

## A Less Lethal Virus

This is a more complex world. You can imagine the creatures to be anything that you want.

Here are the rules for the five things in the world:

- Healthy(green) and infected(blue) creatures move around randomly on the grey areas that you paint.
- A healthy creature next to an infected creature has a 7% chance of becoming infected itself and a 3% chance of becoming infected if it is next to a dead creature.
- An infected creature can die (2% chance), and then decomposes, slowly.
- Infected creatures have a 80% chance of recovery, after which they are immune.

## Possible explorations

- ◇ Press play and watch.
  - Can you describe what happens?
  - Can you explain this in terms of the rules?
- ◇ Stop the simulation.
  - Can you create a situation where all die? Try these steps:
- ◇ Clear the world from the worksheet
  - Click on the rubber, then drag over the worksheet to rub out
- ◇ Paint two separate but equal areas in grey
  - Click on the grey item from the gallery
  - Click the pencil or the filled rectangle from the toolbar
  - Drag over the worksheet area to fill
- ◇ Put different numbers of healthy creatures in both.
  - Click on the green item in the gallery
  - Click the pencil from the toolbar
  - Click on the worksheet to place each creature or drag to place lots.
- ◇ Add a few infected creatures to both areas
  - Click on the blue item in the gallery(infected creature)
  - Click on the pencil tool
  - Click on a grey area in the worksheet to place them
  - Can you account for your success or failure? Look back at the rules.