

Decentralising COVID-19 reporting with R Shiny

#OpenDataSavesLives, ODI Leeds
27 August 2020

Dr Henry Partridge
Trafford Data Lab Manager



Total UK cases COVID-19 Cases Update

as of 09:00 (GMT) on 11/03/2020

Total UK cases

456

Daily Confirmed Cases

63

Total UK deaths

6

England

387

Scotland

36

Wales

15

N. Ireland

18

Cumulative Cases



Daily Confirmed Cases



Upper Tier Local Authorities (UTLA) and NHS Regions

Hertfordshire: 18

Kensington and Chelsea: 15

Devon: 13

Hampshire: 13

Surrey: 10

Southwark: 9

Oxfordshire: 9

Brighton and Hove: 8

Barnet: 8

Torbay: 7

Camden: 7

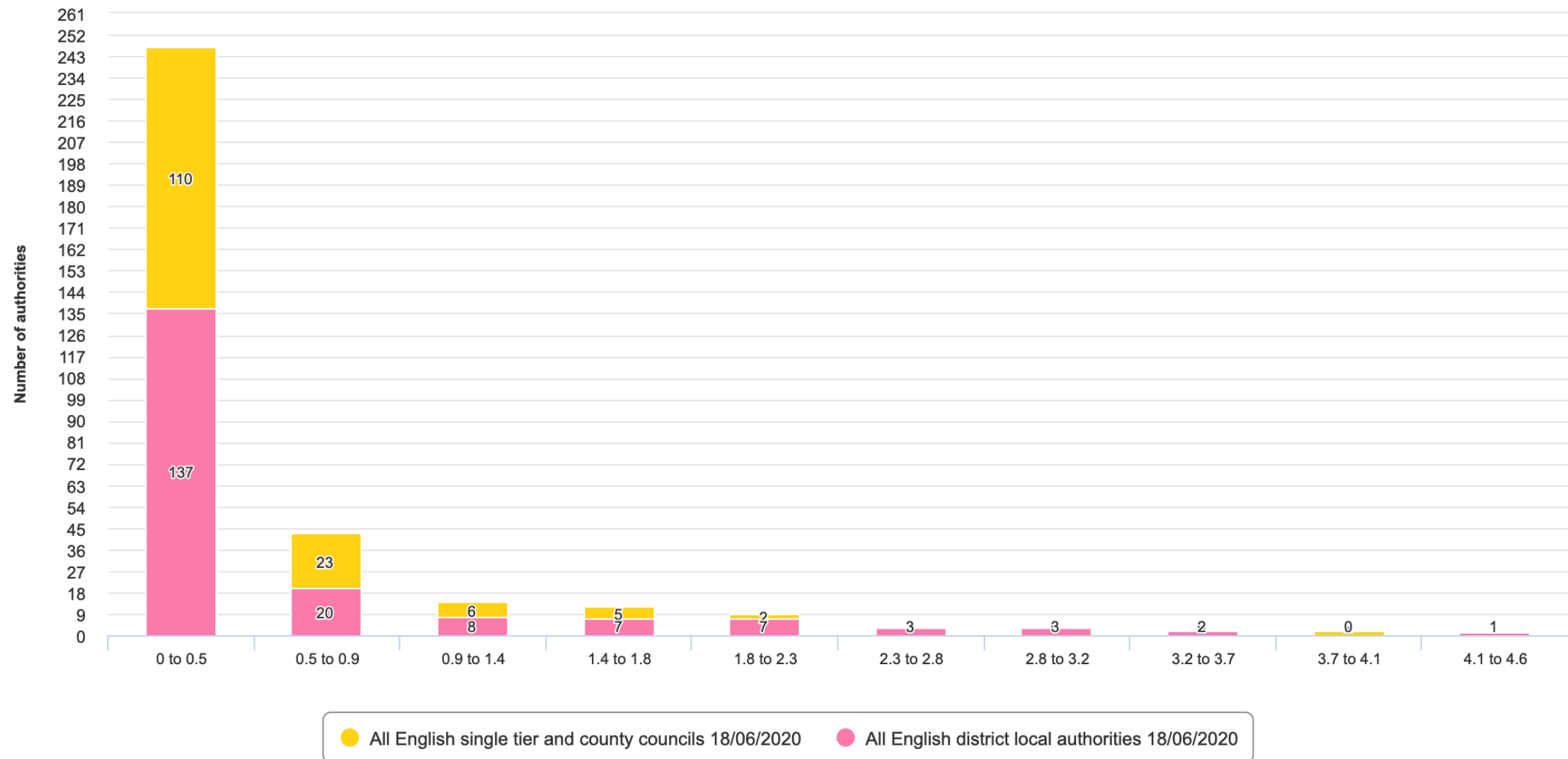
Cumbria: 7

Liverpool: 6

Newcastle upon Tyne: 6

UTLA NHS Regions Legend

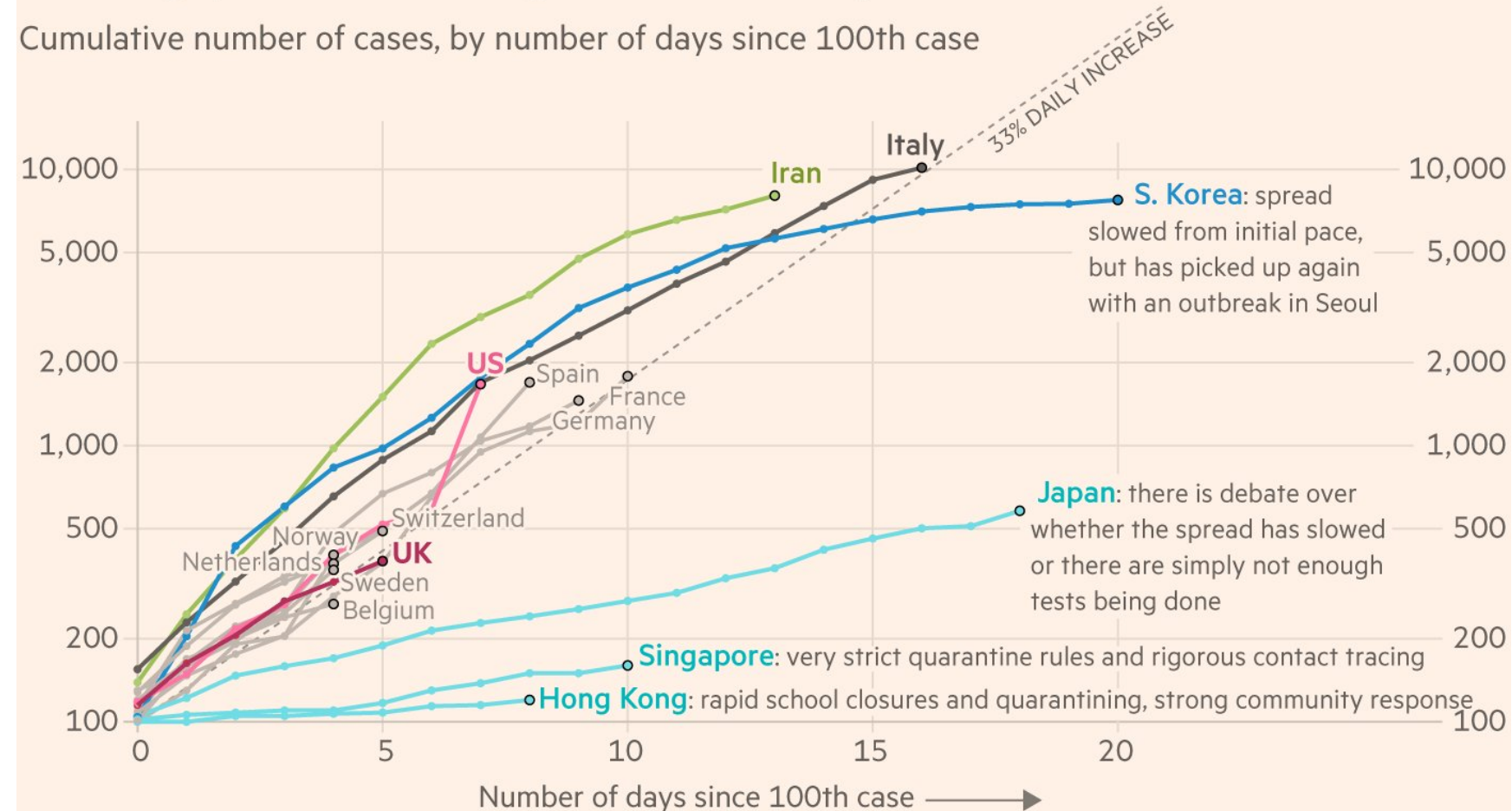
Distribution of Daily lab-confirmed cases of COVID-19 per 100,000 people across English councils, latest non-provisional day



- not open source
- not reproducible
- not scalable

Most western countries are on the same coronavirus trajectory. Hong Kong and Singapore have managed to slow the spread

Cumulative number of cases, by number of days since 100th case



Source: FT analysis of Johns Hopkins University, CSSE

FT graphic: John Burn-Murdoch / @jburnmurdoch

© FT





johnburnmurdoch / coronavirus_cases_trajectories.R

Created 6 months ago



1 file



3 forks



0 comments



7 stars

```
1 read_csv("https://raw.githubusercontent.com/CSSEGISandData/COVID-19/master/csse_covid_19_data/csse_cov
2   gather(date, cases, 5:ncol(.)) %>%
3   mutate(date = as.Date(date, "%m/%d/%y")) %>%
4   group_by(country = `Country/Region`, date) %>%
5   summarise(cases = sum(cases)) %>%
6   filter(country != "Others" & country != "Mainland China") %>%
7   bind_rows(
8     tibble(country = "Republic of Korea", date = as.Date("2020-03-11"), cases = 7755)
9   ) %>%
10  group_by(country) %>%
```



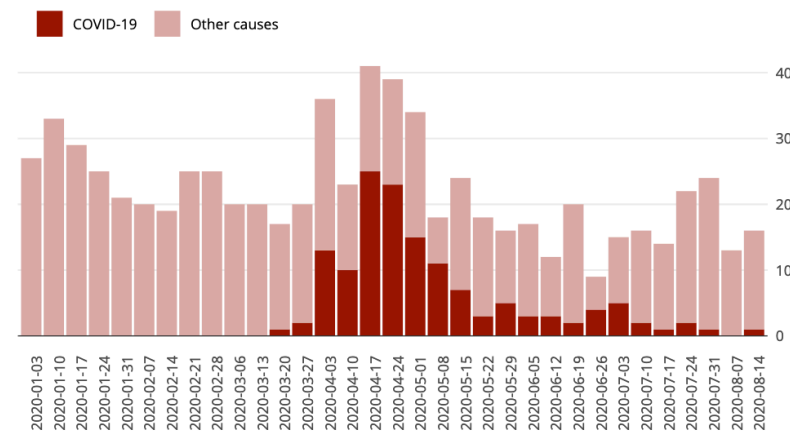
Local COVID-19

Trafford

Summary New cases Total cases Hospital deaths Care home deaths

Weekly registered deaths in hospital

Trafford, to week ending 14 August 2020



Source: Office for National Statistics



Confirmed cases per 100,000

Search local authorities...

Local autho...	07 August - ...	14 August... ↓	Change
Coventry	17.5	18.3	0.8
Corby	19.4	18	-1.4
Trafford	27	17.7	-9.3
Southwark	8.5	17.6	9.1
Oadby and ...	24.6	17.5	-7
Blaby	7.9	16.7	8.9

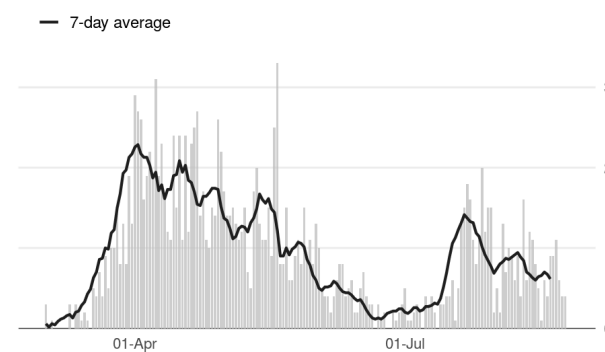
31-40 of 315 rows

Previous

4 of 32

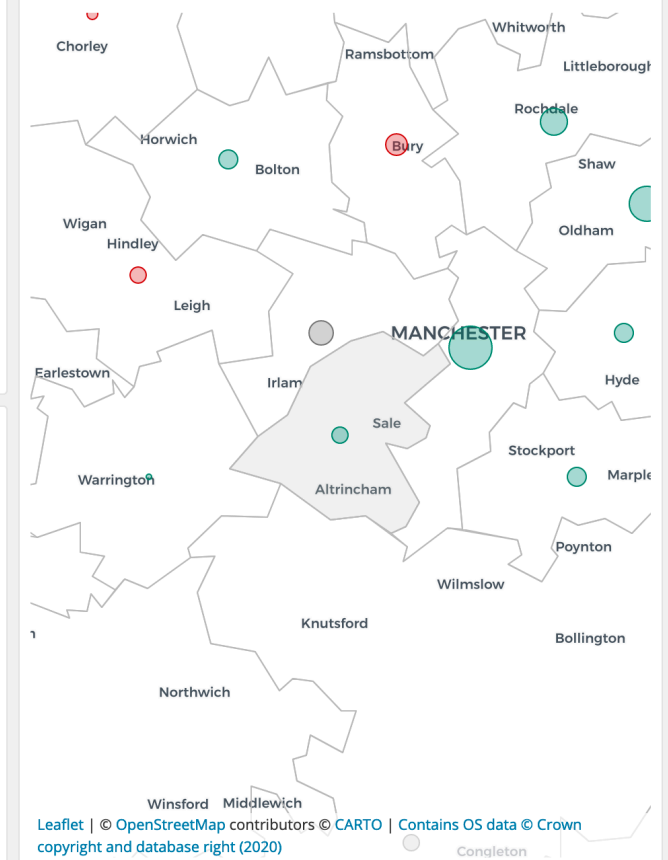
Next

Daily confirmed cases in Trafford



Source: Public Health England

Confirmed cases during week ending 20 August

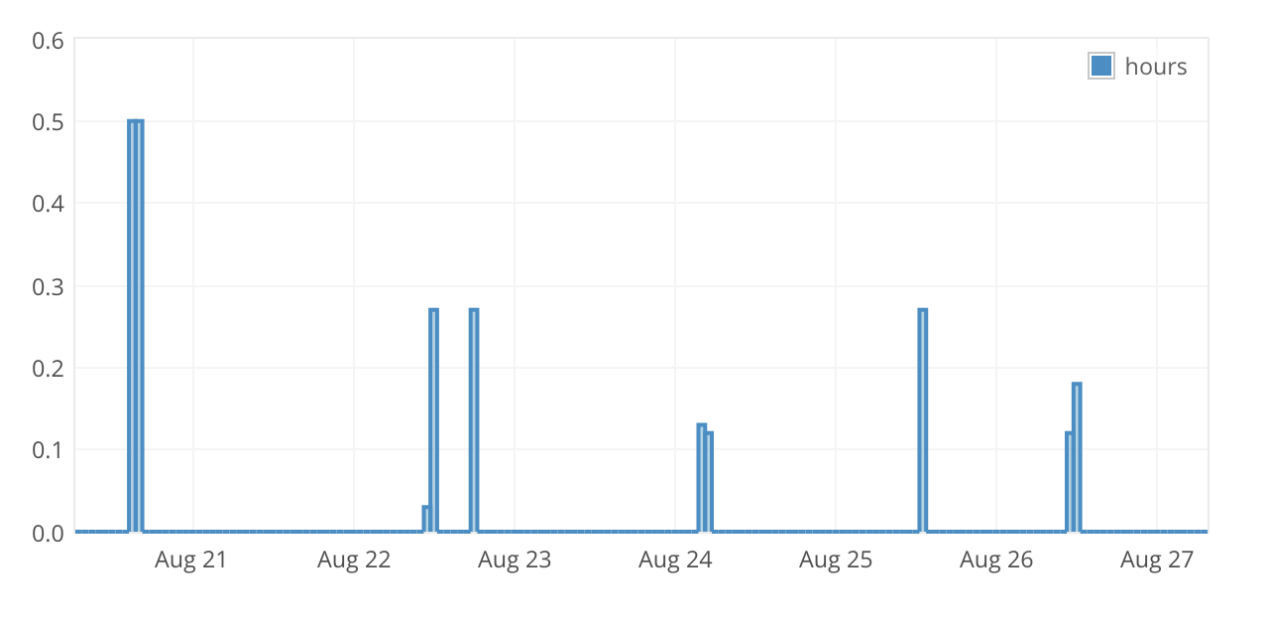


Leaflet | © OpenStreetMap contributors © CARTO | Contains OS data © Crown copyright and database right (2020)



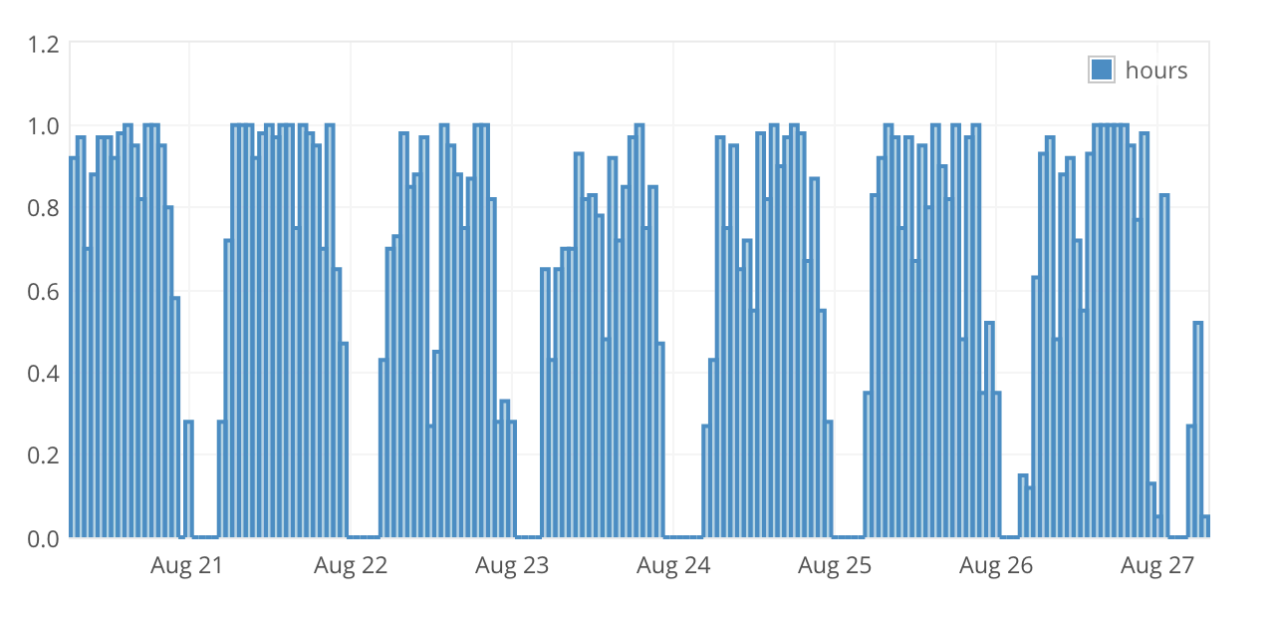
APPLICATION USAGE

Total: 2.39 hours



APPLICATION USAGE

Total: 105.72 hours





Beers Manchester @BeersManchester · Aug 12

Where can I find current covid stats for Greater Manchester?



6



Elisabetta M L @ElibetsMcr · Aug 12

I use this: trafforddatalab.shinyapps.io/local_covid-19/



1



Neil Lawrence @Ox1Digital · Jul 30

Just had a really useful session with the team at @NHSDigital about their COVID dashboard - finding ways they could better meet the user needs of #localgov in presenting data

Had to highlight the brilliant work that @traffordDataLab have done here trafforddatalab.shinyapps.io/covid-19/



2



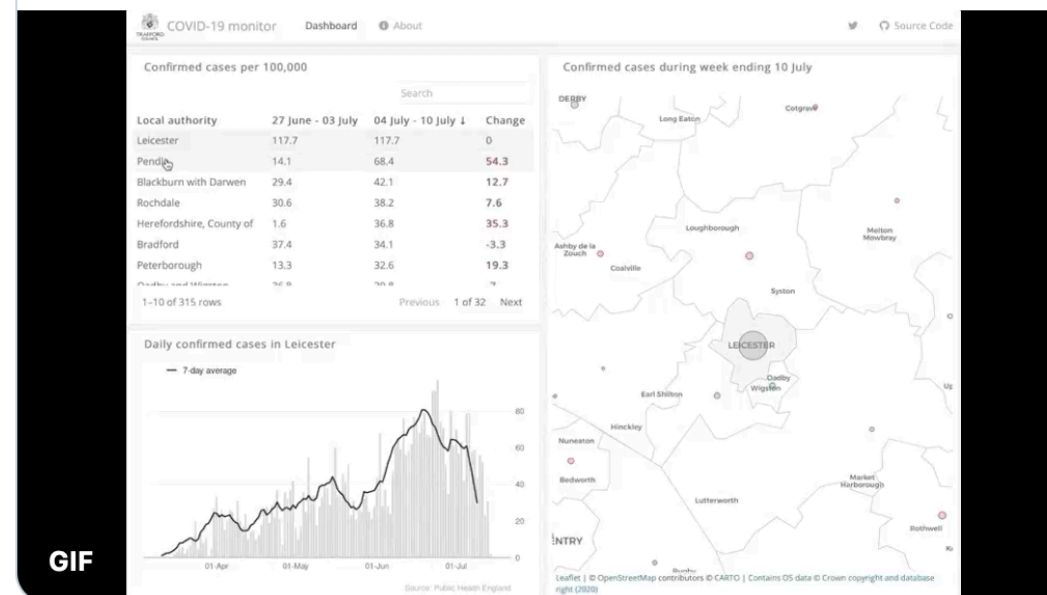
Karen Hodgson @KarenHodgePodge · Jul 27

I showed my Dad this dashboard so he can judge whether he wants to head out this week or stay in without having to keep a daily record of total COVID cases in his local area... yes, he does actually write down a tally so he can calculate if cases are rising or falling.



Trafford Data Lab @traffordDataLab · Jul 16

We've used the reactable #rstats package to help users dynamically explore week-on-week change in #COVID19 cases by local authority | trafforddatalab.shinyapps.io/covid-19




1



15



 [traffordDataLab](#) / [local_covid-19](#)

 Unwatch

2


 Star


0

 Fork

0

 [Code](#)

 [Issues](#)

 [Pull requests](#)

 [Actions](#)

 [Projects](#)

 [Wiki](#)

...

 master

[Go to file](#)

[Add file](#)

 [Code](#)

About



rcatlord and **rcatlord** Registered deaths: ...



✓ yesterday

🕒 74

	data	Registered deaths: 2020-08-14	yesterday
	rsconnect/shin...	Registered deaths: 2020-08-14	yesterday
	.gitignore	Update .gitignore	last month
	LICENSE	Initial commit	3 months ago
	README.md	Update README.md	last month
	app.R	Registered deaths: 2020-08-07 an...	6 days ago
	global.R	Reflect changes on source data for...	21 days ago
	screenshot.png	Update README	3 months ago
	styles.css	New cases over last seven days	3 months ago

COVID-19 cases and registered deaths at a local authority level

 [trafforddatalab.shin...](#)

[covid-19](#)

[coronavirus](#)

 [Readme](#)

 [MIT License](#)

Releases

No releases published

[Create a new release](#)



Local COVID-19

Essex

Summary

New cases

Total cases

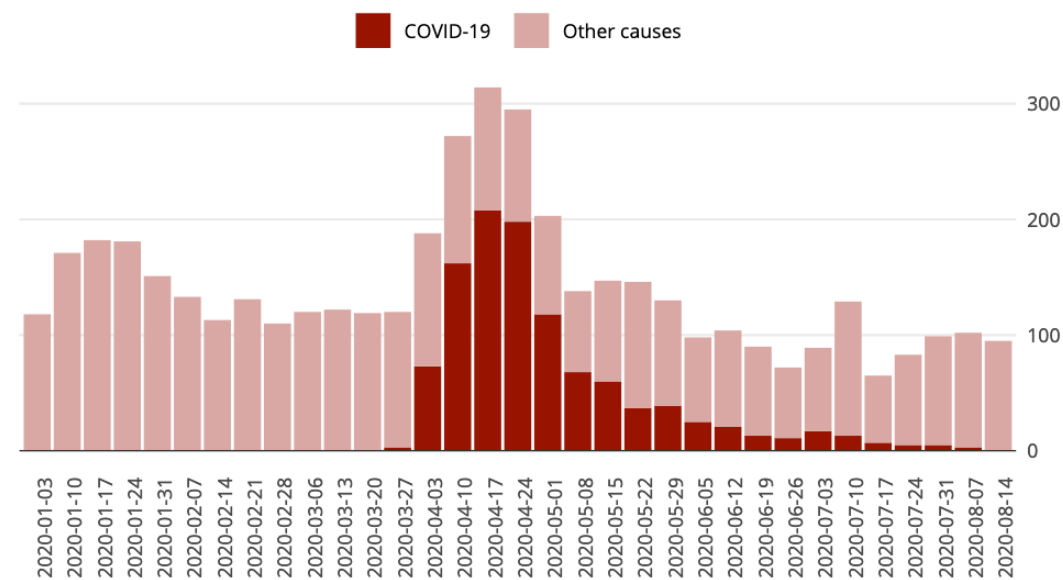
Hospital deaths

Care home deaths



Weekly registered deaths in hospital

Essex, to week ending 14 August 2020



Source: Office for National Statistics



Thank you

 @trafforddatalab
 @trafforddatalab
 trafforddatalab.io