

# Retrovirus - Quick Facts

(Unless otherwise indicated, information is from <http://www.wpinstitute.org> )

- Retrovirus: XMRV (xenotropic murine-leukemia-virus-related virus)
- First discovered: in prostate cancer tumors
- First discovered in ME/CFS patients: October 2009  
Original test of blood - 67% positive  
<http://www.sciencemag.org/cgi/data/1179052/DC1/1>  
Refined test of blood plasma - 95% positive
- 3 separate labs tested for & were first to discover XMRV in ME/CFS patients: National Cancer Institute, Whittemore Peterson Institute, Cleveland Clinic <http://www.cancer.gov/newscenter/pressreleases/CFSxmr>
  
- Researchers used PCR assays and Flow cytometry  
<http://www.sciencemag.org/cgi/data/1179052/DC1/1>
- Blood samples came from several regions of US & a few from other countries
- Criteria used for patient selection: Canadian Criteria & Fukuda Criteria  
<http://www.sciencemag.org/cgi/data/1179052/DC1/1>
- XMRV was also found in some fibromyalgia & atypical MS patients
- Contagious through blood transmission.
- Not contagious via air
- Elevated Rnase-L pathway & low Natural Killer cells are usually present in ME/CFS patients with XMRV.
- Retroviruses can activate other latent viruses e.g. EBV  
<http://www.cancer.gov/newscenter/pressreleases/CFSxmr>
- ME/CFS is now a XAND (X associated neuro-immune disease)
- Replication by inserting itself into the host cell's DNA, thus further generations of the cell will contain this viral DNA. <http://www.chronicfatiguetreatments.com/wordpress/treatments/xmrv-dr-david-bell/>
- "Secret Weapon" of retroviruses identified - 02/2010. A "virulence factor" inhibits the host immune response and allows the virus to spread throughout the body. This factor is a sequence of amino acids that is located in the envelope protein of the virus. [Abstract](#) Article: <http://www.sciencedaily.com/releases/2010/02/100215130341.htm>