

# CPV-2 Timeline

CPV-2 Emerged in US, Europe

1978 Virus Isolation, Electron Microscopy, Immunofluorescence, Hemagglutination



Heterologous (feline and mink) vaccines, low efficacy

1979 Hemagglutination Inhibition, Serum Virus Neutralization



Worldwide distribution, Panzootic

1980 Homologous (canine) modified live vaccines, good efficacy

1981 CPV-2a appears in US, Europe

1984 CPV-2b appears in US, Europe

CPV vaccines approved in US now contain CPV-2 or CPV-2b



1985 Laboratory ELISA developed

1994 Many canine parvovirus vaccines proven ineffective



1996 Commercial vaccines increased infectivity and efficacy

PCR developed to detect all CPV-2 variants, but not used clinically



1997 Development of ELISA for point of care antibody detection (TiterCHEK)



2000 CPV-2c first found in Italy



2001 Fecal antigen capture ELISA developed for point of care use (Witness, SNAP)



2003 CPV-2c widespread in Europe, along with CPV-2b

2005 CPV-2c found in US



2006 CPV-2c reported widely in the US and South America



Dot Blot ELISA developed for point of care antibody detection (Vaccicheck)

2007 CPV-2 and CPV-2b vaccines effective against CPV-2c (Multiple Studies)

PCR begins to be used more widely to detect CPV virus, but expensive

2011 CPV-2c becomes most prevalent variant in US

2013 CPV-2 and all variants are present in the US

