

Table 45-2. Major Bacteriophage Groups Considered Appropriate Virus Models in the Environment

Description	Host strain	Comments
Somatic coliphages	<i>E. coli</i> C (most commonly used)	Heterogeneous group of different morphology; frequent occurrence in human and animal feces ($10^2 - 10^8 \text{ g}^{-1}$) and wastewater ($10^3 - 10^4 \text{ ml}^{-1}$); may multiply in the environment; good persistence in the environment; readily inactivated by water treatment processes (with the exception of a few types)
FRNA bacteriophages	<i>S. typhimurium</i> phage type 3 NaI ^r (F= 42 lac::Tn5), <i>E. coli</i> HS[pFamp]R	Homogeneous group, physical properties similar to those of enteroviruses; infrequent in human and animal feces (up to 10^3 g^{-1}), frequent occurrence in wastewater ($10^3 - 10^4 \text{ ml}^{-1}$); can multiply only at temperatures above 30EC; relatively high resistance; serotypes may be related to the (human or animal) origin of fecal pollution
<i>B. fragilis</i> phages	<i>B. fragilis</i> HSP40	Occur only in human feces (up to 10^8 g^{-1}); do not multiply in the environment; host strain possibly not applicable around the world; relatively low numbers in wastewater ($<1-10^3 \text{ ml}^{-1}$); relatively homogeneous group; relatively high resistance
