

Comparing COVID-19 Variants

Name: _____

Date: _____

Student assessment

The Word Bank below contains some of the scientific vocabulary you encountered in the Comparing COVID-19 Variants lesson. Use these words, when appropriate, to give the best scientific answers you can to questions 1-3. You will only need some of these terms.

Word Bank			
Asymptomatic	Genetic information	Mutation	Variant
Basic reproduction number (R_0)	Genome	Neutral mutation	Variant of concern
Beneficial mutation	Harmful mutation	Replication	Variant of interest
Epidemic	Infection	Sequence	Virulence
Fitness	Infectious period	Transmission/transmissibility	Virus
	Latent period		

Scenario

Public health officials are tracking COVID-19 infections in a community. They take virus samples at random from infected individuals and compare the genomic sequence of the samples to the original COVID-19 virus. A new lab tech has just completed comparing the latest batch of sequences and says to a more experienced lab tech, "Oh no, we're in trouble! The virus has mutated!" The experienced lab tech responds in a calm voice, "Relax, it's probably no big deal."

Questions

The questions on the next page are based on the scenario above. Give detailed answers to each question using the correct scientific terms from the word bank, where appropriate.

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1. Why are public health officials sequencing COVID-19 virus samples and comparing them to the original?
2. Explain why the experienced lab tech thinks the mutation is “probably no big deal.”
3. Do you need any other information to decide if this is a variant of concern? If so, what information?