Swine Diseases By Transmission Route: ALL ROUTES

Diseases can be spread from animal-to-animal by five main routes of transmission.

The following tables summarize several diseases of swine and their route(s) of transmission

Many of these diseases can also affect people (zoonotic) or be introduced to the U.S. from other countries (termed "foreign animal disease" or FAD).

Prevention measures directed at stopping disease transmission can protect a wide range of diseases.

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▲ Zoonotic Disease (Z): Disease that can be transmitted between animals and humans.

• Foreign Animal Disease (FAD): Never found or previously eradicated within the U.S. animal population. The disease is reportable to State and Federal animal health authorities.



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	Aerosol	Direct Contact	Fomites	Oral / Ingestior	Vector	Zoonotic	FAD
Actinobacillus pleuropneumoniae (APP)							
African swine fever							•
Atrophic rhinitis (B. bronchiseptica, P. multocida)							
Brucellosis (Brucella suis)							
Campylobacteriosis (Campylobacter coli)							
Classical swine fever							•
Clostridial disease							
Colibacillosis (Escherichia coli)							
Cryptosporidiosis (Cryptosporidium spp.)							
Cysticercosis/Taeniasis (Taenia solium)							
Enzootic pneumonia (Mycoplasma hyopneumoniae)							
Erysipelas (Erysipelothrix rhusiopathiae)							
Exudative dermatitis (greasy pig) (Staphylococcus hyicus)							
Foot and mouth disease (FMD)							٠
Japanese encephalitis							٠
Leptospirosis (Leptospira interrogans)							
Melioidosis (Burkholderia pseudomallei)							٠
MRSA-Methicillin-resistant Staphylococcus aureus)							
Nipah virus							٠
Porcine circovirus							
Porcine deltacoronavirus							
Porcine epidemic diarrhea virus (PEDV)							
Porcine parvovirus (PPV/SMEDI)							
Porcine reproductive/respiratory syndrome (PRRS)							
Porcine rotavirus							
Pseudorabies/Aujeszky's disease							
Salmonellosis							
Senecavirus A							
Streptococcosis (Streptococcus suis)							
Swine dysentery (Brachyspira hyodysenteriae)							
Swine influenza							
Swine vesicular disease							
Transmissible gastroenteritis (TGE)							

Prevention measures used to reduce a particular route of transmission can protect against many diseases.

Aerosol transmission occurs when droplets containing disease agents pass through the air and are inhaled. Most infective particles only travel in the surrounding air for short distances and require close contact. The following diseases of swine are spread by aerosol transmission.



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- Foreign Animal Disease (FAD): Never found or previously eradicated within the U.S. animal population. The disease is reportable to State and Federal animal health authorities.



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	Zoon	FAD
Actinobacillus pleuropneumoniae (APP)		
African swine fever		•
Atrophic rhinitis (B. bronchiseptica, P. multocida)		
Brucellosis (<i>Brucella suis</i>)		
Classical swine fever		•
Colibacillosis (Escherichia coli)		
Enzootic pneumonia (Mycoplasma hyopneumoniae)		
Foot and mouth disease (FMD)		•
Leptospirosis (Leptospira interrogans)		
Melioidosis (Burkholderia pseudomallei)		•
MRSA-Methicillin-resistant Staphylococcus aureus)		
Nipah virus		•
Porcine deltacoronavirus		
Porcine epidemic diarrhea virus (PEDV)		
Porcine reproductive/respiratory syndrome (PRRS)		
Pseudorabies/Aujeszky's disease		
Streptococcosis (Streptococcus suis)		
Swine influenza		
Swine vesicular disease		
Transmissible gastroenteritis (TGE)		

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Using prevention measures to reduce aerosol transmission can protect against all of the listed diseases.

Swine Diseases By Transmission Route: **DIRECT CONTACT**

Direct contact transmission occurs when animals touch or have physical contact with the body fluids of an infected animal. Some are transferred reproductively during breeding or from the mother to offspring. The following diseases of swine can be spread by direct contact.



- Zoonotic Disease: Disease that can be transmitted between animals and humans.
- Foreign Animal Disease (FAD): Never found or previously eradicated within the U.S. animal population. The disease is reportable to State and Federal animal health authorities.



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Actinobacillus pleuropneumoniae (APP)IAfrican swine fever (ASF)IBrucellosis (Brucella suis)ICampylobacteriosis (Campylobacter coli)IClassical swine fever (CSF)IColibacillosis (Escherichia coli)IEnzootic pneumonia (Mycoplasma hyopneumoniae)IErysipelas (Erysipelothrik rhusiopathiae)IFoot and mouth disease (FMD)IJapanese encephalitisILeptospirosis (Leptospira interrogans)IMelioidosis (Burkholderia pseudomallei)IMuiph virusIPorcine circovirusIPorcine epidemic diarrhea virus (PEDV)IPorcine reproductive/respiratory syndrome (PRRS)IPorcine rotavirusISamonellosisISamonellosisISenecavirus AISenecavirus AISume dysentery (Brachyspiratny syndrome (PRRS)ISumonellosisISumonellosisISumonellosis (Surphodoccus suis)ISumonellosis (Surphotoccus suis)ISumonellosis (Surphotoccus suis)ISumonellosisISumonellosisISumonellosisISumonellosisISumonellosisISumonellosisISumonellosisISumonellosisISumonellosisISumonellosisISumonellosisISumonellosisISumonellosisISumone		Reproduc	Zoonotic	FAD
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Swine influenza Swine vesicular disease	Streptococcosis (Streptococcus suis)			
Swine vesicular disease	Swine dysentery (Brachyspira hyodysenteriae)			
	Swine influenza			
Transmissible gastroenteritis (TGE)	Swine vesicular disease			
	Transmissible gastroenteritis (TGE)			

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Swine Diseases By Transmission Route: FOMITES

Fomite transmission occurs when an animal contacts objects or surfaces contaminated by the body fluids or feces of an infected animal. Many disease-causing agents are able to persist on fomites in the environment, resulting in exposure risks.

The following diseases of swine can be spread by fomites.



- Zoonotic Disease (Z): Disease that can be transmitted between animals and humans.
- Foreign Animal Disease (FAD): Never found or previously eradicated within the U.S. animal population. The disease is reportable to State and Federal animal health authorities.



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	Feed/Water Equi	Footwear	Handling Equipm	Housing	Soil	Treatment Equip	Water	Zoonotic	FAD
Actinobacillus pleuropneumoniae (APP)									
African swine fever									•
Brucellosis (Brucella suis)									
Campylobacteriosis (Campylobacter coli)									
Classical swine fever									•
Clostridial disease									
Colibacillosis (Escherichia coli)									
Cryptosporidiosis (Cryptosporidium spp.)									
Cysticercosis/Taeniasis (Taenia solium)									
Erysipelas (Erysipelothrix rhusiopathiae)									
Exudative dermatitis (greasy pig) (Staphylococcus hyicus)									
Foot and mouth disease									٠
Leptospirosis (Leptospira interrogans)									
Melioidosis (Burkholderia pseudomallei)									٠
MRSA-Methicillin-resistant Staphylococcus aureus)									
Nipah virus									٠
Porcine circovirus									
Porcine deltacoronavirus									
Porcine epidemic diarrhea virus (PEDV)									
Porcine parvovirus (PPV/SMEDI)									
Porcine reproductive/respiratory syndrome (PRRS)									
Porcine rotavirus									
Pseudorabies/Aujeszky's disease									
Salmonellosis									
Senecavirus A									
Streptococcosis (Streptococcus suis)									
Swine dysentery (Brachyspira hyodysenteriae)									
Swine influenza									
Swine vesicular disease									
Transmissible gastroenteritis (TGE)									

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Swine Diseases By Transmission Route: ORAL/INGESTION

Oral transmission occurs when an animal ingests disease-causing agents. This can occur from ingestion of contaminated feed or water, or by licking or chewing on contaminated environmental objects. The following diseases of swine spread by ingestion.



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	Zoono	FAD
African swine fever		•
Brucellosis (Brucella suis)		
Campylobacteriosis (Campylobacter coli)		
Classical swine fever		•
Clostridial disease		
Colibacillosis (Escherichia coli)		
Cryptosporidiosis (Cryptosporidium spp.)		
Cysticercosis/Taeniasis (Taenia solium)		
Erysipelas (Erysipelothrix rhusiopathiae)		
Foot and mouth disease		•
Leptospirosis (Leptospira interrogans)		
Melioidosis (Burkholderia pseudomallei)		•
Nipah virus		•
Porcine circovirus		
Porcine deltacoronavirus		
Porcine epidemic diarrhea virus (PEDV)		
Porcine parvovirus (PPV/SMEDI)		
Porcine rotavirus		
Pseudorabies/Aujeszky's disease		
Salmonellosis		
Senecavirus A		
Swine dysentery (Brachyspira hyodysenteriae)		
Transmissible gastroenteritis (TGE)		

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Vector transmission occurs when a living organism moves a disease-causing agent from an infected animal to another. Insects are common disease-carrying vectors.

The following diseases of swine can be spread by vectors.



		Zoonotic	0
Disease	Vector type	Zoo	FAD
Campylobacteriosis (Campylobacter coli)	flies, cockroaches		
Colibacillosis (Escherichia coli)	flies		
Japanese encephalitis	mosquitoes		٠
Porcine circovirus	flies		
Porcine reproductive/respiratory syndrome (PRRS)	flies, mosquitoes		
Salmonellosis	flies		
Senecavirus A	flies		
Streptococcosis (Streptococcus suis)	flies		
Swine dysentery (Brachyspira hyodysenteriae)	flies		
Transmissible gastroenteritis (TGE)	flies		

- Zoonotic Disease (Z): Disease that can be transmitted between animals and humans.
- Foreign Animal Disease (FAD): Never found or previously eradicated within the U.S. animal population. The disease is reportable to State and Federal animal health authorities.



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Using prevention measures to reduce vector transmission can protect against all of the listed diseases.