



COVID-19: Responding with Data, Not Fear

Using Employee Benefits Data to Assess Risk

March 31, 2020





Chris Savoie

VP of New Products

- Works with product management, user experience, and health analytics experts to help large enterprise organizations make the most of their employee benefits data
- Nearly 20 years of driving software and analytic solutions forward across multiple industries
- Favorite food is boiled crawfish

OUR PURPOSE

Turn the world's health data into great healthcare everyone can afford.

OUR APPROACH

We empower U.S. employers and their advisors to optimize health benefits using data.





Dr. Rance Hutchings

Chief Clinical Officer

- Doctor of Pharmacy from University of Washington
- President and founder of Intermountain Drug Consulting, P.C. – a pharmacy consulting firm
- Working with providers in Washington State on Coronavirus outbreak
- Expert sourdough bread maker



Rachel Myrer

Healthcare Analyst

- Analytics expert, works with medical, pharmacy, wellness, biometric, and dozens of other types of data
- Master of Public Health from University of Utah, adjunct professor at Westminster College
- Undefeated in team chess

COVID-19 Risk Assessment

Demo of Analysis

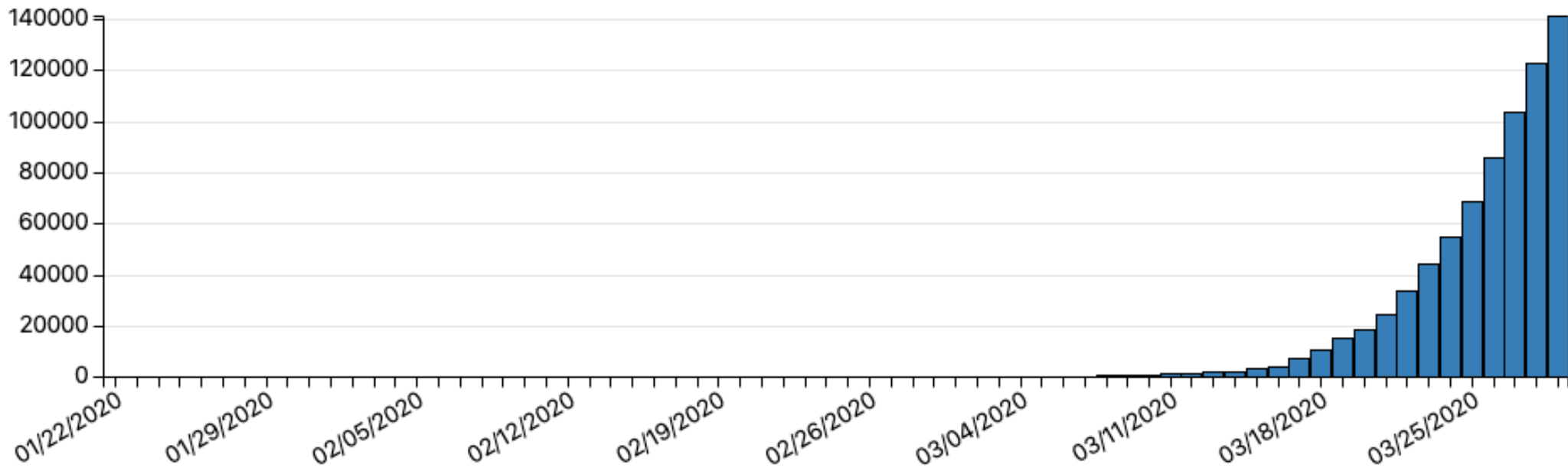
Top requests from clients

1. Chloroquine and Hydroxychloroquine
2. Pneumonia cost
3. Elective procedures
4. Drug shortages
5. Cost modeling

Identifying Credible Sources

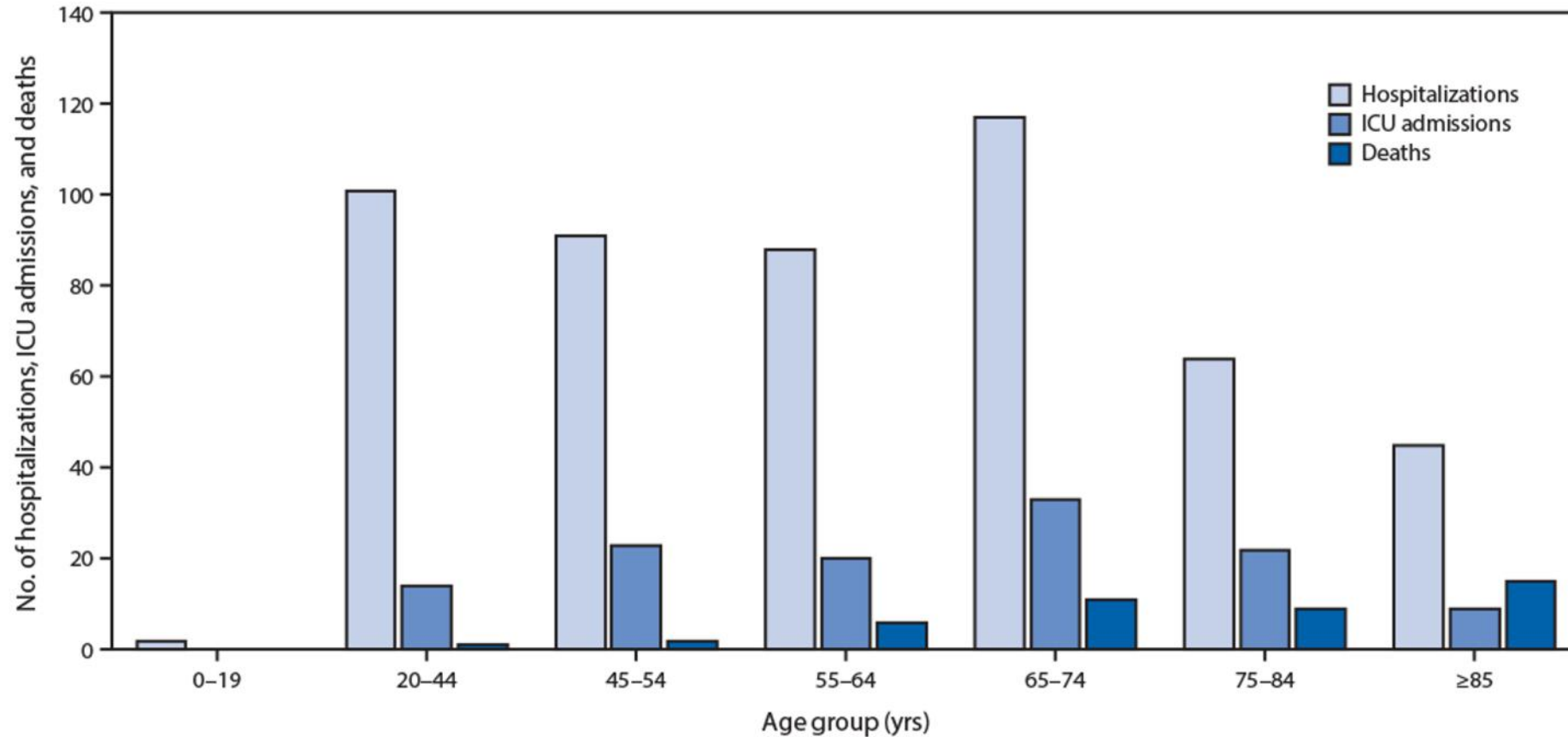
How to Handle Public Data

Average US Population Infection Rate



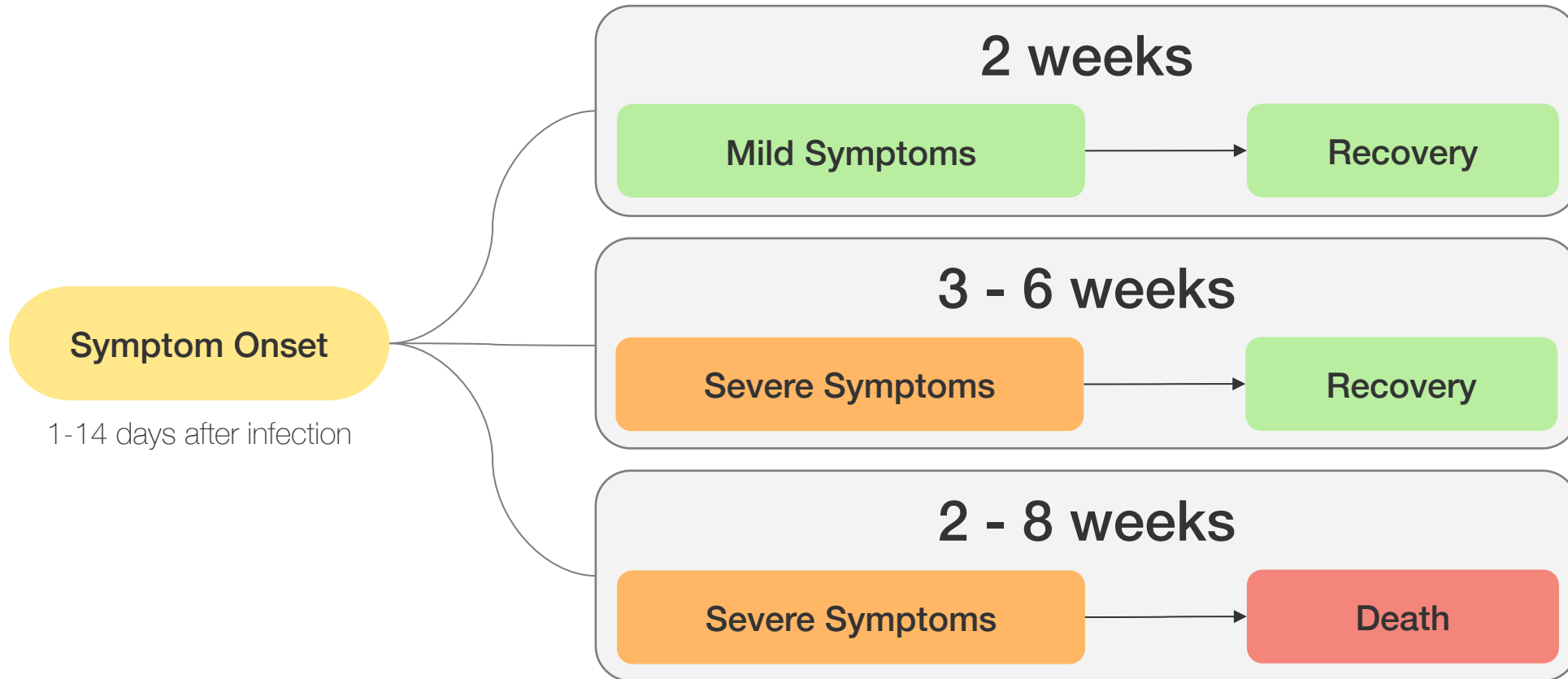
Source: <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>

Age Band Cuts



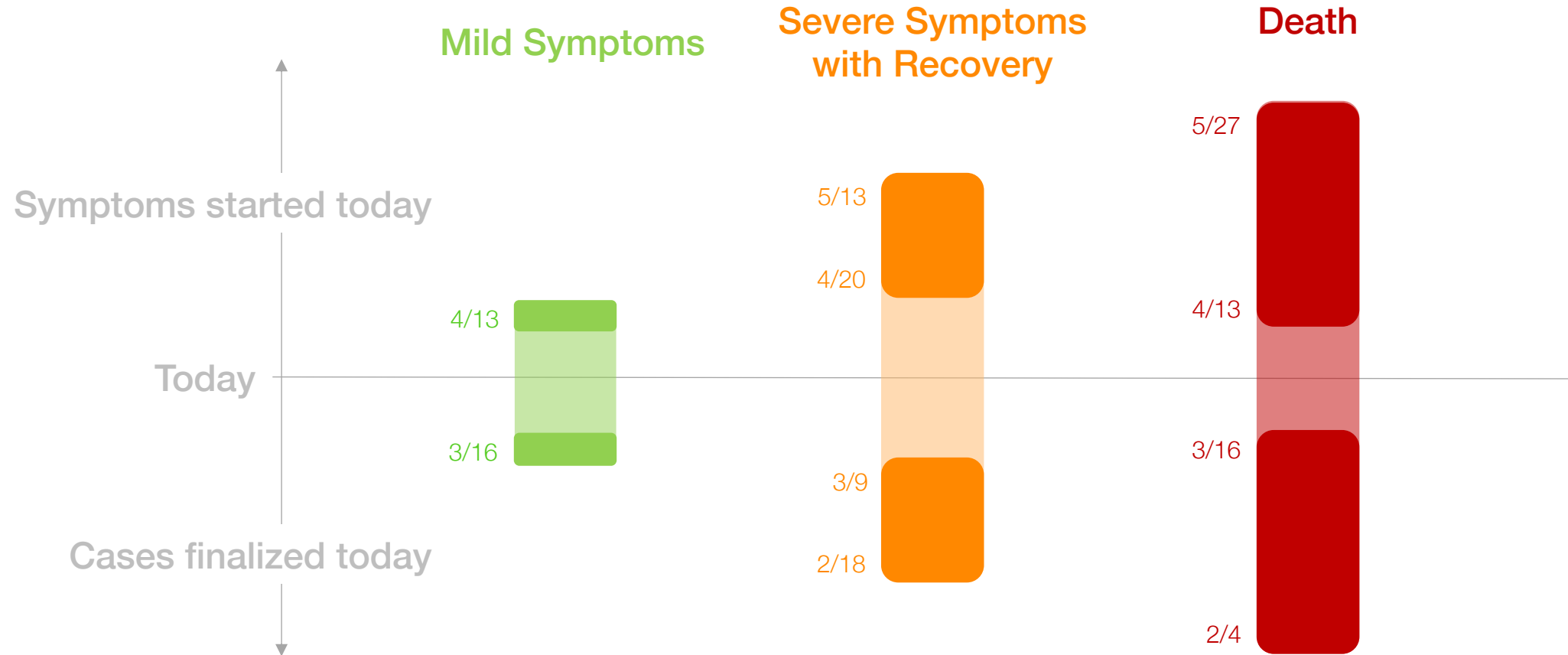
Source: <https://www.cdc.gov/mmwr/volumes/69/wr/mm6912e2.htm>

Simplified Time Bound Series



Source: <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf>

Simplified Time Bound Series – So What?



Source: <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf>

Challenges with testing

1. CDC recommended tests take 4-6 hours
2. Capacity can be dozens or hundreds per day
3. Meaning, a backlog could build up that could take days to overcome - the CDC estimates that the backlog of illness onset → testing → communication is impacting up to 1 week's worth of data

Source: <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/testing.html>

US Reported Cases

As of Monday, March 30, 2020



**World Health
Organization**

122,653



**Centers for Disease
Control and Prevention**

140,904

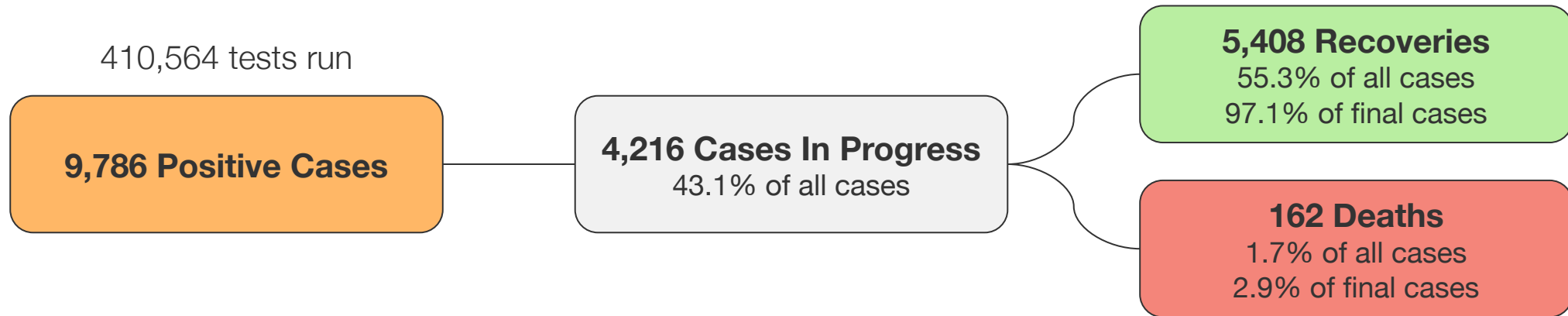
JOHNS HOPKINS
UNIVERSITY & MEDICINE

161,807

COVID Tracking Project

160,530

Example 1: South Korea Mitigation as of 3/31/2020

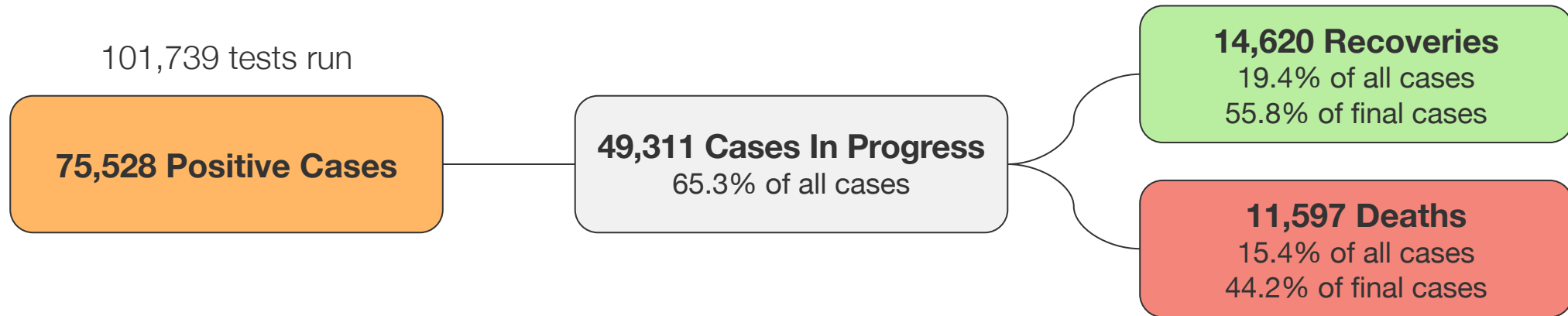


No reporting on hospitalizations, severe vs mild cases, respirator vs no respirator

Source: <http://ncov.mohw.go.kr/en/>

Unreliable

Example 2: Italy Mitigation as of 3/31/2020



No reporting on hospitalizations, severe vs mild cases, respirator vs no respirator

Source: <http://www.protezionecivile.it/media-communication/press-release>

Unreliable

Example 3: US as of 3/30/2020



No reporting on hospitalizations, severe vs mild cases, respirator vs no respirator

Source: <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>

Comparing Data from Other Countries

SOUTH KOREA	ITALY	UNITED STATES
410,564 tests run	101,739 tests run	? tests run
9,786 Positive Cases	75,528 Positive Cases	140,904 Positive Cases
4,216 Cases In Progress 43.1% of all cases	49,311 Cases In Progress 65.3% of all cases	? Cases in Progress ? % of all cases
5,408 Recoveries 55.3% of all cases 97.1% of final cases	14,620 Recoveries 19.4% of all cases 55.8% of final cases	? Recoveries ? % of all cases ? % of final cases
162 Deaths 1.7% of all cases 2.9% of final cases	11,597 Deaths 15.4% of all cases 44.2% of final cases	2,405 Deaths 1.7% of all cases ? % of final cases



Learn more on our COVID-19 resources page at artemishealth.com/covid19



Join us next week at the same time for part three of our COVID-19 webinar series



“As different as we are from one another, as unique as each one of us is, we are much more the same than we are different.”

- Fred Rogers

Q&A

Ask our experts your questions.

Thank you.

