## **ZOONOSES ASSOCIATED WITH SWINE:** Protecting Your Health

The University of Virginia's Occupational Health Program is a three-part program: Health Surveillance, Education, and Risk Assessment. This brochure has been prepared to educate you about the risks of zoonoses (diseases that transmit from animals to humans) that are associated with the care and use of swine in laboratories and University facilities.



#### How are most swine zoonoses transmitted, and how can I avoid them?

Many of the diseases listed are transmitted to humans by the fecal oral-route, although some can also be acquired by wound contamination with excreta, blood or tissue fluids. The swine user is cautioned to use good personal hygiene practices and Universal Precautions when handling animal blood and tissues. These

precautions include: frequent handwashing; use of gloves, masks, and eye protection; and the wearing of protective clothing and other protective devices should be considered, as defined by the Office of Environmental Health and Safety.

Disease	Human Symptoms	Transmission and
		Protection
Influenza	Incubation period is 1-3 days	This organism is generally
	following exposure. Symptoms	transmitted by the aerosol
	include sudden fever, headache,	route. Respiratory protection
	muscle aches and fatigue,	when working with infected
	conjunctivitis, nonproductive	animals is recommended.
	coughing, sneezing, and runny nose.	Good personal hygiene
	Uncomplicated influenza is of short	including washing hands
	duration and recuperation takes 2-7	following work with the
	days.	animals is also required.
Hepatitis E	The incubation period following	This organism is transmitted
	exposure is 26-42 days. Symptoms	by the fecal-oral route. Good
	include gastrointestinal upset, hepatitis	personal hygiene including
	and jaundice that resolve after several	washing hands following
	weeks. A $20 - 25\%$ mortality rate has	work with the animals is
	been noted in pregnant women that	required.
	become infected in the second or third	
	trimester of pregnancy. The period of	
	communicability is unknown.	
Colibacillosis	Incubation period is 24-72 hours after	This organism is transmitted
(Traveler's	exposure. Symptoms include intense	by the fecal oral-route. Good
diarrhea)	diarrhea and dehydration that generally	personal hygiene including

# What are some common zoonoses to which workers could be exposed, and what are their symptoms in humans?

Disease	Human Symptoms	Transmission and Protection
	runs a course of 5-7 days and resolves.	washing hands following work with the animals is required.
Salmonellosis	Incubation period is 12-36 hours after exposure. Symptoms include sudden onset of fever, headaches, abdominal pain, nausea, vomiting, and diarrhea.	This organism is transmitted by the fecal-oral route. Good personal hygiene including washing hands following work with the animals is required.
Campylobacteriosis	Incubation period is 2-5 days after exposure. Symptoms include diarrhea (often bloody), fever, abdominal pain, cramping, nausea and vomiting. Generally the ensuing diarrhea is self- limiting and resolves in 10-14 days.	This organism is transmitted by the fecal-oral route. Good personal hygiene including washing hands following work with the animals is required.
Leptospirosis (Weil's disease)	Incubation period is 10 days after exposure. Most human cases are mild or clinically unapparent. Common symptoms of clinical disease are high fever, headache, chills, and muscle aches, liver failure or meningitis.	The agent may be present in urine, blood and tissues of infected animals. Ingestion, parenteral inoculation and direct or indirect contact of skin or mucous membranes with cultures or infected tissues or body fluids are the primary cause of infection. Gloves are recommended for handling and necropsy of infected animals. Practice good personal hygiene as well.

### What should I do if I experience symptoms?

Personnel that experience symptoms should inform their supervisor and call UVA-Workmed or Student Health Services to schedule an appointment for evaluation and treatment.

### Important Contacts for the Occupational Health Program

UVA-WorkMed: 243-0075 Elson Student Health Center: 924-5362 Environmental Health and Safety: 982-4911 Institutional Animal Care and Use Committee (ACUC): 924-0405 Center for Comparative Medicine: 243-9390 University Human Resources: 924-4598 The Occupational Health Program is jointly administered by UVA-WorkMed and Student Health, in consultation with representatives of University Human Resources, Comparative Medicine, the ACUC, and Environmental Health and Safety. For more information about the Program, visit <u>our web site</u>.