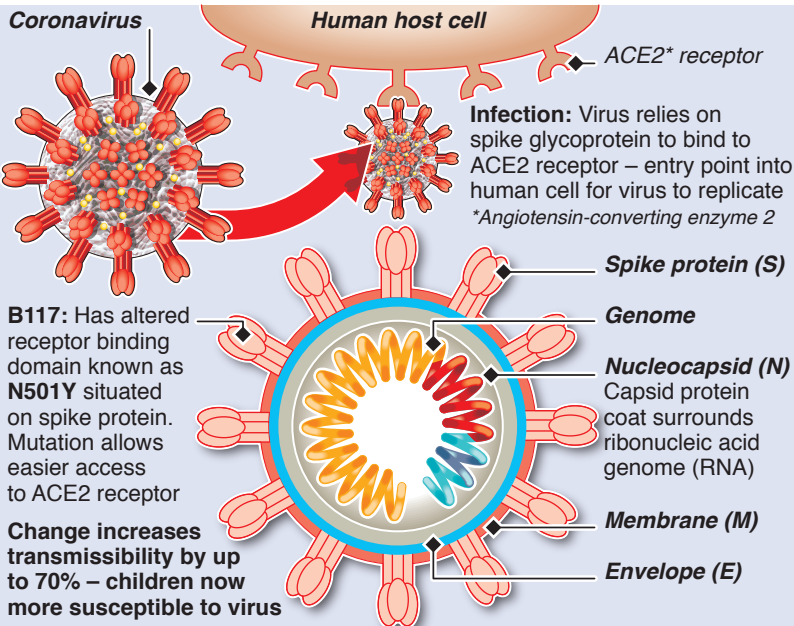


Anatomy of a shape-shifting virus

All viruses naturally mutate when they replicate, changing the genome – the genetic blueprint – that enables a virus to function. The British coronavirus variant B117 has now spread to more than 30 countries



Genome: Of 17 amino acid mutations, eight affect spike protein
N501Y: Amino acid asparagine replaced by amino acid tyrosine

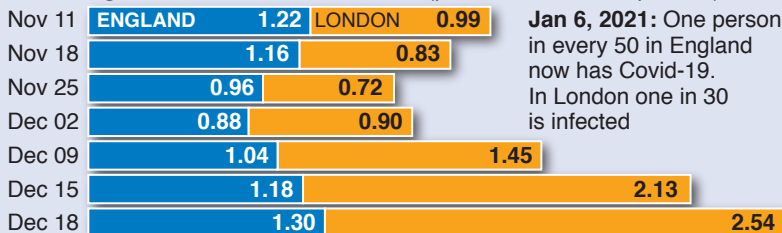


ORF 1a†

ORF 1b†

Spike E M N

Rocketing case rates from new variant (positive swab tests, percent)



†**ORF – Open reading frame:** Allows host cell's molecular machine – its ribosomes – to read RNA code and add amino acids one after another to make viral protein