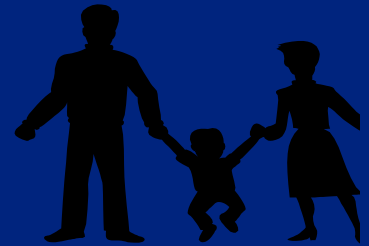




Zoonoses – recent and current issues

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Background

- Zoonoses are infections naturally transmissible between vertebrate animals and man
- May include environmental infections shared between animals and man
- Human cases often act as sentinels since many zoonoses are subclinical/not apparent in animals
- Being unapparent/economically insignificant in animals presents major challenges for diagnosis and control

Some issues

- Zoonoses are encountered in medical and veterinary settings
- Vets usually more aware of zoonoses than medics
- Minor and common zoonoses are grossly under reported



- Major conditions/incidents are rare (17 in 12 months) and health professionals are often inexperienced in dealing with them
- Inter discipline/inter agency collaboration is essential
- Progress can be hindered by different funding, remits, regional boundaries and unawareness of roles

The main players

- Pet owners, farmers, general public
- Veterinary/medical general practitioners
- Defra, AH, VLA
- Health Protection agency
- Local authorities
- HSE
- FSA
- Others include private Veterinary laboratories, research groups etc

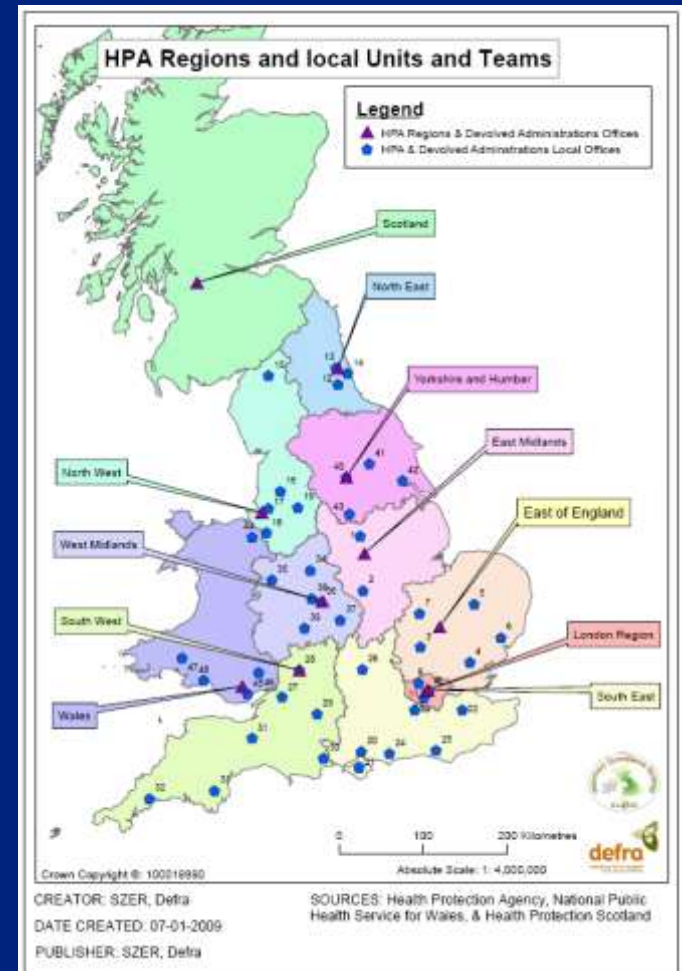
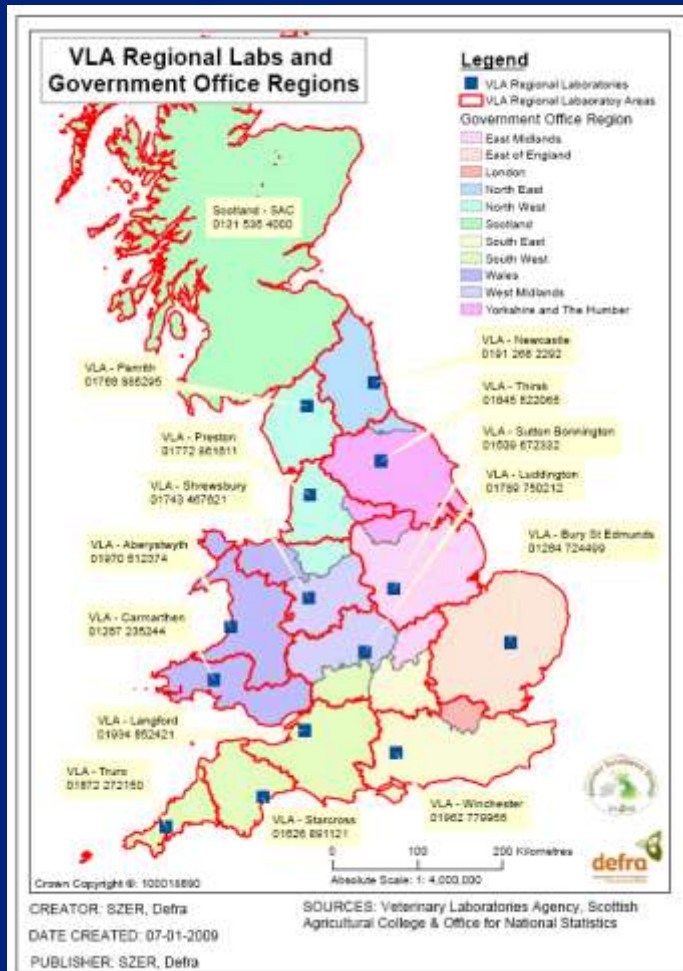
VLA and Zoonoses surveillance

- Part of the Food and Environmental Safety programme
- Provide surveillance information and outbreak investigation for Defra
- Surveillance includes salmonella and non-statutory zoonoses
- Data is obtained from various sources including diagnostic submissions under ED & W programme.
- Remit includes outbreak investigations and field-led follow-up studies

Guidelines for Zoonoses investigations

- Initial document developed for Scotland (SCIEH/HPS) in 2001
- A working party from the Human Animal Infections and Risk Surveillance (HAIRS) group (est. 2004) developed Guidelines for E & W 2009
- Comprehensive clarification of roles, responsibilities, regions, contacts etc
- Zoonoses Surveillance, Investigation and Control workshop, Colindale, June 2009

Zoonoses Guidelines



Purpose of new guidelines

- Clarify the roles and responsibilities of different organisations with respect to zoonotic incidents
- Outline how organisations should best work together in different situations
- Intended for all those likely to be involved in the management of zoonotic incidents in England and Wales
- To complement rather than replace existing guidelines

Some examples..

VTEC O157 on open farms



**E-COLI
KILLER
BUG
HITS 6**

Youngsters struck down after a visit to National Trust farm

THE CHILDREN became infected with the killer bacteria E coli O157 after a visit to a National Trust farm. The children were taken to hospital and one of them died. The children were taken to hospital and one of them died. The children were taken to hospital and one of them died.

- 31 investigations with HPA 1997-2007
- Statistical sampling, culture, PT, PFGE/VNTR
- Proportion of positive samples:
 - Cattle 29%, sheep 24%, donkeys 15%, pigs 14%, horses 12%, goats 10% etc
- Most cases sourced to goats or sheep (closer contact)
- Identify and manage the risks



“Carlisle children struck down by bug after farm visits”

- Cryptosporidiosis affected up to 100/360 children from 8 schools who visited a farm open day in Carlisle in April 2009
- At least 40 cases confirmed by CRU, Swansea
- Contact with goats, calves, chickens and milked a cow
- Crypto detected by FAT in 3/7 calf samples (10,000 to 2M oocysts /g and 7/20 goat samples (to 750,000/g)
- Confirmed by PCR as *C. parvum*
- Molecular comparisons underway
- Relied on hand gel disinfection after eating
- Open farm Sunday (LEAF) June 7th



Q fever outbreak in Cheltenham 2007

- 32 cases June 2007 centred round Cheltenham
- No recent reports of Q fever in animals in the area
- Identified main local livestock farms
- Questionnaire telephone survey to identify risk factors
- Met office atmospheric dispersion data
- New advisory guidelines introduced for farmers



Other recent examples

- Fatal *Corynebacterium ulcerans* diphtheria from dogs/cats
- Psittacosis in duck processing plant plant workers
- Weil's disease from pet rats
- *Yersinia pseudoTB* from guinea pigs



Thanks for listening..

