

Important Vocab for the Editorial

1. matter of concern (phrase) – something which causes worry.
2. coronavirus (CoV) (noun) – a large family of viruses that cause illness ranging from the common cold to more severe diseases. common signs of infection include respiratory symptoms, fever, cough, shortness of breath and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death. (Courtesy: WHO)
3. variant (noun) – different or form or version or mutant of something (virus).
4. merit (verb) – deserve, warrant, justify.
5. public health (noun) – the branch of medicine handling public health; public health is also the science of protecting and improving the health of people and their communities through education, policy making and research for disease and injury prevention.
6. double mutant (noun) – a unique “double mutant” coronavirus variant – with a combination of mutations not seen anywhere else in the world – has been found in India. The ‘double mutant’ virus that as having a bearing on the spread of the pandemic in India, has a formal scientific classification: B.1.617.
7. categorise (verb) – class, group, list, label.
8. Variant of Concern (VOC) (noun) – A variant for which there is evidence of an increase in transmissibility, more severe disease (e.g., increased hospitalizations or deaths), significant reduction in neutralization by antibodies generated during previous infection or vaccination, reduced effectiveness of treatments or vaccines, or diagnostic detection failures.
9. classification (noun) – categorization, grouping, sorting.
10. prompt (verb) – cause, impel, urge.
11. scrutiny (noun) – careful observation, review, examination.
12. overseas (adverb) – in a foreign country.
13. so-called (adverb) – commonly named.
14. Variants of Interest (VOI) (noun) – A variant with specific genetic markers that have been associated with changes to receptor binding, reduced neutralization by antibodies generated against previous infection or vaccination, reduced efficacy of treatments, potential

diagnostic impact, or predicted increase in transmissibility or disease severity.

15. **flag** (verb) – indicate, identify, point out.
16. **potential** (adjective) – possible, probable, likely.
17. **evade** (verb) – avoid, dodge, elude, escape.
18. **play a part/role** (phrase) – contribute to, be instrumental in, be a factor in.
19. **Indian SARS-CoV2 Genomic Consortia (INSACOG)** (noun) – INSACOG refers to the Indian SARS-CoV-2 Genome Sequencing Consortia. The INSACOG consortium of scientists, spanning 10 labs across the country, and involved in sequencing genomes of coronavirus samples in different States, had been giving regular updates on the threat from new strains to the government.
20. **consortium** (noun) – association, syndicate, corporation, federation. Consortia is a plural form of consortium.
21. **sequence** (verb) – determine the complete order of compounds/building blocks (nucleotides) of nucleic acids, such as RNA or DNA.
22. **genome** (noun) – the genetic material (a complete set of DNA, including all of its genes) of an organism. The sum total of the genetic material of a cell or an organism.
23. **genome sequence** (noun) – a process that determines the order, or sequence, of the DNA (nucleotides i.e., A, C, G and U) in each of the genes present in the virus's genome.
24. **concerning** (adjective) – worrying, alarming, bothersome.
25. **mutation** (noun) – a significant and basic “alteration/variation” in the DNA sequence.
26. **fraction** (noun) – proportion, portion, part, amount, percentage, ratio of something.
27. **consistently** (adverb) – always, each time, invariably.
28. **afflicted** (adjective) – troubled, bothered, burdened, distressed, strained.
29. **lineage** (noun) – sequence.
30. **U.S. Centers for Disease Control and Prevention (CDC)** (noun) – The United States Centers for Disease Control and Prevention is the national public health agency of the United States. It is a United States federal agency, under the Department of Health and Human Services, and is headquartered in Atlanta, Georgia. CDC is the U.S's leading science-based, data-driven, service organization that protects the public's health.

31. Public Health England (noun) – The Public Health England (PHE) was set up on 1 April 2013 as an operationally autonomous executive agency of the Department of Health. Its mission is to protect and improve the nation’s health and to address inequalities through working with national and local government, the National Health Service (NHS), industry and the voluntary and community sector.
32. criterion (noun) – basis, standard; specification, guideline. (criteria is the plural form of criterion).
33. interest (noun) – advantage, benefit.
34. prevalence (noun) – it refers to the number of cases of a disease that are present in a particular population at a given time whereas “incidence” refers to the number of new cases that develop in a given period of time.
35. go on to (phrasal verb) – proceed (to do something).
36. dominant (adjective) – main, most important/prominent, most powerful.
37. strain (noun) – variety, kind, type; variant, mutant.
38. geography (noun) – (particularly in business) region.
39. antibody (noun) – immunizer; it is also called ‘immunoglobulin’; a protective protein produced mainly by plasma (blood) cells in the immune system in response to the presence of antigens (disease-causing organisms (bacteria & viruses) and other harmful/toxic foreign substances like insect venom).
40. breakthrough infections (noun) – people getting infections after they are fully vaccinated is when the infections are caused by circulating virus variants, with potential immune escape mechanism, which might reduce the efficacy of vaccines. These are called “vaccine breakthrough infections.”
41. inoculate (verb) – to inject/introduce a vaccine into the body of someone to produce immunity to a particular disease; immunize, vaccinate.
42. radical (adjective) – thorough, complete, comprehensive, exhaustive, wide-ranging, extensive.
43. mask up (phrasal verb) – to wear a mask (face covering).
44. go a long way (phrase) – achieve great success; to be helpful for a significant amount of time.
45. vaccine (noun) – a biological preparation that improves immunity to a particular disease.
46. defence (noun) – protection, shielding, safeguarding; security.

47. magic pill (noun) – a drug or treatment that can cure a disease quickly and completely; nostrum, elixir, wonder drug, magic bullet.
48. magic bullet (noun) – (quick) solution, answer, remedy, cure.
49. on one's toes (phrase) – alert, wide awake, responsive.

A matter of concern: On Indian coronavirus variant

MAY 12, 2021 00:02 IST

New variants do not always merit changes in public health response, but keep people alert

The Indian variant, B.1.617 and its family of related coronaviruses have been categorised as a Variant of Concern (VOC) by WHO, a classification which will now prompt greater international scrutiny of those who test positive overseas. While there are several so-called 'variants of interest', only three, other than the B.1.617, have been categorised as VOC — the U.K. variant (B.1.1.7), the South Africa variant (B.1.351) and the Brazilian variant (P2). Usually, in countries that detect emergent variants, it is the health authorities there who flag them as potential VOC. To qualify as one, the identified variant must be linked to increased transmission or be associated with more severe disease or found to be evading detection by diagnostic tests. Concerns that the B.1.617 may be playing a role in disease spread in India were expressed by scientists by mid-March. The INSACOG, or the Indian SARS-CoV2 Genomic Consortia, had flagged a variant with two concerning mutations, E484Q and L452R, that separately had been found in other variants elsewhere. INSACOG said they now seemed to appear together on a variant that was linked to a large fraction of cases in Maharashtra and began to be called 'double mutant' or even 'triple mutant' (as it also had another important mutation, P614R).

In March nearly 20% of the cases out of Maharashtra, which has consistently been among the most afflicted States, were being linked to the variant. However, it was in early April that this variant became formally classified as a lineage, B.1.617. It was only after the U.K.'s labelling it as a VOC that it was called so by health authorities in India. In fact, unlike the United States's CDC or Public Health England, India still does not have a classification criterion for labelling viruses as variants of interest, or

concern. Classifying variants is not just a matter of mere academic interest. Based on the prevalence, some variants may go on to become the dominant strain in a region or multiple geographies. It then becomes the responsibility of vaccine companies to check whether their vaccines continue to be effective. Such studies have already begun in India, but while laboratory studies show that vaccines continue to be effective, some of the emerging variants do seem to be better at evading antibodies. Along with monitoring reinfections and cases of breakthrough infections (testing positive after being double inoculated), flagging variants must be seen as a crucial health response. Detecting newer variants does not always merit radical changes in public health response — such as masking up — but they go a long way in reminding people to continue being alert, viewing vaccines as an important defence but not a magic pill, and keeping health authorities on their toes.

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