

# EPIDEMIOLOGY WITH PROFESSOR ANDREW NUNN

## TALKING POINTS

### KNOWLEDGE

1. What is multidrug-resistant tuberculosis?
2. How many months long was the regimen studied in the first stage of the STREAM trial?

### COMPREHENSION

3. Why do we need new treatments for TB?

### ANALYSIS

4. What were the issues with the WHO-recommended regimen for MDR-TB treatment?
5. What has enabled the treatment regimen timeframe to be shortened?

### SYNTHESIS

6. Can you see a possible solution that would prevent diseases from developing drug resistance?

### EVALUATION

7. How effective is the regimen tested in the STREAM trial compared to the WHO-recommended regimen?
8. Which treatment regimen would you recommend if you were a health organisation dealing with MDR-TB? Why?

### CREATIVITY

9. How would you design a further phase of the STREAM trial if a new tuberculosis drug was discovered today?

## MORE RESOURCES

Find out about the Year 12 summer programme offered by the Medical Research Council Clinical Trials Unit: [in2scienceuk.org/students/](http://in2scienceuk.org/students/)

Visit [www.ctu.mrc.ac.uk/our-research/](http://www.ctu.mrc.ac.uk/our-research/) and [www.cisr.org/education-center/](http://www.cisr.org/education-center/) to learn more about clinical trials.

## ACTIVITIES YOU CAN DO AT HOME OR IN THE CLASSROOM

Choose a disease that affects people in the world today (for example, polio) and complete the table below with the information you find.

DISEASE NAME	
YEAR DISCOVERED	
SYMPTOMS	
GEOGRAPHICAL SCALE OF OUTBREAK (how far across the world this disease has spread)	
LOCATIONS OF MAJOR OUTBREAKS	
TREATMENT AVAILABLE	
YEAR OF VACCINE DISCOVERY (if a vaccine has been discovered)	

Complete the table below to compare how measures to control your chosen disease have changed from the time of its discovery to the present day.

TIME	5 YEARS AFTER DISCOVERY	PRESENT DAY
TREATMENT USED (is any of this treatment specific to this disease?)		
GEOGRAPHICAL SCALE OF OUTBREAK		
VACCINE AVAILABLE		
GLOBAL CASES PER YEAR		
GLOBAL DEATHS PER YEAR		