

# Process for Evaluation of Animal Concerns

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**ATSDR**  
AGENCY FOR TOXIC SUBSTANCES  
AND DISEASE REGISTRY

# Reported Animal Concerns

## 1. Reproductive problems

- Infertility and small litter sizes (dogs, horses)
- Cystic ovaries (horses)
- Stillbirths and failure to thrive
- Malformations
- Genitals
- Skeletal (limbs and feet)
- Neural tube (spina bifida, hydrocephalus)
- Body wall closure defects



## 2. Skin abnormalities

- Acute and chronic (dogs)
- Sweat glands (foals)

## 3. Cancers

- Tumors in puppies and adult dogs

# Reported Livestock Concerns

Species reported: cattle, horses, sheep, goats, ostriches

- Reproductive – infertility, cystic ovaries
- Developmental
- Skeletal deformities, body wall defects
- Ocular: eye defects
- Respiratory problems – acute and chronic
- Immune function?
  - Needs further study and better clinical documentation



# Limitations to Date



- No incidence and prevalence data
    - No systematic collection of data
    - Limited access to veterinary and animal production records
    - Incomplete information on existing diagnoses and laboratory findings
- \*\* No routinely collected state or national animal health statistics exist for these conditions to use as comparison values.**

# Gathered Input



12/7/2009 – 12/11/2009

Met with the following veterinarians to gather input:

- Texas Animal Health Commission
  - Texas State Veterinary Diagnostic Lab
  - Texas A&M College of Veterinary Medicine
- Specialists consulted:** Toxicologist, Oncologist, Reproductive Health (Theriogenologist), Immunologist, Clinical Pathologist, Epidemiologist, Laboratory Services.
- Local veterinarians at various clinics and animal hospitals serving the Midlothian area.



# Next Steps

- Determine if environmental data is sufficient and can be used to estimate doses for routes of exposure (companion animals and livestock).
- Review veterinary and scientific literature for previous reports of toxicological information on contaminants of concern with respect to animal health issues.
- Consider developing *Provisional Animal Health Guidance Values* (PAHGVs) for specific routes of exposure (air, soil, water, etc.).
- Utilize the PAHGV screening values to determine if adverse health outcomes are expected.
- Incorporate findings as part of Public Health Consultation

