Coronavirus Deaths in Fairfax County

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Revision A: May 29, 2020

Introduction: We have gathered data on coronavirus cases in Fairfax County between April 25 and May 23. One source has summary data1; the other, data by age group2. The purpose of this report is to compare the data to growth rates that are exponential and linear.

By Revision A, we update the data up to May 29 (May 28 for overall data), using the same sources.

Summary: The data are better fit by a straight line than by an exponential. The linear model based on data from April 25 to May 22 predicted that we would have 394 deaths by May 29; the exponential, 510 (Exhibit 1). As of May 29, there were 378 deaths. We know of no model that predicts a linear growth rate.

Of those who died, 91% were above the age of 60 and 0% below the age of 20 (school age).

Discussion: We were able to find data for 26 days. From May 13 through May 29, we got complete sets of data for each day from the references cited in the footnotes. For days prior to May 13, we got data from newspaper reports. We did not find data for every day.

Exhibit 1: Deaths in Fairfax County due to the Coronavirus COVID-19, as of May 22

1 https://www.vdh.virginia.gov/coronavirus/
The number of tests as of the end of May 22 was 33,098, averaging approximately 1000 per day. From May 22 to May 28, 6 days, the testing rate was 1,972 per day. Tests were performed not from the general population but from those with some COVID-19 symptoms. Of these tests up to May 22, 27% showed the presence of COVID-19 – “cases”; 3.6% were hospitalized; and 1.0% died; up to May 28, the percentages were 24.6%, 2.9%, and 0.9% -- the rates are slowing (Exhibit 2).

Of the deaths, 91% were over the age of 60; 81%, over the age of 70; and 61%, over the age of 80 (Exhibit 3). These percentages have changed little over the course of the 34 days for which we obtained the data. Clearly, those below the age of 60 (i.e., the working class) are unlikely to die from the disease. None of those who have died were under the age of 20 (i.e., school age) and only two were under the age of 30.