



Figure 1: Where Zinc interferes with RNA Virus activity and replication

Reference source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6628855/figure/fig1/>

The diverse stages of viral replication cycles that are inhibited by zinc. In vitro studies have demonstrated a number of mechanisms by which zinc interferes with the viral replication cycle. These include:

1. free virus inactivation,
2. inhibition of viral uncoating,
3. viral genome transcription, and
4. viral protein translation and polyprotein processing .

No studies to date, however, have demonstrated zinc-mediated inhibition of virus assembly and/or particle release.

An index of abbreviations in the Figure 1 are:

1. CV, coronavirus;
2. DdDp, DNA-dependent DNA polymerase;
3. EMCV, encephalomyocarditis virus;
4. FMDV, foot and mouth disease virus;
5. HCV, hepatitis C virus;
6. HIV, human immunodeficiency virus;
7. HPV, human papilloma virus;
8. HRV, human rhinovirus;

9. HSV, herpes simplex virus;
10. PV, polio virus;
11. RdRp, RNA-dependent RNA polymerase;
12. RT, reverse transcriptase;
13. SARS, severe acute respiratory syndrome coronavirus;
14. SFV, Semliki Forest virus;
15. SV, sindbis virus;
16. VZV, varicella-zoster virus;
17. Zn, zinc.