

VIRAL CONTAGION



Lesson 3 Resource Pack

Infection rate of 2 with each infected person remaining infectious for 1 week

Infection rate of 2

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
New People infected																				
Total people infected																				

Day	21	22	23	24	25	26	27	28	29	30
People infected										
Total people infected										

Infection rate of 5 with each infected person remaining infectious for 1 week

Now complete the table for an infection rate of 5

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
People infected																				
Total people infected																				

Day	21	22	23	24	25	26	27	28	29	30
People infected										
Total people infected										

Infection rate of 12 with each infected person remaining infectious for 1 week

Now complete the table for an infection rate of 12

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
People infected																				
Total people infected																				

Day	21	22	23	24	25	26	27	28	29	30
People infected										
Total people infected										

Once you have worked out your sequences you can now complete the following two way table. Enter the information into the correct position on the table.

	Number of days		
	5	10	20
Infection rate 2			
Infection rate 5			
Infection rate 12			

Now that you have completed your table, some of the key questions could be:

Key Question:

What impact has the change in the length of the infectious period had on the number of people infected?

1. Is there any way of slowing the disease down? Do we need to shut all airports, ports and transport hubs?
2. Will quarantining areas help? Or is it already too late?
3. Does the virus respond to treatment?
4. If the disease spreads at its current rate how many people will be infected in the next five days?
5. What do you recommend we do?

You will need to justify any answers with the maths calculations and observations made so far.

Good luck. You'll need it.