is compromised are also at greater risk from *Salmonella* infection. Because of the serious consequences *Salmonella* can have for under-fives, reptiles should not be kept in establishments with children under the age of five.

References

- [1] Guidance on infection control in schools and other childcare settings, Health Protection Agency (2010), www.hpa.org.uk.
- [2] Infection prevention and control in childcare settings, Health Protection Scotland (2011) www.hps.scot.nhs.uk.
- [3] *Materials of Living Origin* - Educational Uses SSERC, (2012), www.sserc.org.uk.
- [4] Be safe! The Association for Science Education (2011), www.ase.org.uk.
- [5] Reducing the risks of *Salmonella* infection from reptiles, Health Protection Agency (2009), www.hpa.org.uk.
- [6] *Salmonella* guidelines for reptile owners, The Royal (Dick) School of Veterinary Studies, www.DickVetExotics.com.
- [7] Aiken AM, Lane C, Adak GK. Risk of *Salmonella* infection with exposure to reptiles in England, 2004-2007, Euro Surveill (2010), www.eurosurveillance.org.