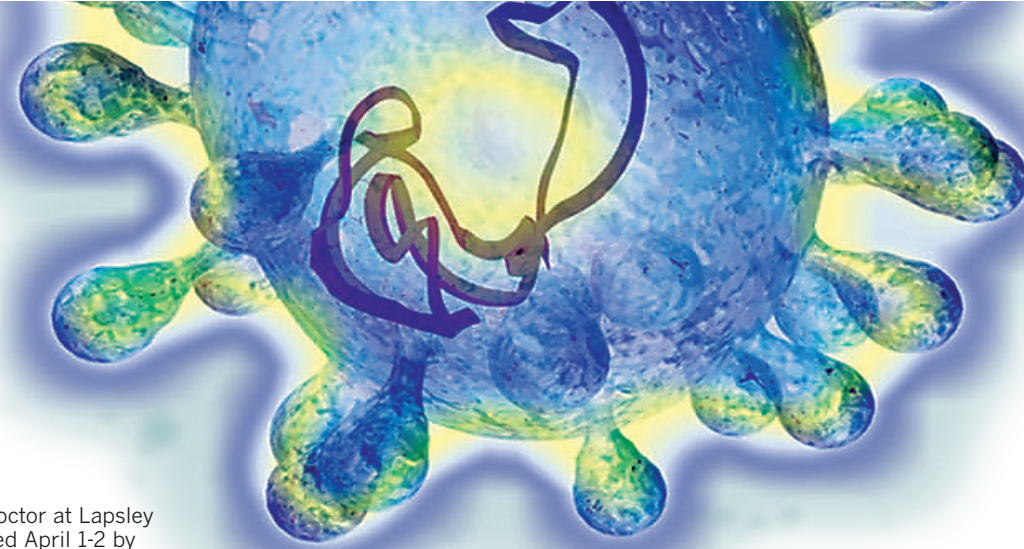
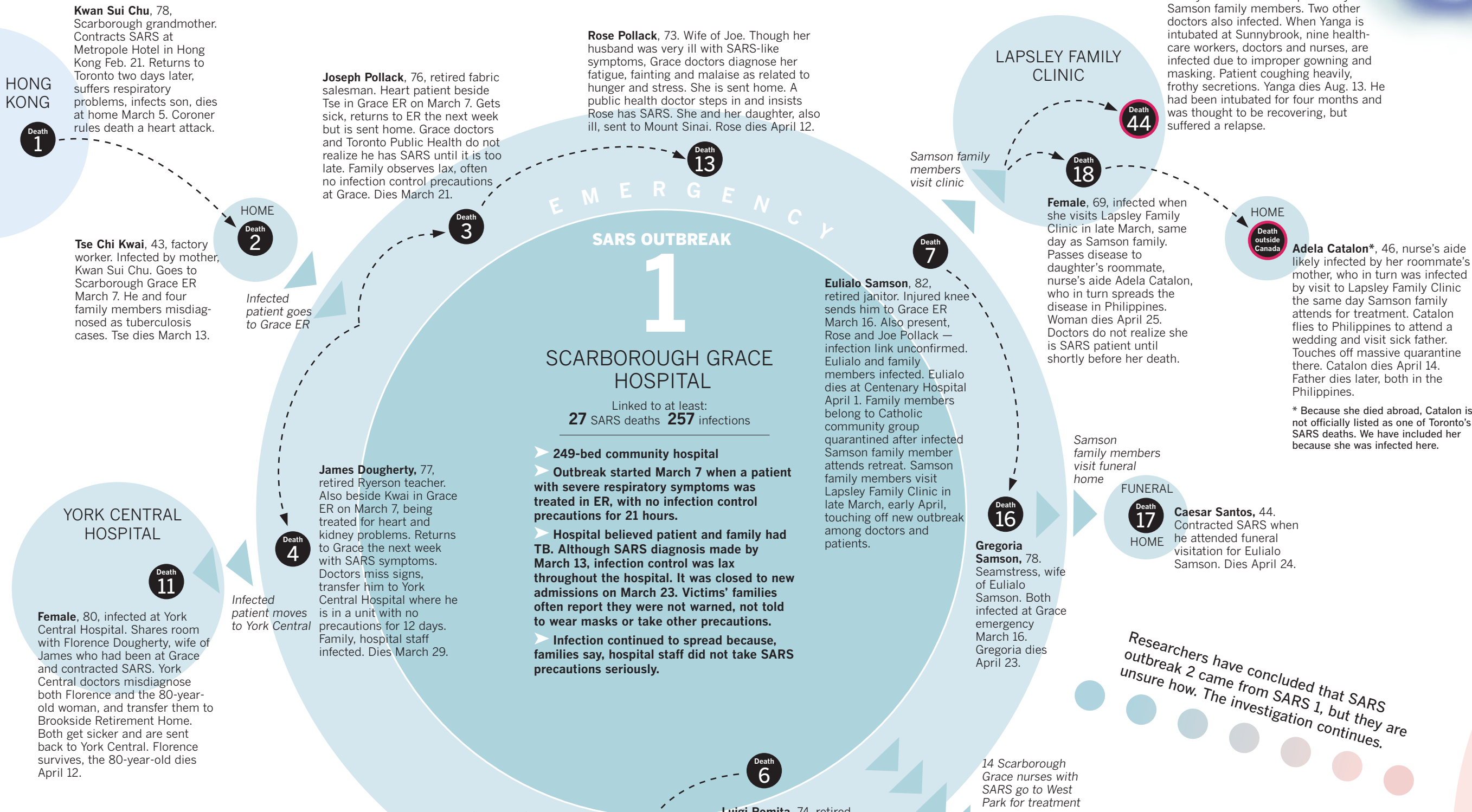


# Tracking Toronto's SARS deaths

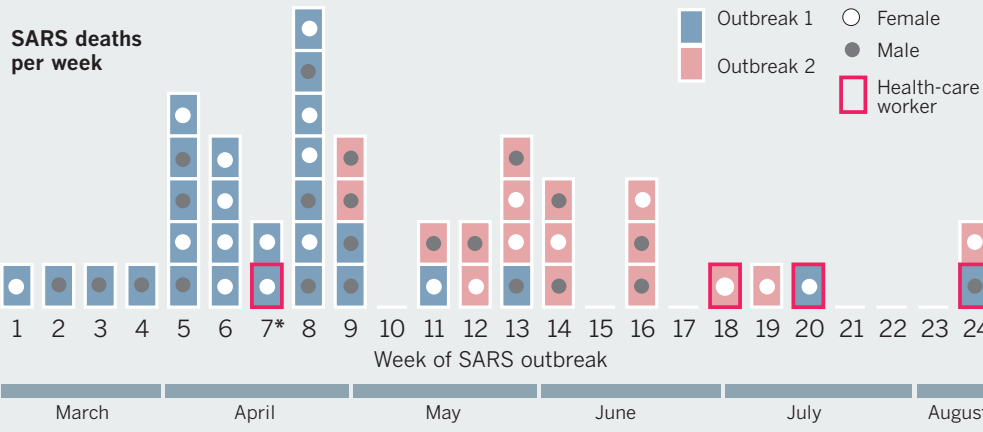
The chart shows the known links that led to the spread of SARS in Toronto, causing 44 deaths and 375 infections in two waves. The disease was spread mainly by close contact with an infected person.



**CORONAVIRUS: Severe Acute Respiratory Syndrome (SARS) is caused by a type of coronavirus, a disease-producing agent commonly found in mammals. Coronaviruses take their name from the halo (or corona) seen around the sun during an eclipse. This fatal strain may have jumped to humans from the civet cat.**

## When they died

The first SARS death in Toronto was March 5, the last Aug. 13. Most patients who died, particularly those 60 and older with other health problems, passed away within three weeks of contracting the disease. Several others, including a nurse and a doctor, survived for three months or more.



## What went wrong

SARS is difficult to diagnose. Mistakes (misdiagnosis, lack of precautions) were made in both outbreaks, leading to more infections. For 22 of the deaths for which The Star could obtain information about the patients, here is what happened:

Death number	Name	Age	Misdiagnosis	Sent home or to other hospital without precautions	Lack of hospital precautions	Infected others
<b>SARS outbreak 1</b>						
1	Kwan Sui Chu	78	✓			✓
2	Tse Chi Kwai	43	✓		✓	✓
3	Joseph Pollack	76	✓	✓	✓	✓
4	James Dougherty	77	✓	✓	✓	✓
6	Luigi Romita	74	✓	✓	✓	✓
7	Eulialo Samson	82	✓	✓	✓	✓
9	Joe Grande	62	✓	✓	✓	✓
13	Rose Pollack	73	✓	✓	✓	✓
16	Gregoria Samson	78	✓			✓
20	Chi Sui Lin	77				
42	Tecla Lin	58				✓
44	Nestor Yanga	54			✓	✓

<b>SARS outbreak 2</b>						
25	Lewis Huppert	99	✓		✓	✓
28	Berta Weinstein	90	✓		✓	✓
32	Lidia Bychutsky	67			✓	
33	Maurice Buckner	57	✓	✓	✓	✓
35	Kitty Chan	66			✓	
36	Mark Weinstein	63			✓	
37	Istvan Biro	67	✓		✓	
40	Nelia Laroza	51				✓
43	Mojgan Tehrani	44	✓	✓	✓	✓

<b>Died outside Canada</b>						
	Adela Catalan	46				✓

These deaths can also be traced back to the original Grace outbreak. The Star was unable to identify the victim or get medical details.

Death 5	Female, 78. Infected at Scarborough Grace. Dies March 31.	Death 19	Female, 64. Dies April 25.
Death 8	Female, 57. Infected at Grace Hospital and transferred to Markham Stouffville hospital, dies April 2.	Death 21	Female, 79. Dies April 26.
Death 10	Female, 75. York region resident infected at Grace Hospital and transferred to St. Joseph's hospital for treatment. Dies April 6.	Death 23	Male, 39. Dies April 30, the youngest SARS victim to die.
Death 12	Female, 86. Dies April 12.	Death 24	Male, 72. Dies April 30.
Death 14	Female, 99. Dies April 17.	Death 26	Female, 67. Dies May 11.
Death 15	Male, 63. Dies April 22.	Death 30	Male, 62. Hewlett Packard employee who broke quarantine to go to work March 29 and April 1, infecting others. Dies May 25.

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## What SARS does

Severe Acute Respiratory Syndrome affects people in different ways. Patients who are stronger and younger with fewer underlying problems (such as diabetes, heart disease) have a better chance of survival.

**3-5 days after exposure:** Exhaustion, fever, muscle aches, chills, shortness of breath, a slight cough, headaches and sore throat. First days similar to bad case of the flu. Some patients report food and water has a bad taste. X-rays show fluid in the lungs. Temperatures usually 38.4C to 40C (normal temperature is 37C).

**Day 5:** Symptoms continue and get worse. Heavy, fast and dry cough. Some people coughed so hard they could not stand. Many patients also got diarrhea, sweats and reported a rapid heart rate and memory loss.

**Day 6-10:** Patient usually hospitalized. Typical treatment is a drug cocktail of antibiotics, sometimes including an antiviral medication called Ribavirin, normally used to treat pneumonia in young patients. Many patients intubated at this point, meaning a tube is forced down their throat to help their raw lungs breathe. Patients sedated and many chemically paralyzed so they do not try to pull out the tube.

**After Day 10:** Those who died, did so peacefully because they were sedated. Typically, they passed away due to multi-organ failure. Survivors report vivid, colourful dreams after they regained consciousness. During recovery, patients reported recurring shortness of breath. The long-term effect of SARS is unknown.

**Burial:** Most families were not able to have a funeral at the time of death. Bodies were either cremated immediately, or kept in cold storage in a sealed body bag until a funeral could be held (after infected, but surviving, family members had finished quarantine). When funerals were held, the casket was closed.

Other deaths connected with the North York General outbreak:

Death 22	Male, 88. Patient at North York. Dies April 29.
Death 38	Male, 45. North York General patient infected as part of new outbreak. Dies June 19.
Death 39	Female, 81. Patient at hospital. Dies June 21.

Other deaths that occurred during North York General outbreak:

Death 29	Male, 59. Wife also infected. Male dies May 20.
Death 34	Male, 71. Dies June 3.
Death 41	Female, 76. Dies July 11.