#### **PA Vaccine Conversations on Twitter**

Dr. Iuliia Alieva, Dawn Robertson, Dr. Kathleen M. Carley Vaccine Hesitancy Project Update based on June 3, 2022 - June 9, 2022

The CMU centers for:

Informed DEmocracy And Social cyber-security

Computational Analysis of Social and Organizational Systems



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## **PA Vaccine Conversations Project**

- ☐ This report is an effort to summarize social media conversations around COVID-19 issues in Pennsylvania, with a focus on vaccination. It contains an analysis of the general topics related to COVID-19 vaccination. This includes discussions related to COVID-19 regulations, mandates, masks, pro-and anti-vaccination campaigns, science messages, misinformation, disinformation, conspiracy theories, and vaccine hesitancy messages.
- □ Anti-Vax messaging includes vaccine hesitancy messages, opinions, questions, policy health and science related information, misinformation, disinformation, and conspiracy theories.

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#### Report Overview June 3 - June 9

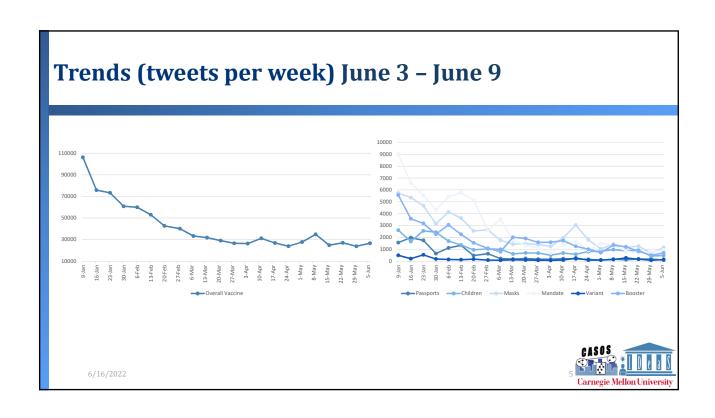
- ☐ Mandates, masks, racism, FDA approval, heart issue, and vaccine side effects are trending this week;
- ☐ Trending stories: trib.al/NISMW9E Special Olympics reverses vaccine mandate after DeSantis threatens \$27m fine; phmpt.org/pfizers-documents Pfizer's Documents;
- □ Anti-vax, disinformation, and vaccine hesitancy stories: <a href="rumble.com/v174zbr-new-pfizer-releases-more-documents.html">rumble.com/v174zbr-new-pfizer-releases-more-documents.html</a> NEW: Pfizer Releases More Documents; <a href="dossier.substack.com/p/ghost-shot-pfizer-quietly-admits">dossier.substack.com/p/ghost-shot-pfizer-quietly-admits</a> Ghost Shot: Pfizer quietly admits it will never manufacture original FDA approved COVID vaccines; <a href="israelnationalnews.com/news/328529">israelnationalnews.com/news/328529</a> New study links COVID vaccines to 25% increase in cardiac arrest for both males & females; <a href="amgreatness.com/2022/05/30/whisteblowers-lawyer-pfizer-got-away-with-vaccine-fraud-because-government-was-co-conspirator">dosument-was-co-conspirator</a> Whisteblower's Lawyer: Pfizer Got Away With Vaccine Fraud Because Government Was Co-Conspirator
- Popular anti-vax tweets: "A Pfizer document reveals between 82-97% of pregnant women lost their babies. 45% of the 270 pregnant mothers reported adverse clinical events, and more than 60% of these were serious." Great work @JesseKellyDC <a href="https://t.co/0j00TA3vce">https://t.co/0j00TA3vce</a>; Let's repeal Pfizer's immunity before we discuss repealing gun manufacturers immunity; The released Pfizer documents are devastating to the COVID cult; The CEO of Pfizer, the head of the CIA, the Director of the NSC, the VP of Facebook, the King of Holland and the Secretary General of NATO are all secretly meeting right now behind closed doors in DC. It's called Bilderberg, & not a single major media outlet has reported on it; The Pfizer documents show they knew that 35 teenagers had heart damage a week after being injected with MRNA vaccines and did not tell the public

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# **Countering disinformation June 3 – June 9**

- □ The most popular stories and tweets this week spread disinformation about Pfizer documents: <a href="mailto:rumble.com/y174zbr-new-pfizer-releases-more-documents.html">rumble.com/y174zbr-new-pfizer-releases-more-documents.html</a> NEW: Pfizer Releases More Documents; "A Pfizer document reveals between 82-97% of pregnant women lost their babies. 45% of the 270 pregnant mothers reported adverse clinical events, and more than 60% of these were serious." Great work @JesseKellyDC <a href="https://t.co/0j00TA3vce">https://t.co/0j00TA3vce</a>
- □ Several fact-checking stories provide details about allegations made three days after more than 80,000 pages of Pfizer COVID-19 data was made public and explain why those claims are false. Experts told USA TODAY the claim is based off a misinterpretation of data from a post-surveillance data report Pfizer published in 2021. The data in the report, which includes deaths and adverse events, does not specify whether the vaccine caused any of these health outcomes
- □ USA Today also debunks a claim about vaccine 12% efficacy rate and fetus harm <a href="https://www.usatoday.com/story/news/factcheck/2022/06/09/fact-check-false-claims-stem-80-000-page-pfizer-release/9664481002/">https://www.usatoday.com/story/news/factcheck/2022/06/09/fact-check-false-claims-stem-80-000-page-pfizer-release/9664481002/</a>
- □ Similar fact-checking stories were published by Reuters: <a href="https://www.reuters.com/article/factcheck-covid19-vaccine-idUSL2N2X]12Z">https://www.reuters.com/article/factcheck-covid19-vaccine-idUSL2N2X]12Z</a> Fact Check-Pfizer documents do not show that COVID-19 vaccine has 12% efficacy; <a href="https://www.reuters.com/article/factcheck-screenshot-pfizer-idUSL1N2X015E">https://www.reuters.com/article/factcheck-screenshot-pfizer-idUSL1N2X015E</a> Fact Check-Canadian outlet Global News did not report that Pfizer's COVID-19 vaccine recorded a 12% efficacy rate
- ☐ It is necessary to ensure that fact-checking links are widely shared. The suggestion is to promote them via social media communication; also, through partnerships with local organizations and communities who would share this information or similar fact-checking details from journalists and researchers in the media.



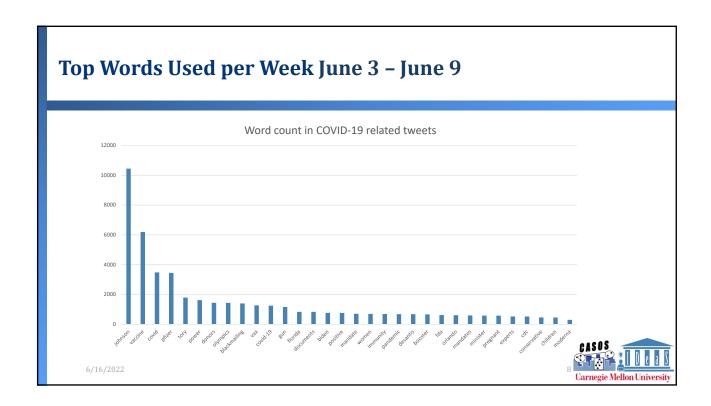
#### **High Level View by City June 3 - June 9** Conversation topics trending this week Tweets Overall Vaccine 53.1% 6641 30.4% 161 11.3% 975 4.5% over last Racism Vaccine Passports 0.4% 0.6% 13 0.5% FDA Approval 153 85 0.7% 38 0.6% 28 1.1% 2 0.2% Masking Boosters 400 237 2.0% 82 1.2% 2.5% 49 2.0% 28 2.9% FDA Approval Employees 28 18 0.2% 5 0.1% 0.2% **Heart Issues** 0.6% "Experimental" 78 56 0.5% 0.1% 12 0.5% 1.6% 0.9% Children 317 188 73 1.1% 3 1.9% 1.8% 9 0.6% 0.2% Myocarditis 85 52 0.4% 21 0.3% 1 0.4% 2 368 187 1.6% 1.2% 3.3% 13 82 2.5% 1.3% Heart 1131 548 4.7% 390 5.9% 1.9% 105 4.3% 85 8.7% Masks 3 0.0% Thrombosis/VITT 22 16 0.1% 0.0% 2 0.2% 853 582 5.0% 138 2.1% 3.1% 3.8% 34 3.5% Mandates 0.2% 0.2% 35 23 0.1% Natural Immunity Efficacy 0.7% Omicron 0.3% 0.7% 0.8% Delta Variant 11.5% 7.2% 3.8% Race 26 Ivermectin 64 38 0.3% 0.2% 0.4% 6/16/2022

### High Level View by County June 3 – June 9

County	Allegheny	Beaver	Butler	Cambria	Fayette	Indiana	Somerset	Westmoreland
Overall Vaccine	6800	33	22	10	10	4	3	28
Vaccine Passports	17							
FDA	38							
Boosters	85		1	1				
Employees	5							
"Experimental"	9							
Children	73							
Myocarditis	22					1		
Heart	82		1					
Masks	408	5	3	2				1
Thrombosis/VITT	3							
Mandates	143	3	1					1
Natural Immunity	8							
Efficacy	15							1
Omicron	25							
Delta Variant	17							
Race	481		1	1			1	
Ivermectin	2							
Military	14					1		
Breakthrough	4							

 Race: pulled by one of the vaccine keywords plus at least one other term in ("Black", "African American", "of color", "Latin", "Hispanic", "brown", "eugenic")





#### **Top Hashtags by County June 3 - June 9**

■ We've checked hashtags in several counties such as Allegheny, Beaver, Butler, Cambria, Fayette, Indiana, Somerset, and West Moreland. After removing hashtags that were part of our search criteria, the top 5 hashtags for each county related to COVID19/vaccines are as follows\*:

Allegheny	Beaver + Butler	Somerset	West Moreland
pfizer (88)	covidvaccine (3)	Covid (1)	h2p (1)
ussliberty (61)	covid_19 (2)		myocarditis (1)
covid19 (55)	coronavirus (1)		pfizer (1)
partygate (39)	covidvaccination (1)		
pfizerdocuments (28)	maskmandate (1)		

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#### **Top Hashtags by City June 3 - June 9**

☐ After removing hashtags that were part of our search criteria, the top 5 hashtags for each region related to COVID19/vaccines are as follows:

Philadelphia	Chester	Norristown	Pittsburgh	Erie	Allentown/ Bethlehem	Other
pfizer (120)	covidvaccine (12)	pfizer (40)	pfizer (88)	borisjohnsonmustgo (3)	pfizer (55)	covid19 (10)
covid19 (108)	pfizer (12)	vaccinedeaths (28)	ussliberty (61)	desantisdestroysflorida (3)	covid19 (38)	pfizer (6)
cdnpoli (73)	covid19 (9)	trump (24)	covid19 (54)	wtpblue (3)	covidvaccine (27)	pitt (6)
vaccine (48)	health (8)	billgates (23)	partygate (39)	covid19 (2)	pfizerdocs (19)	pfizerdocs (5)
pfizerdocuments (30)	coronavirustips (6)	monkeypox (23)	pfizerdocuments (28)	demvoice1 (2)	pfizerdocuments (18)	h2p (4)



#### **Top URLs by County June 3 - June 9** Fayette Allegheny Butler + Beaver Indiana **West Moreland** amgreatness.com/2022/05/30/whisteblo thepolemicist.substack.com/p rumble.com/v174zbr-new-pfizer- link.theepochtimes.com/mkt\_app/researcher-/twitter-censorship-vaccine-risk-and Twitter Censorship, bbc.in/3xpNiSk As it happened: we-made-a-big-mistake-on-covid-19-vaccine 4469331.html Researcher: 'We Made a Time to move on, says foreign secretary after PM vote (1) eleases-more-documents.html NEW: Pfizer Releases More Pfizer Got Away With Vaccine Fraud Because Government Was Co-Conspirator (1) Vaccine Risk, and Myocarditis Mumbo-Jumbo (1) Documents (79) Big Mistake' on COVID-19 Vaccine (1) $\frac{the times co.uk/article/f096c3ee}{e330-11ec8bdd-c253e043f5f0} \frac{the gateway pundit.com/2022/06/cde-follows-science-recommending-masks-non-airborne-masks-non-airb$ e330-11ec-8bdd-c253e043f5f0 Queen's thanksgiving service: Boos and jeers for Boris Johnson outside Recommending-masks-non-airborne-monkeypox-virus CDC 'Follows The Science' Recommending Masks For The Non-Airborne twitter.com/i/broadcasts/1YqIDqnbogNxV Gov. DeSantis Applauds Special Olympics for Dropping Vaccine Mandate (1) 1362581 Ron DeSantis Bullied the Special Olympics Into Dropping Its St Paul's (63) Monkeypox Virus (1) Vaccine Requirement (1) townhall.com/tipsheet/scottmorefield/2022/0 6/05/new-study-mask-mandates-associated-027878912 UK Prime Minister gatesnotes.com/Health/Vaccinate-the-world-in-six-months/Vaccinate with-increased-covid-death-rate-n2608241 Boris Johnson wins confidence vote and will remain as prime minister e-world-in-six-months Vaccinate the world in six months (38) New Study Alleges Mask Mandates Associated (1) With Increased Covid Death Rate (1) washingtonpost.com/opinions/202 2/06/01/baby-autopsy-hibdossier.substack.com/p/ghost-shot-pfizer-quietly-admits Ghost Shot: advisers-back-novavax-covid-19-shots-as-new us-option FDA advisors back Novavax COVID-Pfizer quietly admits it will never vaccine-antivax I'll never forget manufacture original FDA approved COVID vaccines (30) performing an autopsy on an

unvaccinated baby (1)

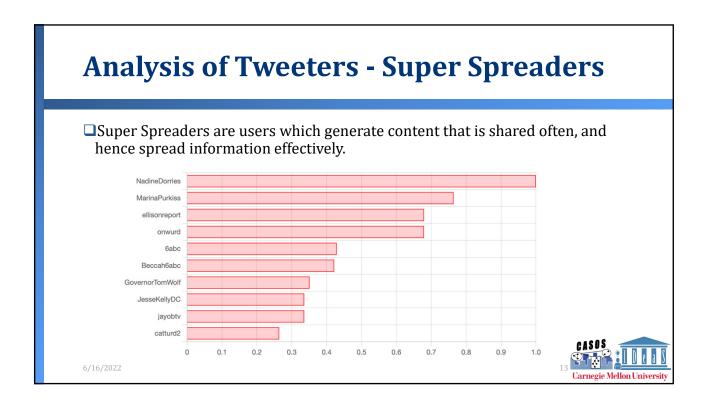
19 vaccine as a new U.S. option (1)

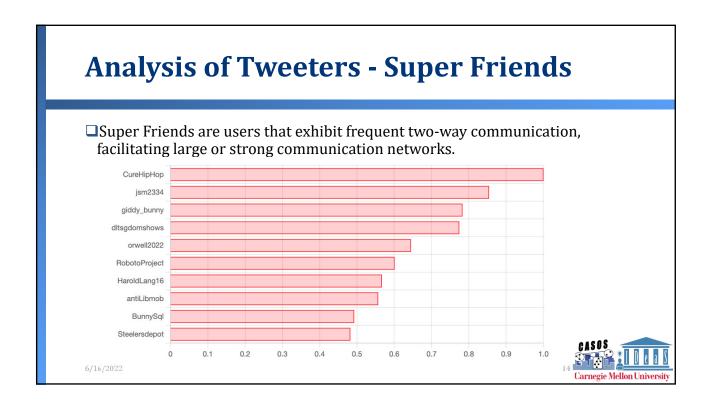
zerohedge.com/covid-19/peer-reviewedstudies-confirm-vaccine-and-mask-mandates-did-not-stop-covid-spread-schools Peer-Reviewed Studies Confirm Vaccine/Mask

Mandates Did Not Stop COVID Spread In Schools & Universities (1)

mpt.org/pfizers-documents Pfizer's Documents (22)

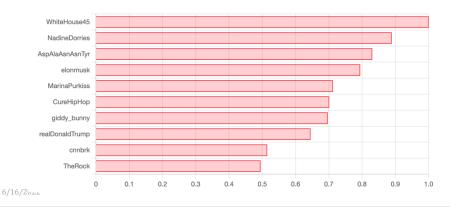
Philadelphia	Chester	Norristown	Pittsburgh	Erie	Allentown/ Bethlehem	Other
tribal/NISMW9E Special Olympics reverses vaccine mandate after DeSantis threatens \$27m fine (110)	lovephillydelco.substack.com/p/update-getting-vaccinated-in-philly UPDATE: Getting Vaccinated in Philly & DelCo (31)	thetimes.co.uk/article/f096c3ee-e330-11ec- 8hdd-c253e0431510 Queen's thanksgiving service: Boos and jeers for Boris Johnson outside St Paul's (22)	rumble.com/v174zbr-new- pfizer-releases-more- documents.html NEW: Pfizer Releases More Documents (79)	aol.com/florida-threatened- special-olympics-27m- 184702464.html Florida threatened Special Olympics with \$27M fine over COVID-19 vaccine mandate (2)	dossier.substack.com/p/ghost -shot-pfizer-quietly-admits Ghost Shot: Pfizer quietly admits it will never	phmpt.org/pfizers-docum Pfizer's Documents (5
israelnationalnews.com/news/328529 New study links COVID vaccines to 25% increase in cardiac arrest for both males & females (63)	rumble.com/v174zbr-new- pfizer-releases-more- documents.html NEW: Pfizer	beta-ctvnews.ca/national/coronavirus/2022 /5/31/1 5925930.amp.html Federal COVID- 19 border restrictions extended for another month (15)		rumble.com/v174zbr-new- pfizer-releases-more- documents.html NEW: Pfizer Releases More Documents (2)	phmpt.org/pfizers-documents Pfizer's Documents (20)	nyti.ms/3NdQRjM Spec Olympics lifts a vaccine man its Games in Orlando after F threatens a fine. (4)
dossier.substack.com/p/ghos t-shot-pfizer-quietly-admits Ghost Shot: Pfizer quietly admits it will never manufacture original FDA approved COVID vaccines (37)	brownstone.org/articles/the- who-treaty-is-tied-to-a-global- digital-passport-and-id-system The WHO Treaty Is Tied to a Global Digital Passport and ID System (3)	channel4.com/news/tories-will-look-like- party-of-chaos-if-theres-no-confidence-vote- in-pm-spectator-editor-says Tories will look like 'party of chaos' if there's no confidence vote in PM, Spectator editor says (13)	gatesnotes.com/Health/Vacci nate-the-world-in-six- months.Vaccinate the world in six months (38)	apne.ws/hz9mS03_UK Boris Johnson's ups and downs: key events in his career (1)	rumble.com/v174zbr-new- pfizer-releases-more- documents.html NEW: Pfizer Releases More Documents (18)	link.theepochtimes.com/mk pfizer-asks-fda-to-authoriz covid-19-vaccine-doses-f children-under-5 4507053 Pfizer Asks FDA to Author COVID-19 Vaccine Doses Children Under 5 (3)
rumble.com/v174zbr-new- pfizer-releases-more- documents.html NEW: Pfizer Releases More Documents (34)	cbc ca/news/canada/british- columbia/bc-man-vaccine- injury-payout-1.6472636 B.C. man among first Canadians approved for COVID-19 vaccine injury payout (3)	thetimes.co.uk/article/boris-johnson-is- sleepwalking-into-an-inevitable-vote-of-no- confidence-0x9bnfmrw_Boris Johnson is- sleepwalking into an 'inevitable' vote of no confidence (13)	dossier.substack.com/p/ghos t-shot-pfizer-quietly-admits Ghost Shot: Pfizer quietly admits it will never manufacture original FDA approved COVID vaccines (30)	bddy.me/30aNa0m Erie VA Nursing Careers (1)	amgreatness.com/2022/05/3 0/whisteblowers-lawyer- pfizer-got-away-with-vaccine- fraud-hecause-government- was-co-conspirator Whisteblower's Lawyer: Pfizer Got Away With Vaccine Fraud Because Government Was Co- Conspirator (16)	vaccines.gov.(3)
phmpt.org/pfizers- documents Pfizer's Documents (33)	israelnationalnews.com/news/ 328529 New study links COVID vaccines to 25% increase in cardiac arrest for both males & females (3)	dossier substack com/p/ghost-shot-pfizer- quietly-admits Ghost Shot: Pfizer quietly admits it will never manufacture original FDA approved COVID vaccines (9)	phmpt.org/pfizers- documents Pfizer's Documents (20)	bioprocessonline.com/doc/wh at-s-next-for-covid-vaccines- with-tonix-pharmaceuticals- seth-lederman-m-d-0002 What's Next For COVID Vaccines With Tonix Pharmaceuticals' Seth Lederman. M.D. (1)	phmpt.org/wp- content/uploads/2022/06/12 5742 S1 M5 5351 c4591001-	amgreatness.com/2022/05 histeblowers-lawyer-pfize away-with-vaccine-fraud-be government-was-co-consp Whisteblower's Lawyer: Pfiz Away With Vaccine Fraud B- Government Was Co-Consp (2)





# **Analysis of Tweeters - Other Influencers**

□Other Influencers are users which have an active network presence, by tweeting often or mentioning users often, and operate in central parts of the conversation, such as by using important hashtags, or mentioning important users.





#### **Accounts Referenced by the Most Tweets**

☐ This shows the tweeters that are most often referenced (e.g. mentioned) in PA tweets. Value is the number of tweets that reference the agent.

Agent Label	Value
NadineDorries[+]	1517
JesseKellyDC[+]	453
GovRonDeSantis[+]	328
GovernorTomWolf[+]	274
POTUS[+]	263
pfizer[+]	219
catturd2	189
PeterStefanovi2[+]	144
BorisJohnson[+]	122
joeywreck	120
NadineDorries[+]	1517
JesseKellyDC[+]	453
GovRonDeSantis[+]	328



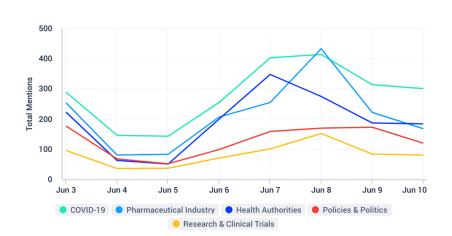
### **Trending Tweets June 3 - June 9**

Tweets that are the most forwarded, either by retweet, reply, or quote:

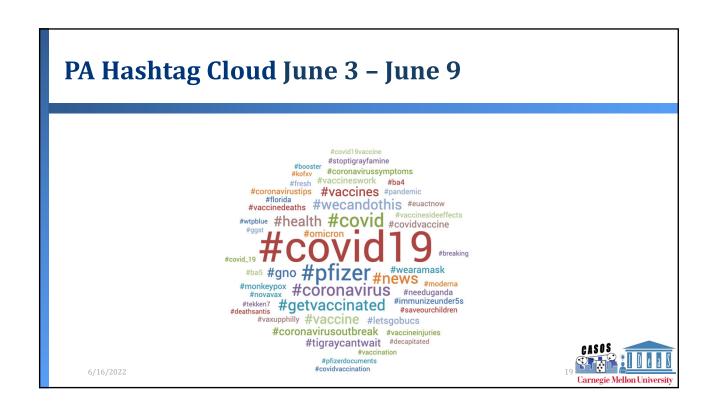
- ☐ I'm really developing a soft spot for Dorries... Here she is, happily telling us that Tory donors are blackmailing the party to keep Johnson in power You do you @NadineDorries https://t.co/BkyXLidys5:
- □ SCOOP: The State or Florida threatened the Special Olympics with \$27.5 MILLION in fines because the organization had a vaccine requirement at its games in Orlando this weekend. Late yesterday, the Special Olympics pulled the requirement. 1/3;
- Let's start with the COVID-19 pandemic. We were told by experts in infectious diseases that to control the spread of the pandemic, we had to socially distance, mask, and get vaccinated. So, in a general sense, we were being told what to do. Guess who had a big problem with that;
- □ "A Pfizer document reveals between 82-97% of pregnant women lost their babies. 45% of the 270 pregnant mothers reported adverse clinical events, and more than 60% of these were serious." Great work @JesseKellyDC <a href="https://t.co/0j00TA3vce">https://t.co/0j00TA3vce</a>;
- Let's repeal Pfizer's immunity before we discuss repealing gun manufacturers immunity;
- This evening, I tested positive for COVID. My symptoms are mild. I'm grateful that I recently got my second vaccine booster. I will be isolating at home according to CDC guidance;
- The released Pfizer documents are devastating to the COVID cult;
- ☐ This is what standing up for your rights is all about Isabella will now be able to compete in the Special Olympics because @GovRonDeSantis fought their vaccine mandate (which is illegal in FL) and won. Isabella's smile says everything. <a href="https://t.co/PkGUL3BQi9">https://t.co/PkGUL3BQi9</a>;
- □ The CEO of Pfizer, the head of the CIA, the Director of the NSC, the VP of Facebook, the King of Holland and the Secretary General of NATO are all secretly meeting right now behind closed doors in DC. It's called Bilderberg, & not a single major media outlet has reported on it;
- □ "Finally we can say the words 'party' and 'gate' and it's a positive" Comedian Lee Mack made a joke about Downing Street's partygate scandal in front of Boris Johnson and wife Carrie, who were watching the Jubilee show from the royal box <a href="https://t.co/Syv26i0qd0">https://t.co/Syv26i0qd0</a>;
- The Pfizer documents show they knew that 35 teenagers had heart damage a week after being injected with MRNA vaccines and did not to the pfizer documents show they knew that 35 teenagers had heart damage a week after being injected with MRNA vaccines and did not to the pfizer documents show they knew that 35 teenagers had heart damage a week after being injected with MRNA vaccines and did not to the pfizer documents show they knew that 35 teenagers had heart damage a week after being injected with MRNA vaccines and did not to the pfizer documents.

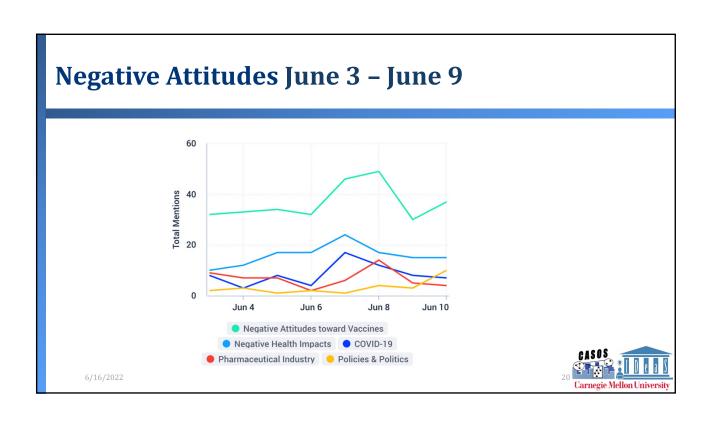
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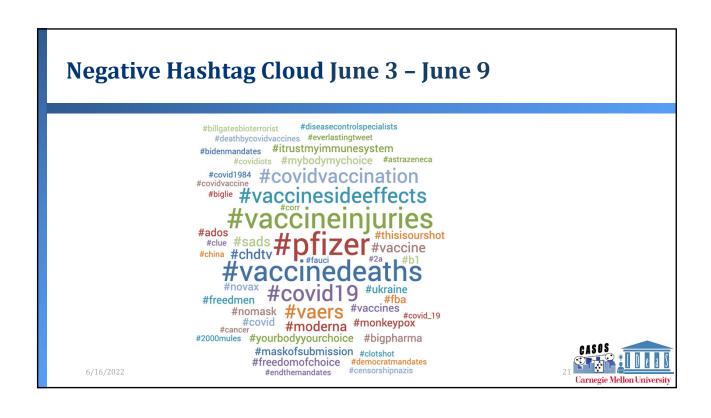
#### **General PA Conversation June 3 - June 9**



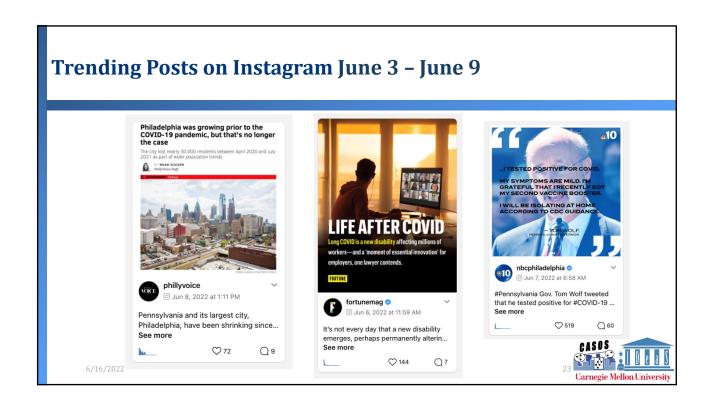


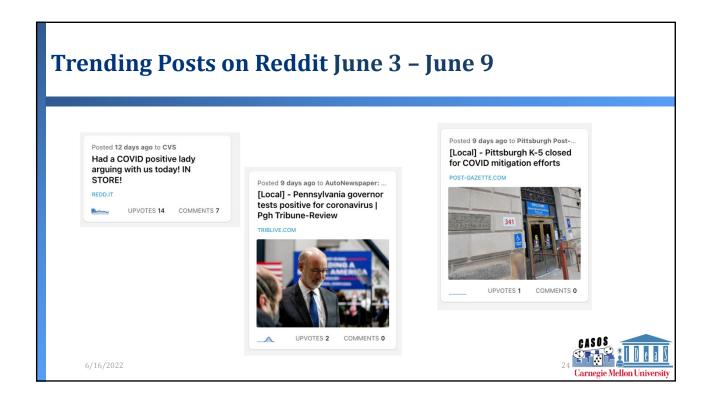












#### **For More Information**

- □ Director Kathleen M. Carley <u>kathleen.carley@cs.cmu.edu</u>
  - □ http://www.casos.cs.cmu.edu/bios/carley/carley.html
- ☐ IDeaS website <a href="https://www.cmu.edu/ideas-social-cybersecurity/">https://www.cmu.edu/ideas-social-cybersecurity/</a>
- ☐ CASOS website <a href="http://www.casos.cs.cmu.edu/">http://www.casos.cs.cmu.edu/</a>
- ☐ Social Cybersecurity Working Group <a href="http://social-cybersecurity.org">http://social-cybersecurity.org</a>
- ☐ Facebook: @IDeasCMU
- ☐ Twitter: @IDeaSCMU
- ☐ YouTube: <u>IDeaS Center</u>
- ☐ Ask to be on our Email-Distro Lists



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