**BDA450 – Assignment 3 – Part 1 – Results**

Chart, line chart

Description automatically generated

We can see that at roughly 2 minutes (t = 120) the number of infected agents on the sidewalk surpasses the number of non infected agents. At roughly t = 200, almost the entire roster of active agents is infected. Non infected agents are becoming infected almost immediately upon spawning at this point.

Chart, line chart

Description automatically generated

The overall statistics show a broader picture that tells a similar story. Eventually 94.5% of the population will be infected and there’s a high risk the non infected will join them shortly.

A screenshot of a computer

Description automatically generated with medium confidence

**BDA450 – Assignment 3 – Part 2 – Results**

My modifications to agent behaviour in part 1 involved giving them some sight. This allowed them to see when someone was approaching them and they would attempt to move out of the way and leave 1 space in between. Once the sidewalk became crowded, agents began bumping into other agents to avoid the ones they were seeing and so would contract the virus anyways. It takes almost 30 seconds longer to reach the breaking point where active infected agents outnumber active healthy agents.

Chart, line chart

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Chart, line chart

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Text

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