

Table 1. Effectiveness of Various Disinfectants on Pathogens

Disease Name	Disease Agent	Type of Agent	Chlorhexadine	Chlorine-Releasing Agent	Iodophor	Phenol and Bis phenols	Single* Ammonium Compound	4-way** (Quaternary Ammonium Compound)
Salmonellosis	<i>Salmonella</i> species	gram-negative bacteria	+++	+++	+++	+++	+	+++
Pullorum Disease	<i>Salmonella pullorum</i>	gram-negative bacteria	+++	+++	+++	+++	+	+++
Fowl Typhoid	<i>Salmonella gallinarum</i>	gram-negative bacteria	+++	+++	+++	+++	+	+++
Paratyphoid Infection	<i>Salmonella</i> species	gram-negative bacteria	+++	+++	+++	+++	+	+++
Arizonosis	<i>Salmonella arizonae</i>	gram-negative bacteria	+++	+++	+++	+++	+	+++
Colibacillosis	<i>Escherichia coli (E. coli)</i>	gram-negative bacteria	+++	+++	+++	+++	+	+++
Pasteurellosis	<i>Pasteurella multocida</i>	gram-negative bacteria	++	+++	+++	++	+	+++
Pseudotuberculosis	<i>Yersinia pseudotuberculosis</i>	gram-negative bacteria	++	+++	+++	++	+	+++
<i>Riemerella anatipestifer</i> Infection	<i>Riemerella (Pasteurella) anatipestifer</i>	gram-negative bacteria	++	+++	+++	++	+	+++
Tuberculosis	<i>Mycobacterium avium</i>	acid-fast bacteria	-	+	+	+++	-	+++
Infectious Coryza	<i>Haemophilus paragallinarum</i>	gram-negative bacteria	++	+++	+++	++	+	+++
Mycoplasmosis	<i>Mycoplasma gallisepticum</i> <i>Mycoplasma synoviae</i> <i>Mycoplasma meleagridis</i>	bacteria lacking cell walls	++	++	++	++	++	++
Campylobacteriosis	<i>Campylobacter jejuni</i>	gram-negative bacteria	+	+++	+++	+++	+	+++
Erysipelas	<i>Erysipelothrix rhusiopathiae</i>	gram-positive bacteria	++	+++	+++	-	++	+++

Table 1. (continued) Effectiveness of Various Disinfectants on Pathogens

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Ulcerative Enteritis; Necrotic Enteritis; or Gangrenous Dermatitis	<i>Colstridium colinum</i> ; <i>Clostridium perfringens</i> Types A or C; <i>Clostridium speticum</i> ; or <i>Clostridium perfringens</i> Type A	gram-positive, spore-forming bacteria	-	++	++	-	-	-
Botulism	<i>Clostridium botulinum</i>	gram-positive, spore-forming bacteria	-	++	++	-	-	-
Bordetellosis (Turkey Coryza)	<i>Bordetella avium</i>	gram-negative bacteria	+	++	++	++	-	+++
Staphylococcosis	<i>Staphylococcus aureus</i>	gram-positive bacteria	-	+++	+++	+++	+++	+++
Streptococcosis	<i>Streptococcus sp.</i>	gram-positive bacteria	-	+++	+++	+++	+++	+++
Chlamydiosis	<i>Chlamydia psittaci</i>	obligate++ intracellular bacteria	++	++	++	++	++	
Aspergillosis	<i>Aspergillus fumigatus</i> <i>Aspergillus flavus</i>	fungus	+	+++	+++	++	+/-	+++
Candidiasis (Thrush)	<i>Candidia albicans</i>	fungus	+	+++	+++	++	+/-	++
Marek's Disease	Marek's disease virus	herpesvirus (enveloped DNA virus)	+/-	+++	+++	-	-	++
Lymphoid Leukosis	Avian leukosis virus	retrovirus (enveloped RNA virus)	+/-	+++	+++	-	-	+++
Infectious Bronchitis	Infectious bronchitis virus	coronavirus (enveloped RNA virus)	++	+++	+++	-	-	+++

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Laryngotracheitis	Infection laryngotracheitis virus	herpesvirus (enveloped DNA virus)	+/-	+++	+++	-	-	+++
Newcastle Disease	Newcastle disease virus	paramyxovirus (enveloped RNA virus)	+/-	+++	+++	+	-	+++
Adenovirus Infection	Adenovirus	adenovirus (non-enveloped DNA virus)	-	+++	+++	-	-	+++
Pox	Avian pox virus	poxvirus (enveloped DNA virus)	+/-	+++	+++	+	-	+++
Duck Viral Hepatitis	Duck hepatitis virus	picornavirus (non-enveloped RNA virus)	-	+++	+++	-	-	+++
Duck Virus Enteritis	Duck virus enteritis virus	herpesvirus (enveloped DNA virus)	+/-	+++	+++	-	-	+++
Reovirus Infection	Reovirus	reovirus (non-enveloped RNA virus)	-	+++	+++	-	-	+++
Infectious Bursal Disease	Infectious bursal disease virus	bimavirus (non-enveloped RNA virus)	-	+++	+++	-	-	+++
Chicken Anemia	Chicken anemia agent virus	circovirus (non-enveloped DNA virus)	-	+++	+++	-	-	+++

- Not an effective Agent.

+/- May or may not be effective.

+ Weakly effective.

++ Effective.

+++ Very effective.

* Older generation such as Roccal®, Zephiran®, and Phemeral®.

** Newer generation; read label for specific organism effectiveness.