

Hazard/threat category	Sub-category
Animal health	Zoonotic notifiable animal disease
Hazard and threat description, plus scale	Risk reference number
Culling of up to 30 million poultry (HPAI), plus possibility of wildlife being affected	H26
Date of revision	Next review
November 2007	November 2009
Version	2
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1. Overview of hazard or threat

Avian Influenza

A highly contagious viral disease affecting the respiratory, digestive and/or nervous system of many species of land/aquatic birds and poultry, transmission being by direct contact with secretions from infected birds and/or their faeces.

Human infection possible through close or direct contact with infected flocks.

No human-to-human transmission reported, **however potential virus mutation could result in a human-to-human transmission variant developing at some time.**

(See also Human Health – Influenza Pandemic)

West Nile Virus

First identified in Africa in 1937, the virus is transmitted by mosquitoes and ticks.

Human infection gives rise to flu like symptoms and in some cases meningitis.

Death can occur in a minority of cases.

Note: Rabies (Lyssa Virus)

A virus carried by infected mammals and transmitted by biting or saliva entering through an open wound which attacks the central nervous system resulting in death.

Eradication programmes within Western Europe have successfully reduced the incidence of infection within Western Europe to the German fox population.

There have been four confirmed cases within the UK involving a specific species of bat, the last being in 2003.

The virus attacks the nervous system and is generally fatal.

2. Key historical evidence

Avian Influenza	
June 2004	Outbreaks of avian influenza confirmed in Cambodia, China, Indonesia, Malaysia, Thailand, and Vietnam.
May 2005	Outbreaks confirmed in Russia, China, Kazakhstan, Turkey, and Romania.
October 2005	Avian Flu (H5N1) confirmed in Eastern Europe, Turkey and Greece. Possible it may arrive within UK via migrating wildlife.
February 2007	Britain's first case of H5N1 Avian Influenza confirmed in Suffolk.

<i>Note: Recent genetic research in the USA (October 2005) shows 1918-19 'Spanish' flu pandemic virus to have mutated from avian influenza virus.</i>	
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Rabies (Lyssa Virus)	
	No reported cases within the UK since 2003 (see Bat reference above)

West Nile Virus	
1999	The virus is now established in North America following an initial outbreak in New York State.
Southern Europe	The virus is known to be active in areas of both Southern and Northern Spain, Southern France and the Balkans.

3. Likelihood

Hazard	Outcome description	Likelihood
Zoonotic notifiable animal disease	Culling of up to 30 million poultry (HPAI), plus possibility of wildlife being affected	Avian Flu - 3 West Nile Virus - 1 Rabies - 1

4. Impact

Summary

Hazard	Outcome description	Impact			
		Health	Social	Env	Econ
Avian Flu	Culling of up to 30 million poultry (avian flu), or euthanasia of up to 20 companion animals.	1	1	2	4
	Effect on wildlife.	1	1	1	1
West Nile Virus	For West Nile virus possible slaughter of 20 – 1000 horses.	2	1	1	2
Rabies	Localised eradication of wildlife mammals, livestock movement restrictions, quarantine domestic pests etc.	3	1	1	2

Details

Impacts
Primary
Avian Flu
Slaughter of commercially and privately owned flocks.
Public resistance to the purchase and consumption of fowl.
Livestock movement restrictions.
West Nile Virus
Potential Risk To Human Health
Livestock movement restrictions.
Rabies
Potential Risk To Human Health
Livestock movement restrictions.
Secondary
Avian Flu
Suspension of 'Free Range' status
Suspension of leisure related activities (Bird Shows/Racing etc)
West Nile Virus
Localised slaughter of livestock
Rabies
Localised slaughter of livestock
Possible localised travel and recreational restrictions in respect to above

5. **Vulnerability and resilience**

Vulnerability

Avian Flu

Humans working with or amongst infected livestock at risk of infection, prognosis generally favourable given person infected seeks early medical assistance.

Commercial and domestic flocks vulnerable to infection from wild fowl and birds. Resilience increased by keeping flocks and other valued birds caged and/or in covered buildings.

West Nile Virus

Sustained, average UK ambient summer temperatures not high enough to sustain insect carriers.

UK nationals visiting infected areas aboard at risk of contracting disease.

Rabies

The illicit smuggling of pets or other small mammals into the UK represents the greatest risk whereby rabies could enter the country. Wild and domesticated mammals have no immunity to the virus, as do humans.

Humans infected with the virus can be treated successfully providing they seek immediate medical attention.

Resilience

Specific Governmental Plans and Local Authority Rabies Plans in place.

6. Overall assessment

Category	Sub-category		
Animal health	Zoonotic notifiable animal disease		
Outcome description	Impact	Likelihood	Risk
Avian Flu	Minor (2)	Unlikely (3)	Medium
West Nile Virus	Minor (2)	Negligible (1)	Low
Rabies	Minor (2)	Negligible (1)	Low
Overall Assessment			
			MEDIUM

Specific Controls in place

Avian Flu

Monitoring spread/transit of infected wildlife from Europe - DEFRA and others.
Generic Exotic Animal Disease Contingency Plan (Draft), Version 1, 2005. (DEFRA)
Woking Borough Council Avian Flu Plan

West Nile Virus

Specified Type Equine Exotic Diseases (STEED) Contingency Plan (Draft), 2005. (DEFRA)

Rabies

Rabies Contingency Plan – DEFRA.

Milton Keynes Council Rabies Plan
Buckinghamshire County Council Rabies Plan
Oxfordshire County Council Rabies Plan
Berkshire Rabies Plan

Ambulance Service

South Central Ambulance Service NHS Trusts Major Incident Plan.

Health Plans & Guides

Buckinghamshire and Milton Keynes Health Protection Team & Local/Unitary Authorities in
Berkshire Unitary Authorities Rabies Plan.
Royal Berkshire Hospital NHS Trust Major Incident Plan
Heatherwood and Wexham Park Hospitals NHS Trust Major Incident Plan
Berkshire Primary Care Organisations Major Incident Plan and Operational Response Manuals
Berkshire Healthcare Trust Major Incident Plan
Buckinghamshire Hospitals NHS Trust Major Incident Plan
Milton Keynes Hospital NHS Trust Major Incident Plan
Buckinghamshire Mental Health Trust Major Incident Plan
Buckinghamshire Primary Care Organisations Major Incident Plan
Oxford Radcliffe Hospitals NHS Trust Major Incident Plan
Oxford Mental Health Trust Major Incident Plan
Nuffield Orthopaedic Clinic Major Incident Plan
Oxfordshire Primary Care Organisations Major Incident Plan
South Central Strategic Health Authority Major Incident Plan
Berkshire Integrated Emergency Planning Structure

Fire Service

Bucks Fire and Rescue Service OC 42/1/7, Infectious Diseases

Environment Agency

Environment Agency 24/7 Incident Response.
Environment Agency Incident Management Plans.

Others

Thames Valley Police Emergency Procedures Manual
ACPO Emergency Procedures Manual

Additional risk treatment required: None

