

Cornell Guided Notes

Biotechnology for Health (Biomedical Innovations) | 2027-04-07

Name

Period

Date

Lesson

Lesson focus

Intervention model

Key words and questions

Prepared details and student notes

Essential question
What is today's target?

Model how a public health control measure changes the course of an outbreak. Big idea:
Modeling an intervention before deploying it shows where it will and will not work.

My notes, examples, and questions

Key words
What vocabulary unlocks the lesson?

- incidence
- prevalence
- morbidity
- mortality
- contact tracing

My notes, examples, and questions

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Cornell Notes - Continued

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Must-know ideas
What should I understand by the end?

- Each intervention targets a specific part of the transmission chain.
- Predicting impact on incidence requires knowing the baseline rate and the reach of the measure.
- Every intervention has unintended effects or populations it misses.

My notes, examples, and questions

Process notes
What happens during class?

- 0-5 min: Warm-up: which intervention do you think would cut incidence fastest?
- 5-20 min: Choose one intervention; identify the population it targets
- 20-40 min: Predict how incidence changes and write the reasoning
- 40-55 min: Sketch before-and-after epidemic curve with and without the intervention
- 55-70 min: Note one limitation or unintended effect with an explanation
- 70-80 min: Exit ticket: name your intervention, target population, and predicted incidence change

My notes, examples, and questions

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Steps and evidence What do I do and turn in?

- Choose one intervention such as isolation, vaccination, or contact tracing.
- Predict how it changes incidence over the next period.
- Identify which population it targets and why.
- Note one limitation or unintended effect.
- Sketch a before-and-after curve showing the expected impact.

Evidence: Notebook check - Intervention model with chosen measure, target population, incidence-change prediction, before-and-after epidemic curve sketch, and one stated limitation.

My notes, examples, and questions

Checks for understanding How do I know I got it?

- You modeled an intervention's effect on incidence.
- You named the target population and one limitation.

My notes, examples, and questions

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Lab or safety notes
What must I handle carefully?

Supplies:

- Computer with spreadsheet software
- Provided outbreak dataset
- Line-list template
- Calculator
- Design notebook
- Printed case summary sheets

My notes, examples, and questions

Summary

Today's lesson focused on Intervention model. The main target was: Model how a public health control measure changes the course of an outbreak. The evidence of learning is Notebook check: Intervention model with chosen measure, target population, incidence-change prediction, before-and-after epidemic curve sketch, and one stated limitation.. In my own words, the most important idea from today is:

My summary

My final question or connection