

OMG 15,000 new cases in Florida on 11th July 2020 – Let's panic

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As we move through the coronavirus pandemic, we have come to realise that the media will always seek to create panic. A favoured method is to write about high case numbers without mentioning testing. Case numbers mean absolutely nothing without data on testing levels (which gives positive test ratio). We now understand that these are not omissions, but that this data that is deliberately excluded since cases and testing data are disclosed together. Here is some context to the OMG Florida story;

- 11th July 2020 was the highest ever level of daily testing at 142,972 (that is a very big number!);
- The ratio of positive tests is certainly up from its low point but at 11.25% of newly tested people it had FALLEN and was lowest in two week range (18.43% to 11.25%);
- Daily deaths are high but it is important to keep a sense of proportion (something media avoids) that 4,381 tragic deaths over the entire COVID outbreak compares to over 200,000 deaths per year in Florida including (for example) over 5,000 deaths from drug overdoses.

That's the context, the key consideration is will the health system be overwhelmed as suggested by the media, we don't have any direct insights on this but an educated guess would say that that is an unlikely scenario.

There are also strong indications that the positive ratio of tests is overstated as many labs are only reporting positive tests and not reporting negative tests – but that is a side issue.

We unpick these themes below;

- Where are we on cases and tests;
- What is the pressure on hospital capacity;
- What is the end game;
- Conclusions

Appendix

- Why do you say the ratio of positive test results is overstated.

Where are we on cases and tests

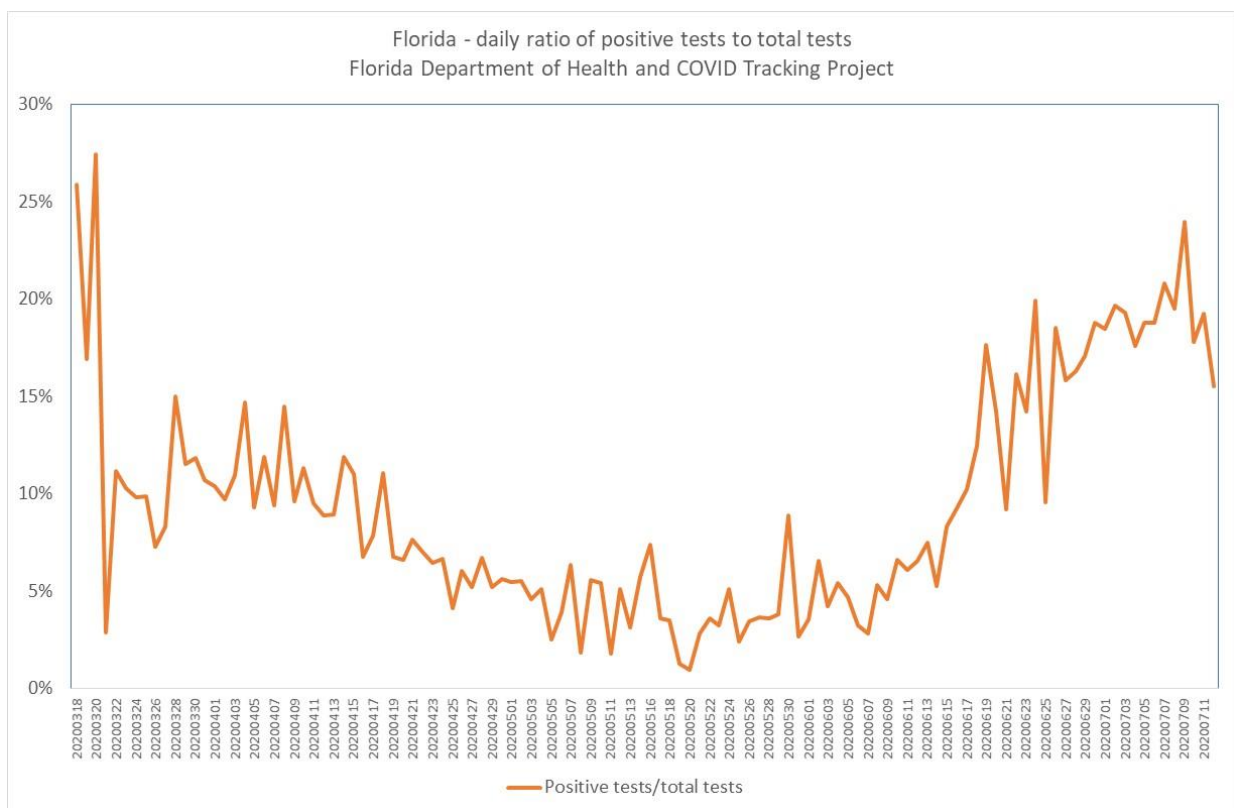
If we were as dishonest as certain Financial Journals we could proclaim – positive test rate down 40% in three days in Florida and that would be our story. Whilst that is “correct” it is not honest, there has been a reduction in positive rate over the past few days, but over a few months it has gone up.

The table below profiles the very recent changes in cases and tests:

	03-Jul-20	11th July 2020	% change
Number of cases	11,395	15,283	34.1%
Number of people tested	85,071	142,972	68.1%
Total number of tests	85,091	142,972	68.0%
Percent positive total tests	15.83%	13.62%	-14.0%
Percent positivity new cases	14.13%	11.25%	-20.4%

The above data points have subtly different definitions (which we won't go into here), the important point is that the very recent increase in cases (34%) has absolutely nothing to do with the rate of positive tests (down) and is entirely driven by 68% increase in number of tests.

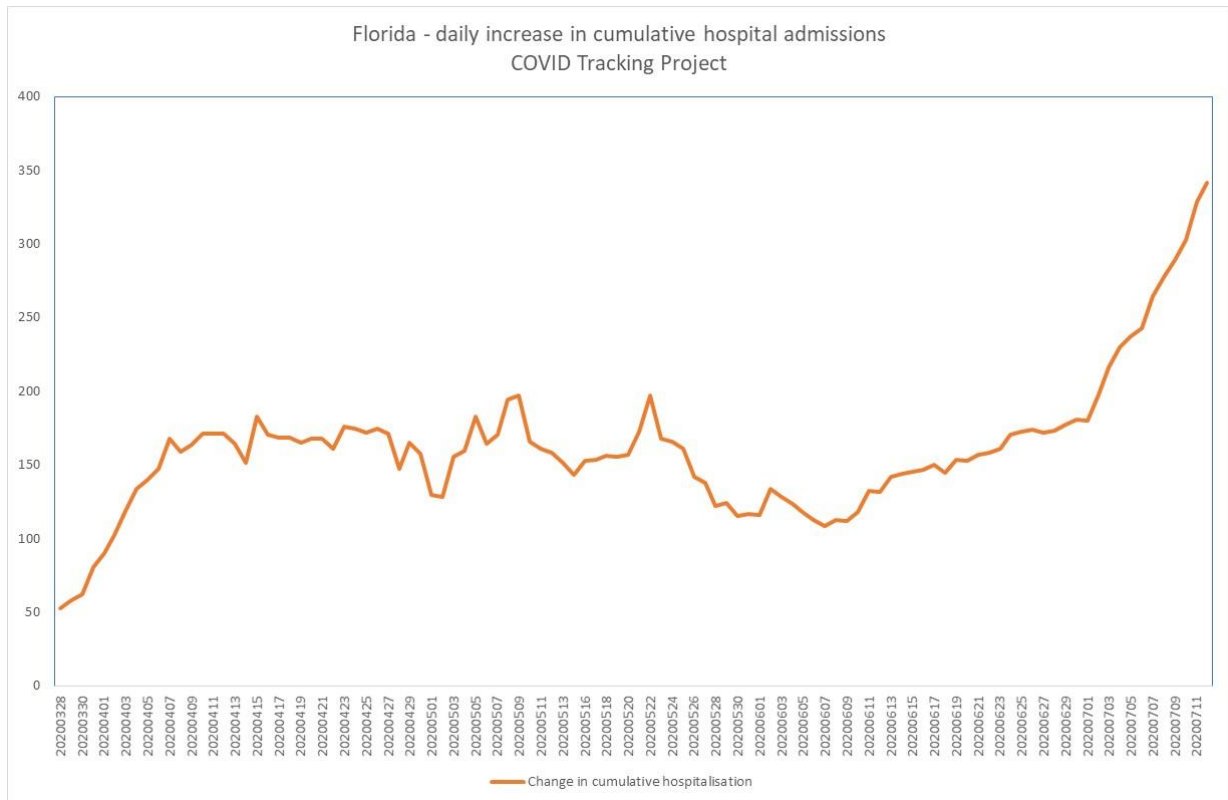
It would be dishonest to leave it at that, since it is necessary to acknowledge that over a period of three months the ratio of positives is significantly up, which generally means the virus has been spreading since a low point 20th May 2020.



What is the pressure on hospital capacity

Hospitalisation is a much more important metric than cases. Florida has been a little bit difficult on this metric, which they are only now disclosing. We have inferred the daily hospital admissions from the daily change in cumulative hospital admissions (which they do disclose). This implied admissions

figure does not address discharges, so this is in theory daily inflows only. That rate of change in cumulative admissions gives the chart below;




That's not a good chart with a near doubling in hospital admissions. There isn't too much daily data about ICU utilisation, but the hospitals that form part of the Agency of Health Care Administration reported 85% ICU utilisation with 15% spare capacity. Our understanding is that this is a high utilisation level and equivalent to peak flu season.

Hospital BedsCounty	Hospital BedsHospital	ICU BedsCounty	ICU BedsHospital
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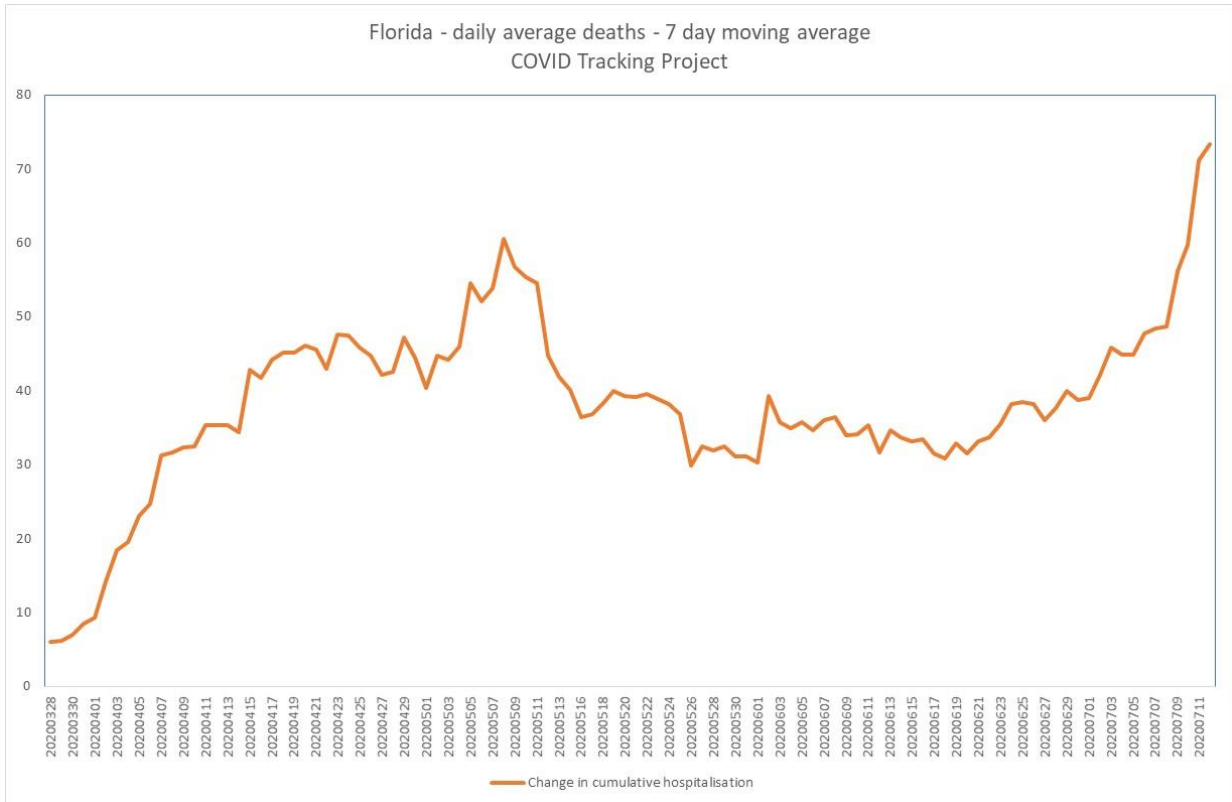
Hospital ICU Beds Census and Staffed Availability as Reported in ESS
 To download to Excel - Click Download at the bottom right of the screen then click Cross Tab
 Last Updated: 08/07/2020 18:15:20

County	Adult ICU Census	Available Adult ICU	Available Adult ICU%	Total Adult ICU Capacity	Pediatric ICU Census	Available Pediatric ICU	Available Pediatric ICU%	Total Pediatric ICU Capacity
Grand Total	5,314	922	14.79%	6,236	400	230	36.51%	630
ALACHUA	276	32	10.39%	308	34	13	27.66%	47
BAKER	0	0		0	0	0		0
BAY	65	20	23.53%	85	2	2	50.00%	4
BREVARD	131	42	24.28%	173	2	8	80.00%	10
BROWARD	446	50	10.08%	496	30	29	49.15%	59
CALHOUN	0	0		0	0	0		0



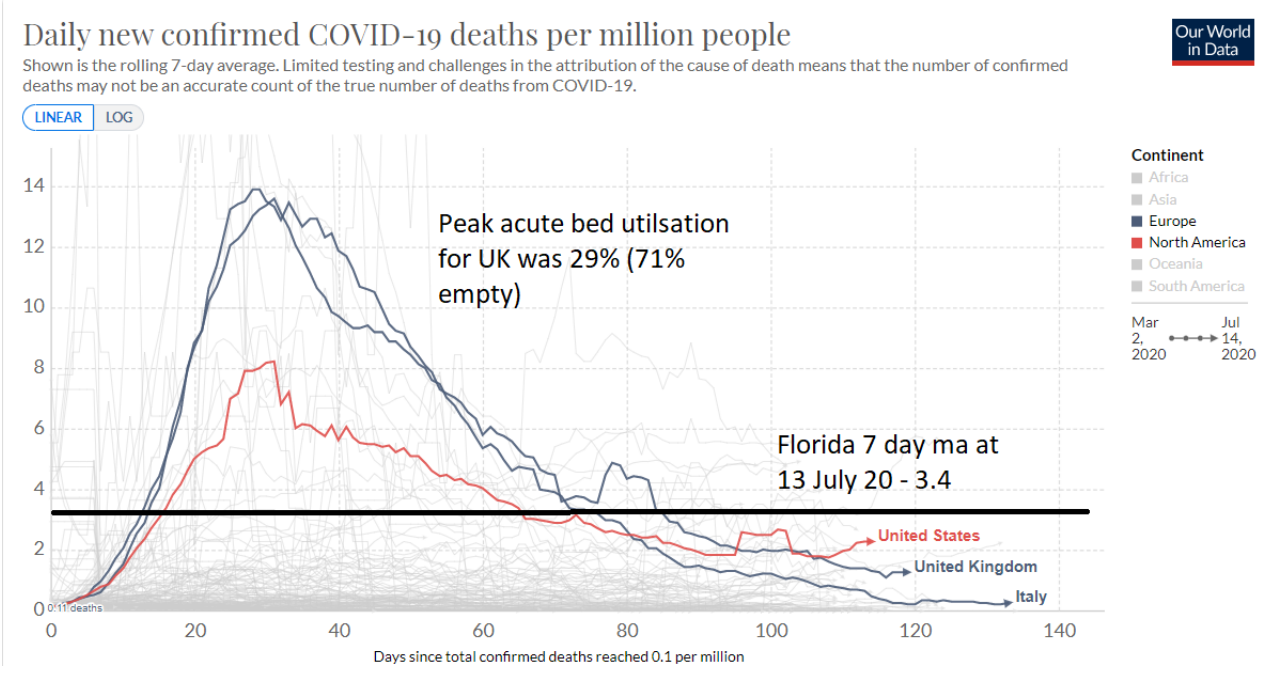
County

- (All)
- ALACHUA
- BAKER
- BAY
- BREVARD
- BROWARD
- CALHOUN
- CHARLOTTE
- CITRUS
- CLAY
- COLLIER
- COLUMBIA
- DESOTO
- DUVAL



However on a wider perspective it would seem unthinkable that Florida would be unable to cope with this influx. Given the lack of daily hospital admissions data across countries, it is necessary to compare daily deaths per million of population, on this basis the U.S. as a whole and other countries in the world have handled significantly higher rates of deaths during pandemic peak. But at 60 deaths per day, that would be equivalent to 2.8 per million of population for Florida, which is significantly below the levels experienced by the U.S. as a whole. It would be hard to imagine that Florida would be overwhelmed, but this is a guess.

METRIC: Confirmed cases, Confirmed deaths, Case fatality rate, Tests, Tests per confirmed case, Share of positive tests, INTERVAL: Cumulative, 7-day rolling average, New per day, COUNT: Per million people, TIMELINE: Align outbreaks, Days since total confirmed deaths reached 0.1 per million



What is the endgame

A favourite media trick is to deliberately avoid proving any sense of proportion or context, what does the current tragic total death figure of 4,277 look like? There are around 21.5 million people in Florida, annual deaths are over 200,000 per year, so the COVID-19 total deaths to date are equivalent to less than 8 days of death at regular rates. For reference in 2017 over 5,000 people died of drug overdoses.

The bigger question is how much longer this could go on for, total deaths per million are now at just under 200 per million, that is a level which is around half of the national average in the U.S. and much lower than several European countries (but higher than those with test and trace strategies like Germany).

METRIC

- Confirmed cases
- Confirmed deaths
- Case fatality rate

INTERVAL

- Cumulative
- 7-day rolling average
- New per day

COUNT

- Per million people

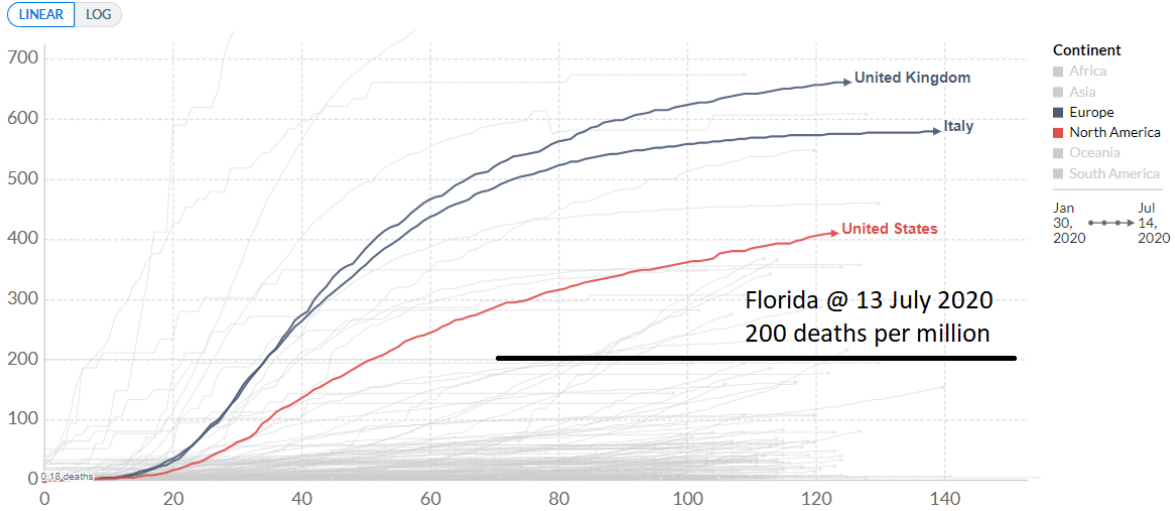
TIMELINE

- Align outbreaks

Days since total confirmed deaths reached 0.1 per million

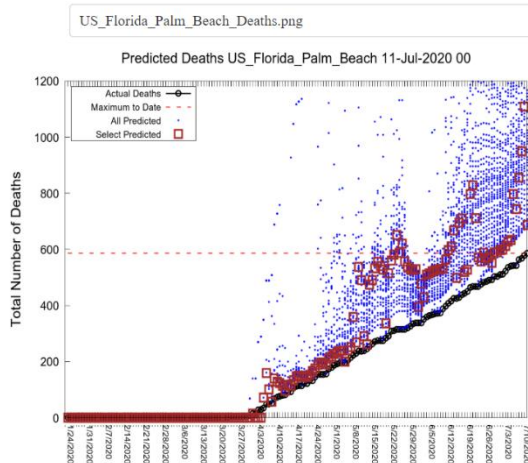
Cumulative confirmed COVID-19 deaths per million people

Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.

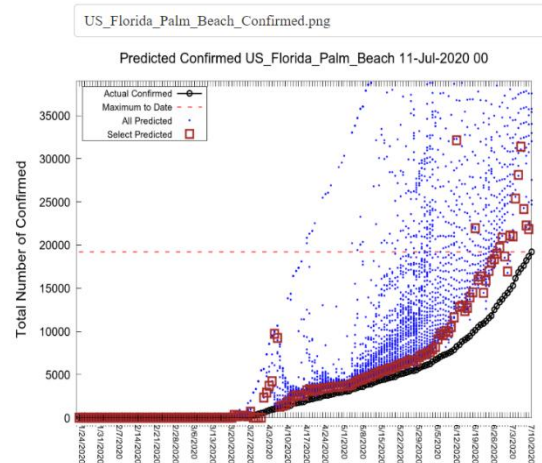


We would recommend the very extensive mathematical tools made available by Professor Levitt at levitt.heroapp.com. That website uses some very sophisticated data fitting to end up with a predicted end point. For Florida this is broken down into regions, unfortunately it looks like the recent updates are suggesting a gap between actual position today and end point plateau. The below charts are taken from that app for Palm Beach (Dade isn't available). It is necessary to compare the black line actual level with square selected predicted levels.

Location 1



Location 2



Conclusions

We put this report together on the understanding that media outlets have not and will not provide a balanced assessment of the situation in Florida and will instead pump the panic over highest ever cases narrative. This narrative will be generally accepted. A few “deniers” will try and provide context and untangle cases from tests. The “denial” title is ironic as only a few individuals actually

look at data in order to form rational views and paradoxically it is the panic brigade that do not want to engage with data.

Based on the research we have done and particularly the findings of professors Levitt, Giesecke, Gupta, Friston and others we believe that lock down measures beyond washing hands, distancing and avoiding large gatherings are largely unnecessary. The most extreme measures of closing schools and preventing people going outside will almost certainly cause much more damage than benefit (if any) and are primarily driven by fear and not by science.

Please re-tweet if you find interesting. There are several other documents on our website thinkingslow.org;

- Debunking the Imperial College model in April using Diamond Princess actual data – we said IFR was too high, growth was not exponential and 80% infection level was too high (even as non-epidemiologists this seemed obvious). As time goes on all of those comments have been validated.
- Debunking an Iran panic story again talking about cases without mentioning testing;
- Formal complaint to the Financial Times over their coronavirus coverage.

Appendix

Overstatement of positive tests

The alachuachronicle.com first raised the issue of overstated positive test ratio in Florida due to the fact that several labs were apparently not returning negative tests, only positive tests. We identified the same issue and a sample from the Florida State report is shown in appendix. @RebelACole has calculated that taking such 100% positives out would reduce the overall positive test ratio from 12.6% to 8.7%.

The possible overstatement is certainly a relevant question that should be answered, but it is hospitalisations, ICU utilisations and deaths that are more important than cases.

Laboratories sending back near 100% positive tests, taken from Florida State Report.

Reporting lab	Inconclusive	Negative	Positive	Percent positive	Total
PHYSICIANS REGIONAL MEDICAL CENTER COLLIER BLVD	1	300	34	10%	335
TWIN CITIES HOSPITAL		319	9	3%	328
AVENTUS BIOLABS	1	261	65	20%	327
HIGHLANDS REGIONAL MEDICAL CENTER		309	18	6%	327
CAPSTONE HEALTHCARE		156	164	51%	320
SOUTH BAY HOSPITAL MICRO		277	42	13%	319
GULF BREEZE HOSPITAL LAB		303	8	3%	311
THE VILLAGES REGIONAL HOSPITAL		299	10	3%	309
SYNERGY LABORATORIES		294	14	5%	308
ST PETERSBURG GENERAL HOSPITAL		255	49	16%	304
ACCESS MEDICAL LABORATORIES		68	227	77%	295
PALMS OF PASADENA HOSPITAL		265	18	6%	283
QUEST	1	48	216	82%	265
RAULERSON HOSPITAL		255	9	3%	264
BAPTIST EMERGENCY CENTER CLAY		248	11	4%	259
VAMC ORLANDO		214	42	16%	256
QUEST DIAGNOSTICS - IRVING	6	111	134	53%	251
BMCT Molecular Diagnostics Subsection		236	5	2%	241
MARINERS HOSPITAL		227	11	5%	238
QUEST DIAGNOSTICS WOOD DALE		210	17	7%	227
BAPTIST HEALTH EMERGENCY CENTER COUNTRY WALK		219	4	2%	223
BAPTIST EMERGENCY CENTER OAKLEAF		214	5	2%	219
APPLIED INGENUITY DIAGNOSTICS		197	15	7%	212
QUEST NEW ENGLAND		191	18	9%	209
QUEST DIAGNOSTICS	2	88	110	55%	200
WALGREENS	1	135	63	32%	199
SOUTHEAST ALABAMA MEDICAL CENT		192	5	3%	197
ORLANDO HEALTH		8	182	96%	190
NCH NORTHEAST		144	43	23%	187
DAVITA LABS		167	15	8%	182
QUEST DIAGNOSTICS - ATLANTA		163	16	9%	179
MAKO MEDICAL LABORATORIES	1	15	161	91%	177
NEW YORK STATE ELR - LENCO MEDICAL LABORATORY		167	9	5%	176
PhysRgnIMCPineRidge		139	33	19%	172