#GoNoroViral Outbreak

2017 FDA Southeast Retail Food Safety Seminar
Two viruses, one conference

- Green strain
- Purple strain
- Two Patient Zeros each infected five people at the Monday night reception.
- Around 12 to 48 hours later...
Two viruses, one conference

- 400 possible infections (200 for each strain)
  - 154 Green infections reported (77% participation)
  - 157 Purple infections reported (79% participation)
- 131 people were coinfected with both strains
- Coinfections with norovirus are thought to occur, and may result in the creation of new viruses from genetic recombination events inside the host.
Epidemic curves

Epidemic Curve, Purple Norovirus

Number of cases

Time of presentation

Mon 6pm - 8pm
Tues 7am - 9am
Tues 9am - 11am
Tues 11am - 1pm
Tues 1pm - 3pm
Tues 3pm - 5pm
Wed 7am - 9am
Wed 9am - 11am
Wed 11am - 1pm
Epidemic curves

Epidemic Curve, Green Norovirus

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Epidemic curves

- Purple took off faster, but Green caught up
- Minus the Tuesday lunch break, both curves look like a point source outbreak:
  - One major peak
  - Suggestive of an agent that was introduced once and quickly moved through a population
  - Most norovirus outbreaks look like this
Node link trees

- A way to visualize networks
- Made with Cytoscape 3, a freely available program
- The story gets more interesting...
Takeaway points

Green outbreak
- Longest chain of cases from Patient Zero: 10
- Patient 4 was responsible for 95% of the outbreak

Purple outbreak
- Longest chain of cases from Patient Zero: 9
- Patient 202 was responsible for 92% of the outbreak
Time for prizes!

• $50 gift cards for each strain
  • Green strain: Ron Honeycutt
  • Purple strain: Cindy Callahan
• $100 gift card for someone who was coinfected Felissa Vazquez
Thank you for playing!

If you want to recreate the game:


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