Number Tells …Facts About
Covid-19 Pandemic in USA

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Source Data: https://www.worldometers.info/coronavirus/

Author's Foreword

I've been closely watching development of the global coronavirus pandemic since it began in Wuhan, China in January. Over this period of time, like most people, I went through curiousness, confusion, anxiety and panic due to lack of knowledge about this deadly virus.

To help myself understand this unprecedented pandemic and learn to how to deal with it, I, as a data mining and analytics expert, started collecting and analyzing daily data of published cases in a systematic way. From my daily tracking, I gradually observed some clear patterns of development of this virus. Most importantly, I reached to my own assessment of the current situation and trend of the pandemic in USA. As a result, I'm now less concerned much about this virus, more confident in winning this national battle against such an "invisible enemy" from Communist China.

This short slide summarizes some of my independent assessments on the current situation of this pandemic in USA. Up to now, few doctors and medical experts can provide clear and consistent advice on how to deal with this virus while enjoying our normal life with family and friends. I hope the next eight pages could help readers get some important insights on this pandemic so that they can live a normal life without fear. At the end, it's not wise to give up our happiness and freedom we have in this God-blessed land, and to let the government take over our lives, simply because of this unknown virus.

A Quick Glance: situation in USA looks no so bad….

Numbers…	USA	Worldwide
Key Measures	**18-Oct**	**Ranking**
Total Tests 1,000	125,684	2
% of POP	37.90%	20
Total Cases 1,000	8,388	1
% of POP	2.53%	12
% of Tests	6.7%	84
Total Death 1,000	224.7	1
% Total Cases	2.7%	60
ICU Cases 1,000	15.4	1
% of Total Cases	0.2%	64
Recovered Cases 1,000	5,457.7	2
% of Total Cases	65.1%	163
Active Cases 1,000	2,705	1
% of Total Cases	32.3%	45

Science: % measures provide more accurate pictures than those simple "Big" numbers

Facts…worst

- ☒ total cases No.1
- ☒ total number of death No.1
- ☒ total ICU/serious cases No.1
- ☒ total active cases No.1

Facts…best

- ☑ total tests No.2
- ☑ total recovered cases No.2

Facts…not so bad

- total cases in % of population No.12
- total cases / test positive in % of tests No.84
- death in % of total cases No.60
- ICU cases in % of total cases: No. 64
- active cases in % of total cases No,45

Much better now than 7 months ago... in all key measures

Numbers...

Statistics of USA Covid-19 Case

Key Measures	30-Mar	1-May	29-May	11-Jul	8-Aug	12-Sep	18-Oct
Total Tests 1,000	NA	6,700	16,811	41,770	64,611	91,704	125,684
% of POP	NA	2.02%	5.07%	12.62%	19.51%	27.67%	37.90%
Total Cases 1,000	164	1,138	1,803	3,356	5,150	6,677	8,388
% of POP	0.05%	0.34%	0.54%	1.01%	1.55%	2.01%	2.53%
% of Tests	NA	17.0%	10.7%	8.0%	8.0%	7.3%	6.7%
Total Death 1,000	3.1	65.8	104.5	135.4	165.1	198.1	224.7
% Total Cases	1.9%	5.8%	5.8%	4.0%	3.2%	3.0%	2.7%
ICU Cases 1,000	NA	16.5	17.2	15.8	18.0	14.4	15.4
% of Total Cases	NA	1.4%	1.0%	0.5%	0.3%	0.2%	0.2%
Recovered Cases 1,000	5.5	168.6	528.8	1,490.4	2,638.5	3,950.4	5,457.7
% of Total Cases	3.4%	14.8%	29.3%	44.4%	51.2%	59.2%	65.1%
Active Cases 1,000	155	904	1,169	1,730	2,346	2,528	2,705
% of Total Cases	94.7%	79.4%	64.9%	51.5%	45.6%	37.9%	32.3%

Facts...then

We experienced panic in March-April...

☒ test positive: >15% of total tests

☒ death rate: >5% of total cases

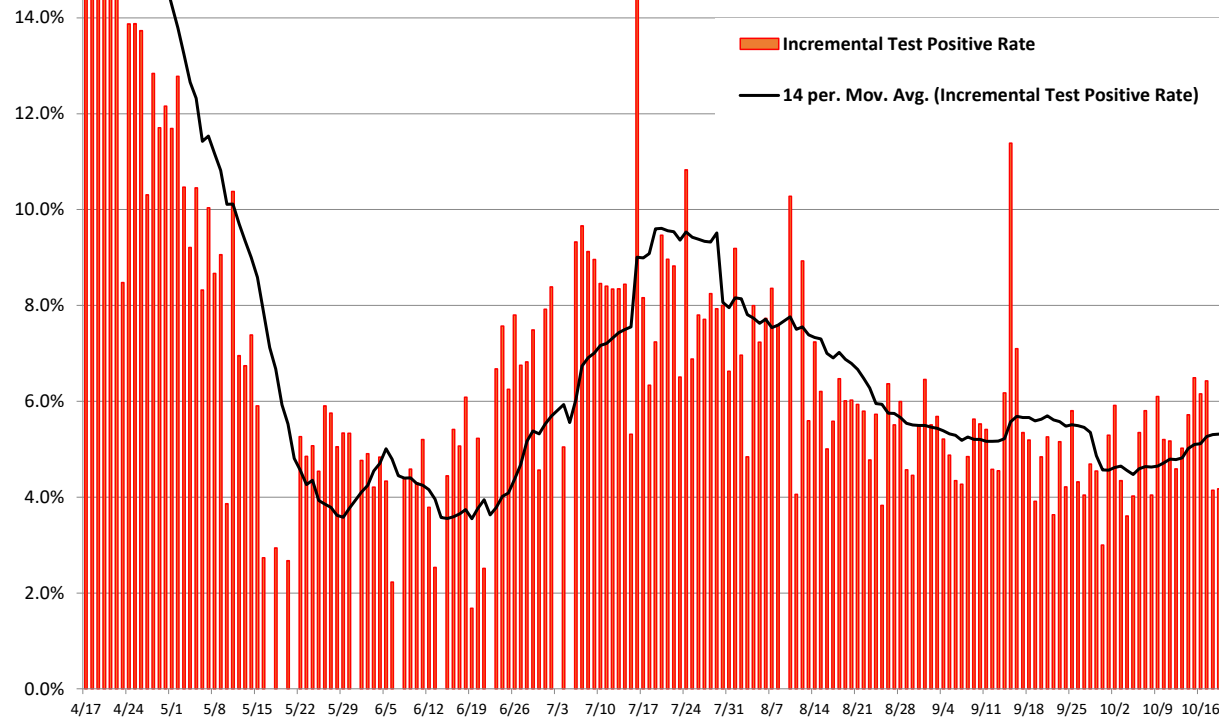☒ ICU cases: 1.4% of total cases

Facts...now

...after 7 months, we now have much less cases of

☑ test positive: <7% of total tests

☑ death: <3% of total cases

☑ ICU: 0.2% of total cases

The worst has passed... daily test positive rate lowest now

Chart...

Daily Incremental Test Positive Rate

Legend:
- Incremental Test Positive Rate
- 14 per. Mov. Avg. (Incremental Test Positive Rate)

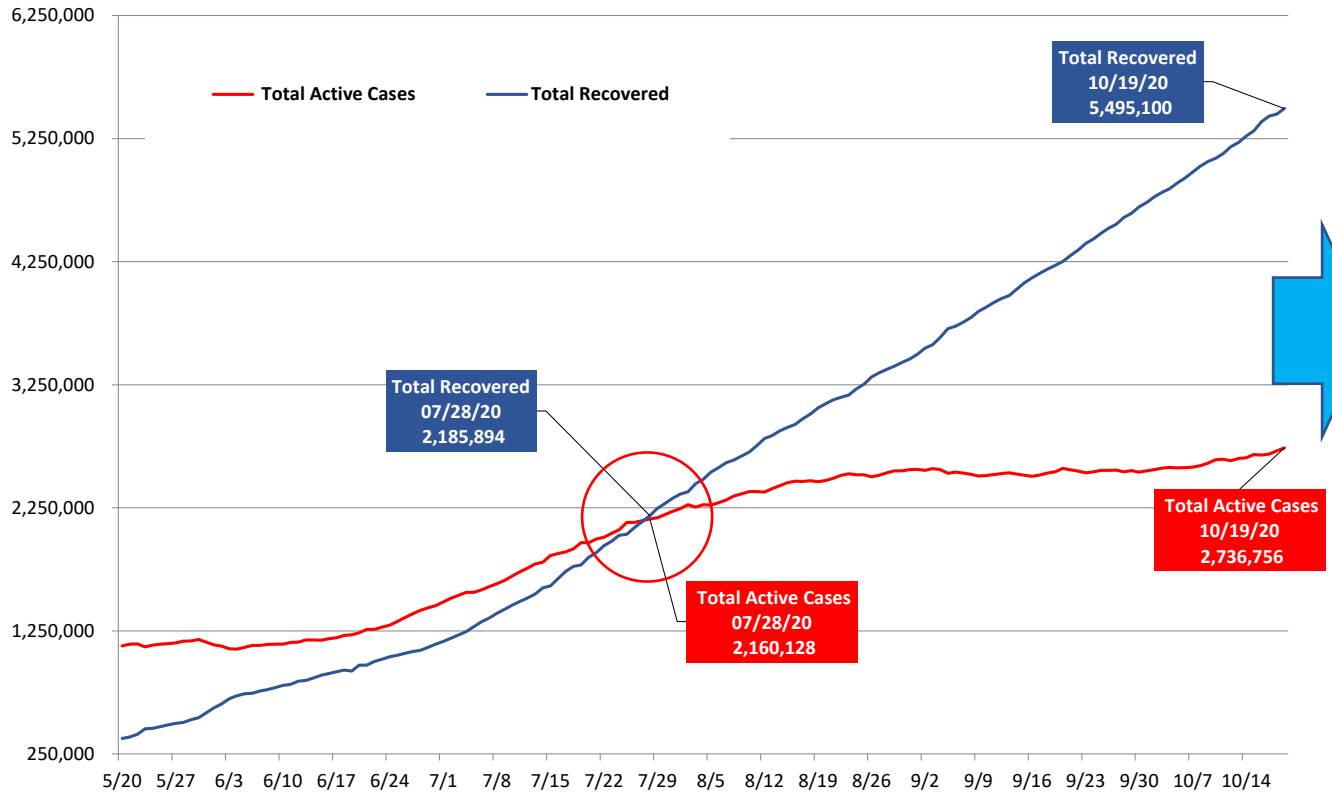Daily incremental test positive rate: daily new cases in % of daily tests

Facts...

Chance we got the coronavirus is 3-5 time lower now than 7 months ago

☒ Worst: 1st wave of the pandemic finished by end of May, with a peak daily test positive rate **> 15%** in Mid of April

☒ Worse: 2nd wave just finished by beginning of October, with a peak daily test positive rate **by 10%** in mid of July

☑ Best: 3rd wave is underway with daily test positive rate between **3- 6%**

The virus is much less contagious now and recent increase in daily cases was a result of dramatic increase in test

The worst has passed... steady recovery & flat active case numbers

Chart...

Chart showing Total Active Cases (red) and Total Recovered (blue) from 5/20 to 10/14. Key annotations:
- Total Recovered 10/19/20: 5,495,100
- Total Recovered 07/28/20: 2,185,894
- Total Active Cases 07/28/20: 2,160,128
- Total Active Cases 10/19/20: 2,736,756

Golden Cross: time when total recovered cases surpass total active cases. See the circle in the above chart.

Facts...

"Golden Cross" / turning point emerged, indicating that recovery started to be accelerated and, as a result, the pandemic got controlled

☑ Total recovered cases started to exceed active cases on 7/28

☑ More daily recovered cases than daily new cases in the past 2 and half month

☑ Steadily recovery

☑ flat active cases

☑ now we have recovered cases 2 times as many as the active cases

The Covid-19 Pandemic has been under good control in USA over past 3 months

The worst has passed… daily mortality rate lowest now

Chart…

Daily Incremental Death Rate

Legend: ■ Incremental Death Rate —— 14 per. Mov. Avg. (Incremental Death Rate)

Daily incremental death rate: daily death in % of total active cases in the previous date
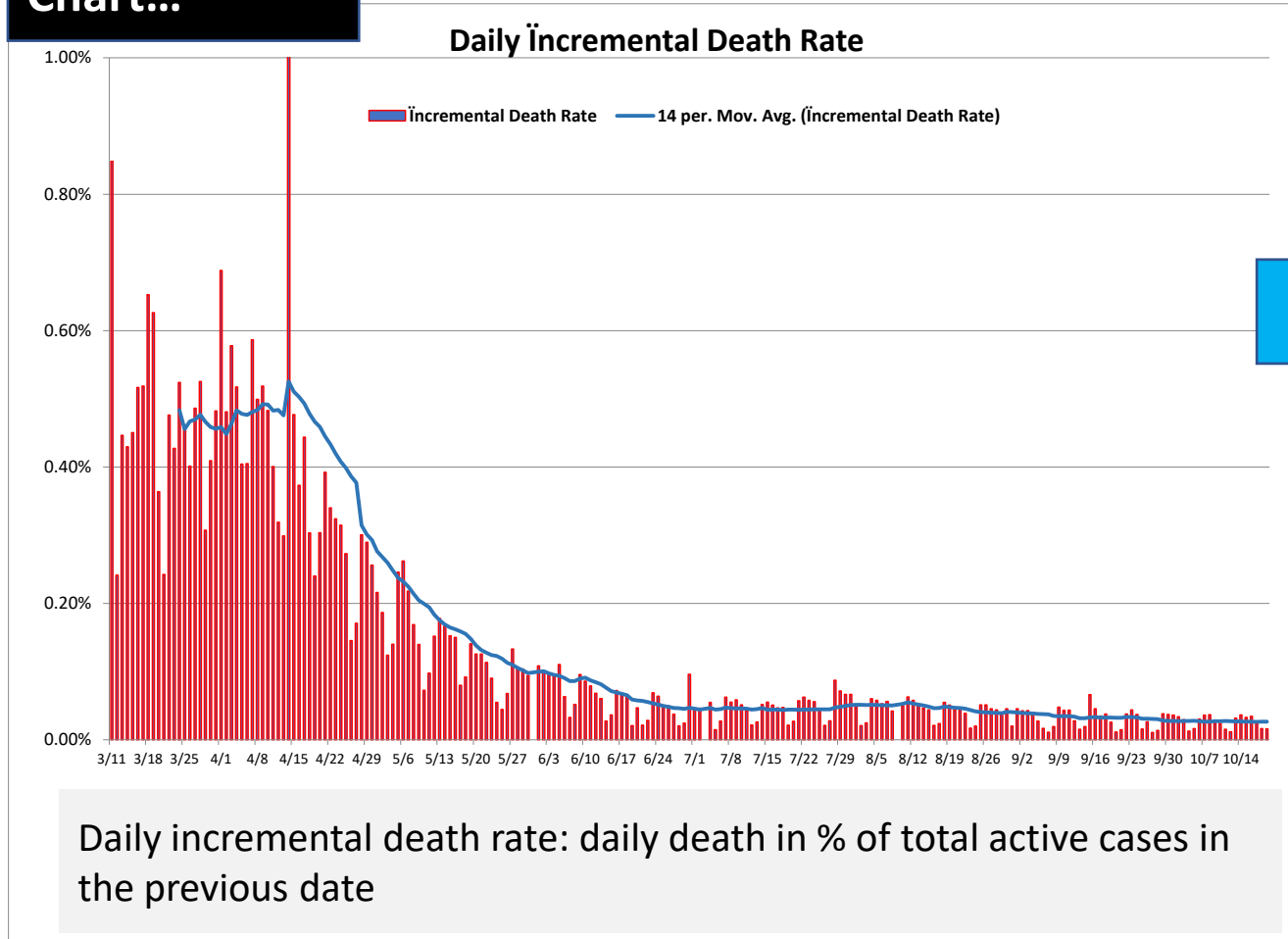
Facts…

If one gets infected now, the chance s/he dies is **0.03%** or 10-20 times lower than 7 months ago

☑ per 10,000 active cases, 3 die daily now comparing to 50 in March and April

☑ flat and downward daily death rate over past 4 months since mid of June

Comparison: CDC estimated 35 million Americans got sick with flu in 2018-19 and 0.1% of them died.

The virus becomes much less deadly now than 7 months ago , and eventually not be much deadly than flu as some experts claims

More numbers and evidence…we're getting better
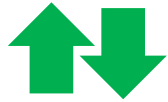
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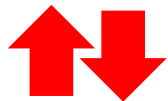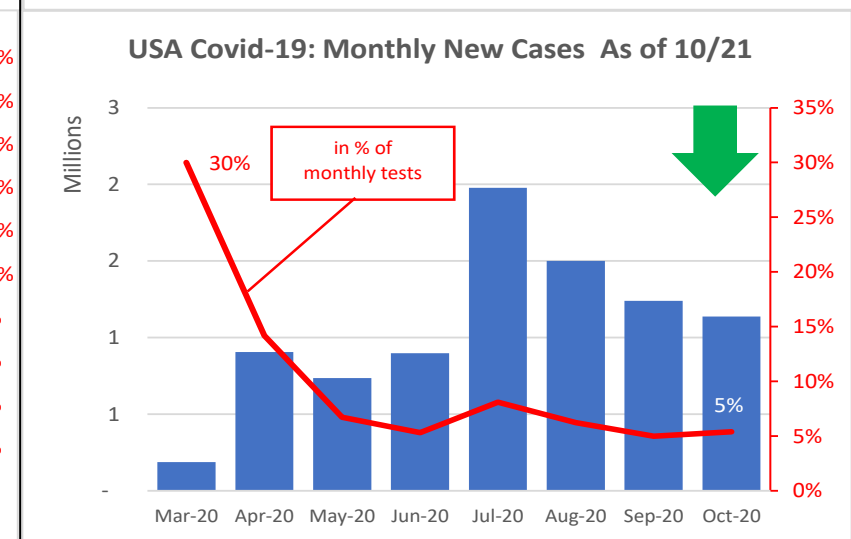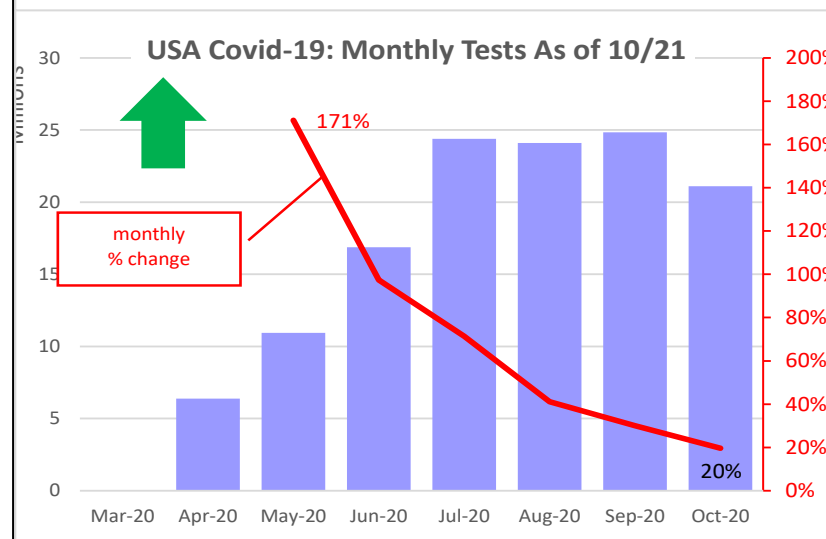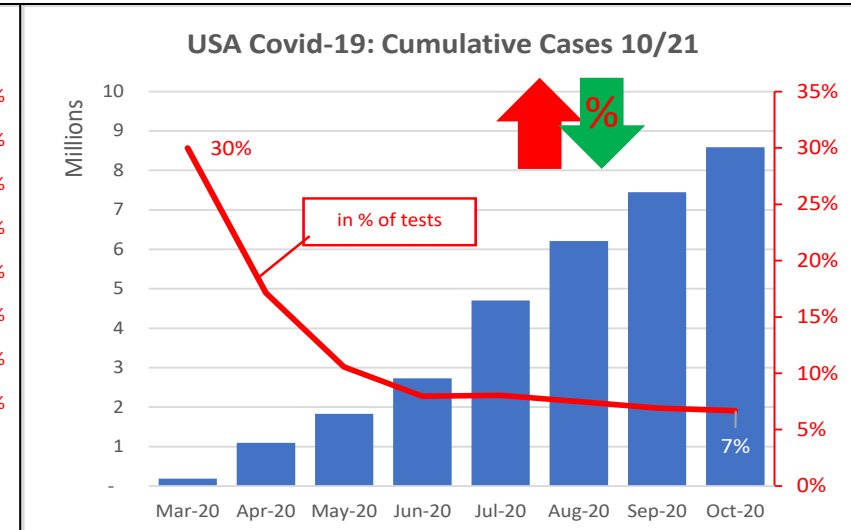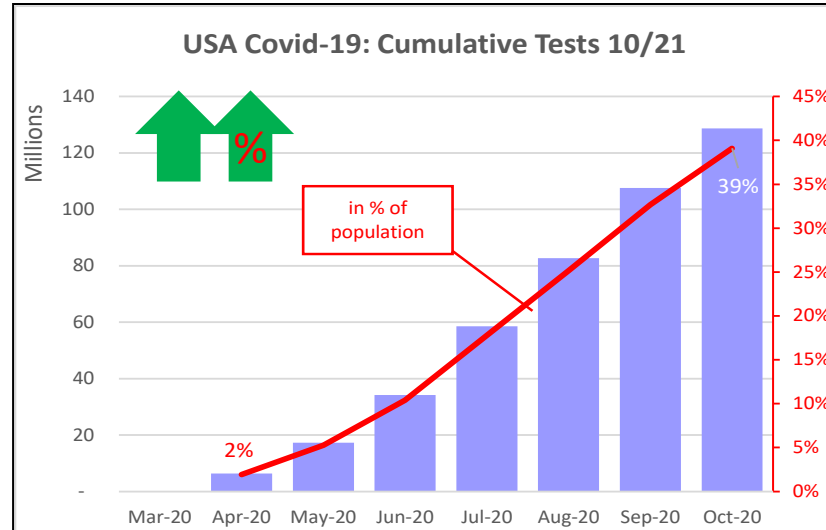
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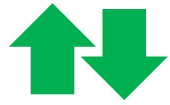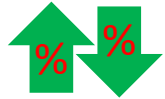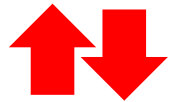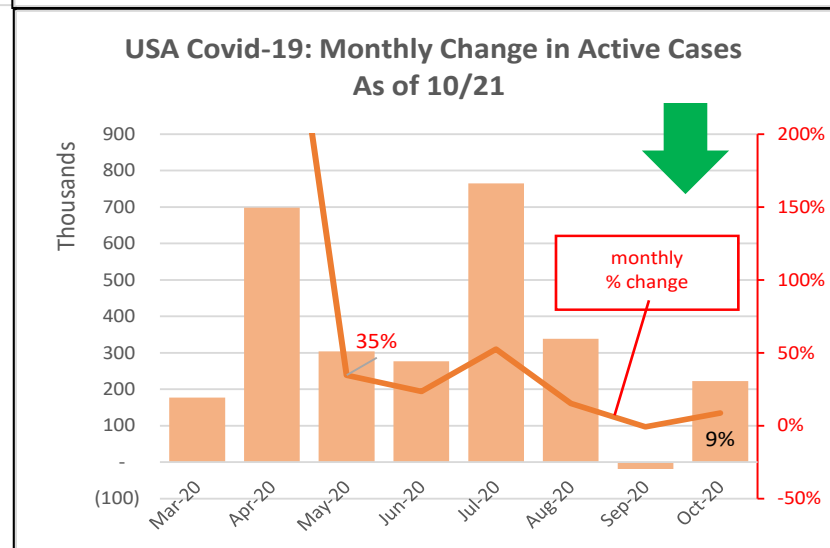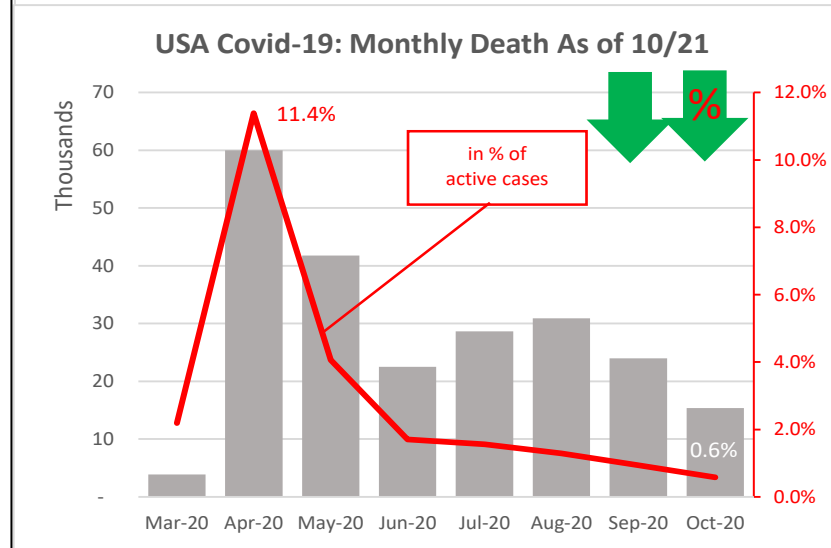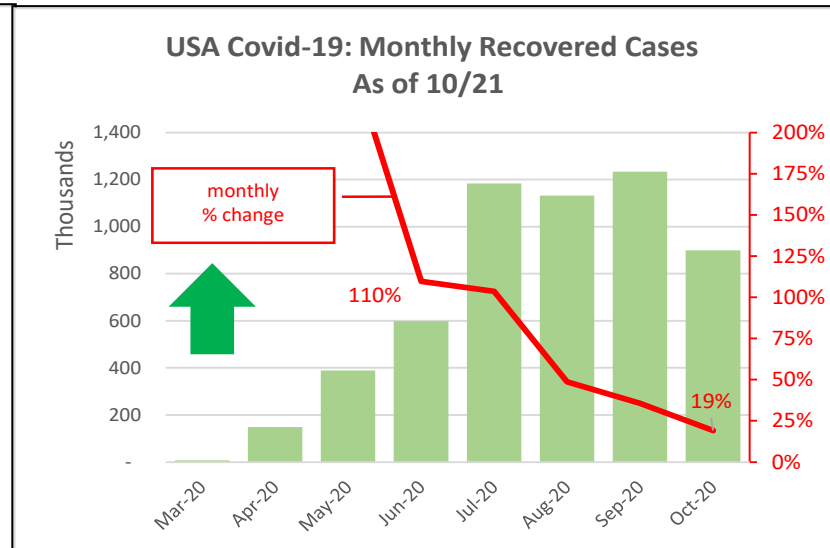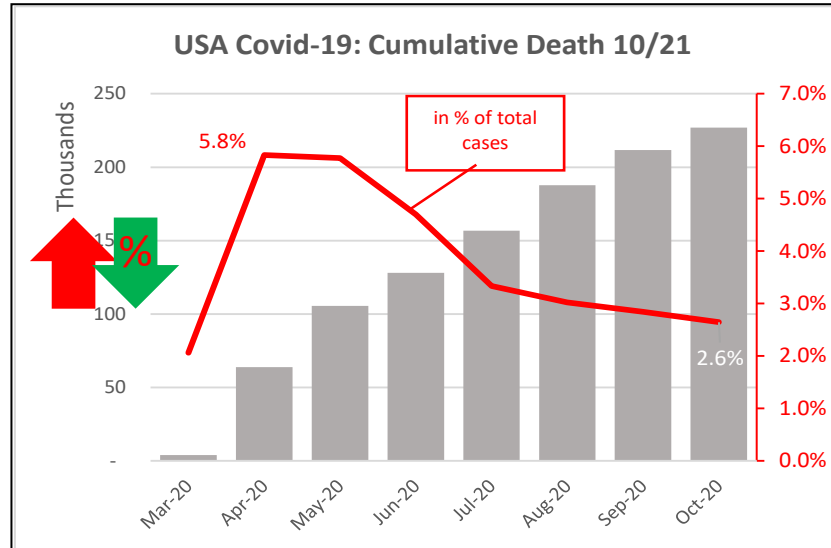
Conclusions

Numbers SUPPORT following assessments:

- ☑ We're not so bad
- ☑ We're much better now than 7 months ago
- ☑ The worst has passed

Numbers DO NOT support following claims:

- ☒ "we're the worst" (Joe Biden and radical media)
- ☒ "it would get worse in winter" (Fauci)
- ☒ "we won't be able to get normal until we have vaccine in mid of 2021" (Bill Gates)

"Don't be afraid of it. You're going to beat it. Don't let it take over your lives." (Quote from President Trump after he was released from hospital on October 5, 2020)