The coronavirus pandemic by the numbers



I’m dwelling on numbers because this week, the US officially counted 200,000 COVID-19 deaths. Words like “grim milestone” just don’t seem adequate in the face of that toll.

Numbers are valuable. Case counts help scientists track the infection’s spread. Death tolls help policy makers figure out where things are going right — or horribly wrong. They’re utilitarian.

They can also hit like a derailed train.

Since I started this column two months ago, more than 345,470 people have died of COVID-19 around the world. 57,993 of those deaths were in the US.

That’s 345,470 people, each with families and friends and coworkers and enemies and cats and dogs and people who just saw them on the street while walking to the bus. They’re gone. Their desks and armchairs and beds are empty. The people who loved them are red-eyed and sorting through the stuff they

left behind. Each human lost cuts deep into communities, and the US has etched a wound into itself that is deeper than any other covid-wound on Earth.

I've stopped looking at the numbers every hour, like I was doing this spring. But every Friday, when I look at the numbers on Johns Hopkins' dashboard, it's still a shock. I know I'm not alone.

"Shocked — that would be the word that I would say captures my response to our current death numbers from the vantage point of February," David Celentano, the head of Johns Hopkins School of Public Health's epidemiology department, told *Vox* this week.

In February, the first US death was alarming. Now, around 800 people in the country are dying of the disease every day, and the sirens and alarm bells have blurred into the background of a horrible year.

When it comes to death, numbers like 200,000 are no more tragic than numbers like 145,763, or 12 or one. But the roundness of the number does help to turn up the volume on that incomprehensible din. Visuals that compare the national death toll to our neighborhoods and cities, like *The Washington Post*'s brutal new interactive map, can help us understand the volume of death — body by body and block by block. Comparisons to other death tolls can help us reckon with just how unprecedented this is.

"The number of dead is equivalent to a 9/11 attack every day for 67 days. It is roughly equal to the population of Salt Lake City or Huntsville, Alabama," Carla K. Johnson wrote for *The Associated Press.*

Thinking beyond the US's borders — more than 985,748 people have died of this disease. There are 74 different countries and territories around the world with populations smaller than that number.

Wrestling with the loss of a nation's worth of people is not something that any one of us thought we'd be dealing with this year. Every single death, every single case, ever since the pandemic roared into public consciousness in January, is one too many.

These numbers are the subject of all the science we talk about every week – they provide the data that researchers use to study this disease. But the climb of these numbers is also an urgent motivation behind this research. Whether researchers are trying to find a vaccine, or a treatment, or figure out how the virus moves between us, or how it wrecks our bodies – the goal is the same. No one can make those numbers go down – but it is still possible to keep them from going up.

Here's what else happened this week.

Research

Child deaths tied to covid-19 remain remarkably low, months into U.S. pandemic
While the COVID-19 death toll in the United States remained the highest in the world, the fatality rate for people under 20 remained extraordinarily low. Experts are still trying to understand how the disease affects younger people.
(Lenny Bernstein/The Washington Post)

The Core Lesson of the COVID-19 Heart Debate
There has been a lot of effort put into understanding some of the damage that COVID-19 can do to the heart. Many studies have poured out of labs, as a flood of data has rushed into them – but many conclusions in the heart debate remain out of reach. Over at *The Atlantic*, Ed Yong discusses why, and finds that "as pandemics get wider, they feel weirder."
(Ed Yong/*The Atlantic*)

What Do Two New Studies Really Tell Us About Coronavirus Transmission on Planes?

This is a good breakdown of some of the limitations behind two case studies that looked at coronavirus transmission on planes.
(Jane C. Hu/*Slate)*

Development

Johnson & Johnson Starts Phase 3 Trial for Single-Dose Coronavirus Vaccine
This week, Johnson & Johnson started its large-scale trials for it's vaccine in the US. Unlike many of the other candidates, this one is designed to only require a single dose – potentially making is easier to distribute. A different company, Novavax, also entered phase three trials this week in the UK.
(Elliot Hannon/*Slate)*

Here come the tortoises: In the race for a Covid-19 vaccine, slow starters could still win out
At *STAT* there's a good update on some of the other vaccine candidates. Pharma companies Merck and Sanofi are both moving more slowly and methodically, but are still very much making progress towards a vaccine.
(Helen Branswell/*STAT*)

A Covid-19 Vaccine for Children May Not Arrive Before Fall 2021
As vaccine development pushes ahead, one group is noticeably not represented in any of the vaccine trials underway in the US – kids. "Vaccine developers are keenly aware that children are not simply miniature adults." Carl Zimmer writes in *The New York Times.* Creating a vaccine that is safe and effective for children will likely take a lot more work, and a lot more time.
(Carl Zimmer/*The New York Times*)

156 countries are teaming up for a Covid-19 vaccine. But not the US or China.

How will a vaccine get distributed when we finally have a good candidate? Manufacturing and shipping issues aside, it's going to be a massive political undertaking too. For a look at the international relations side of vaccine distribution, read up on Covax, an initiative that aims to distribute billions of doses worldwide by the end of next year.
(Julia Belluz/*Vox*)

Averting a COVID-19 vaccination crisis will take careful communication
In order for a vaccine to work, people have to be willing to take it. *The Verge*'s Nicole Wetsman talked with a vaccine hesitancy researcher about *this* vaccine, and what concerns public health experts will have to overcome. (For more expert opinions on a similar topic, check out Maggie Koerth's `How To Know When You Can Trust A COVID-19 Vaccine` at *Five Thirty Eight*.)
(Nicole Wetsman/*The Verge)*

Perspectives

The code: How genetic science helped expose a secret coronavirus outbreak
This is a great feature that dives deep into how researchers uncovered a single outbreak at a meatpacking plant in Postville, Iowa.
(Sarah Kaplan, Desmond Butler, Juliet Eilperin, Chris Mooney and Luis Velarde/*The Washington Post)*

More than Numbers

To the more than 32,397,479 people worldwide who have tested positive, may your road to recovery be smooth.

To the families and friends of the 985,748 people who have died worldwide – 203,549 of those in the US – your loved ones are not forgotten.

Stay safe, everyone.

https://www.theverge.com/2020/9/26/21456639/coronavirus-pandemic-by-the-numbers