

PA Vaccine Conversations and Misinformation on Twitter

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Vaccine Hesitancy Project Update based on September 24 – September 30, 2021

The CMU centers for:

Informed DEMocracy And Social cyber-security

Computational Analysis of Social and Organizational Systems



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1

1

- ❑ This report is an effort to summarize social media conversations around COVID-19 issues in Pennsylvania, focusing on vaccination. It contains an analysis of the general topics about the current pandemic, such as COVID-19 regulations, mandates, masks, pro-and anti-vaccination campaigns, as well as other topics related to COVID-19 misinformation, disinformation, conspiracy theories, and vaccine hesitancy messages.
- ❑ The material contained in this report is a summary of social media content and does not represent a judgment or characterization of any individual.

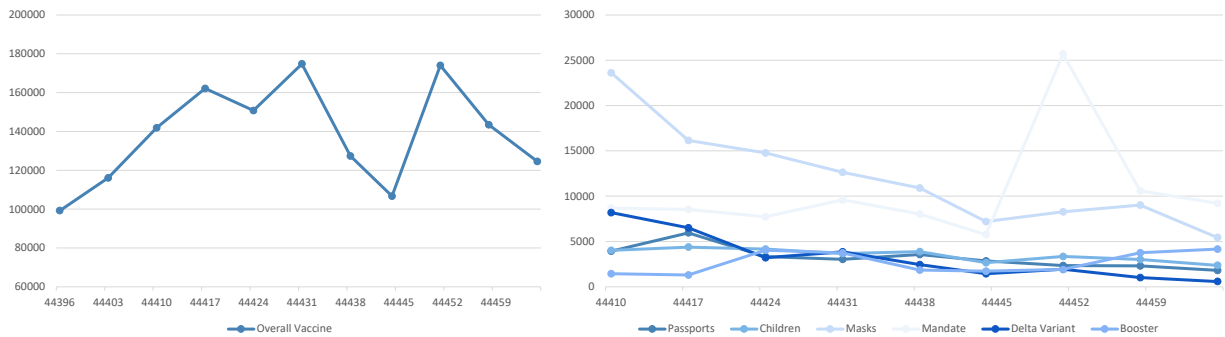
1/11/2022

2



2

Trends (tweets per week) September 24– September 30



1/11/2022



3

High Level View by City September 24 – September 30

	Total PA	Philadelphia		Pittsburgh		Erie		Allentown/Bethlehem		Other	
Conversation	Tweets	Tweets	%	Tweets	%	Tweets	%	Tweets	%	Tweets	%
Overall Vaccine	104169	60173	57.8%	22628	21.7%	1233	1.2%	16672	16.0%	3463	3.3%
Vaccine Passports	1796	916	1.5%	423	1.9%	32	2.6%	391	2.3%	34	1.0%
FDA Approval	409	200	0.3%	98	0.4%	5	0.4%	95	0.6%	11	0.3%
Boosters	4121	2135	3.5%	921	4.1%	73	5.9%	773	4.6%	219	6.3%
Misinfo: Shedding	35	13	0.0%	14	0.1%			6	0.0%	2	0.1%
"Experimental"	346	174	0.3%	74	0.3%	8	0.6%	78	0.5%	12	0.3%
Children	1733	864	1.4%	379	1.7%	19	1.5%	409	2.5%	62	1.8%
Myocarditis	163	89	0.1%	39	0.2%	2	0.2%	28	0.2%	5	0.1%
Heart	622	278	0.5%	179	0.8%	11	0.9%	131	0.8%	23	0.7%
Masks	5375	3221	5.4%	949	4.2%	75	6.1%	813	4.9%	317	9.2%
Infertility	22	16	0.0%	3	0.0%			2	0.0%	1	0.0%
Mandates	9163	4719	7.8%	1753	7.7%	159	12.9%	2181	13.1%	351	10.1%
Natural Immunity	2992	2093	3.5%	485	2.1%	10	0.8%	370	2.2%	34	1.0%
Efficacy	252	139	0.2%	53	0.2%	1	0.1%	49	0.3%	10	0.3%
Spike Proteins	143	80	0.1%	39	0.2%	1	0.1%	21	0.1%	2	0.1%
Delta Variant	1033	529	0.9%	248	1.1%	9	0.7%	196	1.2%	51	1.5%
Race	1781	940	1.6%	411	1.8%	20	1.6%	342	2.1%	68	2.0%
Ivermectin	410	199	0.3%	102	0.5%	9	0.7%	90	0.5%	10	0.3%
Military	1057	583	1.0%	215	1.0%	21	1.7%	211	1.3%	27	0.8%
Breakthrough	638	290	0.5%	213	0.9%	9	0.7%	97	0.6%	29	0.8%

1/11/2022



4

- Trending conversations:
 - Booster shots
 - Military
 - Immunity/breakthrough
- Rural/other regions have a higher than average % of mask related tweets

High Level View by County September 24 – September 30

County	Allegheny	Beaver	Butler	Cambria	Fayette	Indiana	Somerset	Westmoreland
Overall Vaccine	23195	34	80	19	40	19	13	133
Vaccine Passports	427		1		1			1
FDA	101				1			
Boosters	981	2	4	2			2	7
Misinfo: Shedding	15							
"Experimental"	78							
Children	393		2		2			
Myocarditis	42							
Heart	185		2		1			2
Masks	998	3	6	4	2	2	1	9
Infertility	3	1						
Mandates	1803	4	8		4	1	1	10
Natural Immunity	493		1					2
Efficacy	56		1					1
Spike Proteins	40							
Delta Variant	256		1		1			2
Race	422	1	1		1			1
Ivermectin	103				1			
Military	216							3
Breakthrough	216		1		1			1

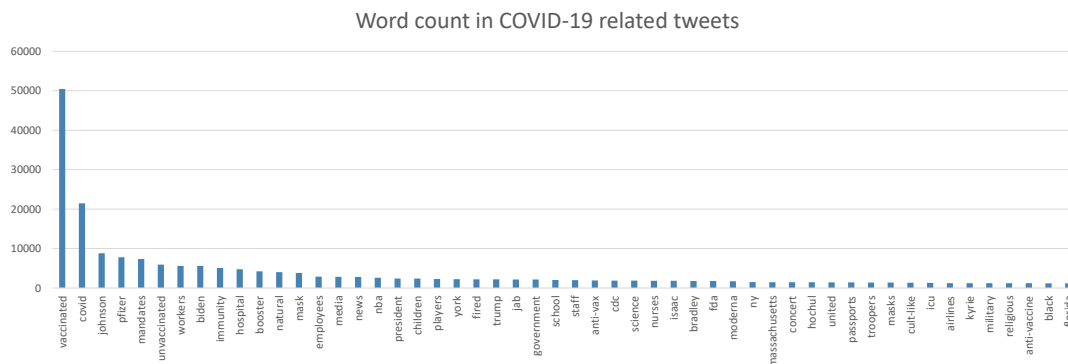
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- Tweets counted here if there is a county location attached
- Race: pulled by one of the vaccine keywords plus at least one other term in ("Black", "African American", "of color", "Latin", "Hispanic", "brown", "eugenic")



5

Top Words Used per Week September 24 – September 30



1/11/2022



6

Top Hashtags by County September 24 – September 30

□ 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	Cambria	Fayette	West Moreland
covid19 (587)	covid19 (2)	nba (1)	ripcity (2)	steelers (7)
steelers (215)	steelers (2)	ripcity (1)	covid19 (1)	covid19 (3)
vaccine (142)	getvaccinated (1)	vaccineswork (1)	firebreak (1)	covid (1)
healthcareheroes (130)	vaccine (1)	yourbodyyourchoice (1)	getvaccinated (1)	getvaccinated (1)
ripcity (129)	vaccinemandate (1)	onesharedpurpose (1)	onesharedpurpose (1)	getvaxxed (1)

1/11/2022



7

Top Hashtags by City September 24 – September 30

□ 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
covid19 (774)	covid19 (165)	covid19 (252)	covid19 (575)	covid19 (31)	covid19 (358)	covid19 (64)
nba (268)	nba (39)	vaccine (59)	steelers (203)	demvoice1 (19)	exposepharma (101)	getvaccinated (29)
yourbodyyourchoice (242)	demvoice1 (36)	getvaccinated (49)	vaccine (137)	getvaccinated (8)	nba (81)	steelers (25)
vaxupphilly (241)	yourbodyyourchoice (35)	novaccinepassport (38)	healthcareheroes (130)	covid (6)	yourbodyyourchoice (68)	nba (23)
ripcity (202)	vaccine (33)	novaccine (37)	exposepharma (125)	exposepharma (5)	vaccine (53)	yourbodyyourchoice (23)

1/11/2022



8

Top URLs by County September 24 – September 30

Allegheny	Butler + Beaver	Cambria	Fayette	West Moreland
https://www.readingeagle.com/2021/09/24/covid-reading-hospital-nurse-vaccine/amp/?twitter_impression=true A Reading Hospital nurse died from COVID. Her dying wish? Get the vaccine (130)	https://pittsburghhockeynow.com/pittsburgh-penguins-evaluating-prospects-vax-nhl-trade-drama-canucks/ Dan's Daily: Vax & Trade Drama for Canucks, Evaluating Penguins Prospects (2)	https://bit.ly/3zIR0cw Ultra IT Lead Support Analyst (1)	http://hill.cm/TfMH0Ry YouTube bans accounts with vaccine misinformation (1)	https://www.washingtonpost.com/technology/2021/09/29/youtube-ban-joseph-mercera/ YouTube is banning prominent anti-vaccine activists and blocking all anti-vaccine content (2)
https://www.zerohedge.com/covid-19/pfizer-launches-final-study-covid-drug-thats-suspiciously-similar-ivermectin Pfizer Launches Final Study For COVID Drug That's Suspiciously Similar To 'Horse Paste' (115)	https://trib.al/lf2LFeP North Carolina hospital system fires about 175 workers over vaccine mandate (2)	https://nbcnews.to/3zG87y1 CDC advisers sign off on Pfizer booster shot for certain groups (1)	https://anchor.fm/sharise-johnson-moore/episodes/Daily-Devotional--September-18--2021--Genesis-141-24-e180j9o Sharise Johnson-Moore's Podcast (1)	http://apple.co/whataaday What A Day Podcast (1)
https://thehill.com/business-a-lobbying/business-a-lobbying/574387-nba-struggles-with-vocal-vaccine-holdouts NBA struggles with vocal vaccine holdouts (98)	https://www.nbcnews.com/tech/tch-news/youtube-cracks-anti-vaccine-videos-bans-major-accounts-rcna2400 YouTube cracks down on anti-vaccine videos, bans major accounts (2)	https://nyti.ms/3ktm0Up F.D.A. Authorizes Pfizer Booster Shots for Older and At-Risk Americans (1)	https://cnb.cx/3ubX0cB Pfizer CEO Albert Bourla predicts normal life will return within a year and adds we may need annual Covid shots (1)	http://dlyr.it/S8R3hf Democrat Gov. Hochul Says Un-Vaxed Christians 'Aren't Listening To God,' 'God Wants' You Vaccinated (1)
https://floridapolitics.com/archives/458805-diaz-review-vaccine-mandates/ Manny Diaz wants to 'review' existing non-COVID-19 vaccine mandates (90)	https://bit.ly/39GUHtX Sport podcast (2)	https://thehill.com/business-a-lobbying/business-a-lobbying/574387-nba-struggles-with-vocal-vaccine-holdouts NBA struggles with vocal vaccine holdouts (1)	https://globalnews.ca/news/8220965/icu-edge-of-cliff-alberta-sept-25/ Edmonton family with father in ICU for surgery complications witnessed 'surreal,' 'horrific scenes' (1)	http://Whitehouse.gov/covidplan PRESIDENT BIDEN'S COVID-19 ACTION PLAN (1)
https://wapo.st/39I9yVh N.C. hospital system fires about 175 workers in one of the largest-ever mass terminations due to a vaccine mandate (89)	https://bit.ly/3AO2ih CDC advisers try to work out the details on booster shots (2)	https://www.nytimes.com/2021/08/21/opinion/arkansas-vaccine-hesitant.html?smid=tw-share Dying in the Name of Vaccine Freedom (1)	https://trib.al/w7JlyRG NYS workers who are fired for not getting vaccinated won't be eligible for unemployment insurance, governor announces (1)	https://babylonbee.com/news/in-order-to-get-christian-women-to-take-vaccine-it-will-now-be-distributed-via-a-pyramid-scheme In Order To Appeal To Suburban Christian Women, Vaccine To Be Distributed Through A Pyramid Scheme (1)

1/11/2022



9

Top URLs by City September 24 – September 30

Philadelphia	Chester	Norristown	Pittsburgh	Erie	Allentown/Bethlehem	Other
https://www.medrxiv.org/content/10.1101/2021.08.24.21262415v1 Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity: reinfections versus breakthrough infections (284)	https://thepostmillennial.com/new-york-governor-unvaccinated-health-care-workers-foreigners/ New York governor threatens to replace unvaccinated health care workers with foreigners (85)	https://www.thegatewaypundit.com/2021/09/wayne-root-police-fire-military-gutted-vaccine-mandate-chinas-plan-destroy-usa WAYNE ROOT: Police, Fire, Military Being Gutted by Vaccine Mandate. Is This China's Plan to Destroy USA? (132)	https://www.readingeagle.com/2021/09/24/covid-reading-hospital-nurse-vaccine/amp/?twitter_impression=true A Reading Hospital nurse died from COVID. Her dying wish? Get the vaccine (130)	https://floridapolitics.com/archives/458805-diaz-review-vaccine-mandates/ Manny Diaz wants to 'review' existing non-COVID-19 vaccine mandates (6)	https://thehill.com/business-a-lobbying/business-a-lobbying/574387-nba-struggles-with-vocal-vaccine-holdouts NBA struggles with vocal vaccine holdouts (69)	https://thehill.com/business-a-lobbying/business-a-lobbying/574387-nba-struggles-with-vocal-vaccine-holdouts NBA struggles with vocal vaccine holdouts (23)
https://thehill.com/business-a-lobbying/business-a-lobbying/574387-nba-struggles-with-vocal-vaccine-holdouts NBA struggles with vocal vaccine holdouts (237)	https://www.nytimes.com/2021/09/24/world/covid-boosters-vaccine-cdc-director.html C.D.C. Chief Overrules Agency Panel and Recommends Pfizer-BioNTech Boosters for Workers at Risk (57)	https://www.zerohedge.com/covid-19/pfizer-launches-final-study-covid-drug-thats-suspiciously-similar-ivermectin Pfizer Launches Final Study For COVID Drug That's Suspiciously Similar To 'Horse Paste' (50)	https://www.zerohedge.com/covid-19/pfizer-launches-final-study-covid-drug-thats-suspiciously-similar-ivermectin Pfizer Launches Final Study For COVID Drug That's Suspiciously Similar To 'Horse Paste' (115)	https://twitter.com/ScooterCasterNY/status/1441817704483196932 Dozens of Anti-mandate activists have entered a vaccinated only food court in Staten Island chanting "USA USA" (5)	https://floridapolitics.com/archives/458805-diaz-review-vaccine-mandates/ Manny Diaz wants to 'review' existing non-COVID-19 vaccine mandates (56)	https://twitter.com/ScooterCasterNY/status/1441817704483196932 Dozens of Anti-mandate activists have entered a vaccinated only food court in Staten Island chanting "USA USA" (21)
https://bbc.in/3KAcVw Covid-19 in Wales: At least 175 cases are unvaccinated (233)	http://hill.cm/Kj6KGV United Airlines to lay off nearly 600 workers who refused to get vaccinated (52)	https://nyti.ms/2yc8Baj It's Never Too Late to Publish a Debut Book and Score a Netflix Deal (43)	https://thehill.com/business-a-lobbying/business-a-lobbying/574387-nba-struggles-with-vocal-vaccine-holdouts NBA struggles with vocal vaccine holdouts (93)	https://www.telegraph.co.uk/news/2021/09/26/scientists-take-jab-sussexes-attack-pharmaceuticals-not-sharing-vaccine-recipes/ Scientists take a jab at Sussexes' attack on pharmaceuticals not sharing vaccine recipes (5)	https://www.nbcnews.com/tech/tch-news/violent-treatments-anti-vaccine-groups-push-people-leave-icus-rcna2233 'Vigilante treatments': Anti-vaccine groups push people to leave ICUs (54)	https://cnn.it/2XN8OAK Researchers who developed the mRNA technology behind Covid vaccines win "America's Nobel" (15)
https://twitter.com/thehowie/status/1438886059186786304 Yale update: I am a perpetual optimist, but even I know it will NEVER be this good again... ZERO cases among residential undergraduate population. ONE case among non-residential population (<0.1% positive rate) 0.2% positive rate for graduate students. (175)	https://thehill.com/business-a-lobbying/business-a-lobbying/574387-nba-struggles-with-vocal-vaccine-holdouts NBA struggles with vocal vaccine holdouts (35)	https://www.bitchute.com/video/k6Ue2Uu3lQo/ "CHIMERIC PROTEIN SPIKE DELIVERED THROUGH SKIN BY NANOPARTICLES" (36)	https://floridapolitics.com/archives/458805-diaz-review-vaccine-mandates/ Manny Diaz wants to 'review' existing non-COVID-19 vaccine mandates (90)	https://on.msnbc.com/3o8UKNg Biden: 'Refusal to get vaccinated has cost all of us' (4)	https://www.nytimes.com/2021/09/24/world/covid-boosters-vaccine-cdc-director.html C.D.C. Chief Overrules Agency Panel and Recommends Pfizer-BioNTech Boosters for Workers at Risk (51)	https://www.npr.org/sections/coronavirus-live-updates/2021/09/17/1038374005/experts-advising-fda-vote-against-pfizer-covid-boosters An FDA Panel Says Only High-Risk Americans And Those 65+ Should Get COVID Boosters (11)
https://wapo.st/39I9yVh N.C. hospital system fires about 175 workers in one of the largest-ever mass terminations due to a vaccine mandate (125)	https://www.medrxiv.org/content/10.1101/2021.08.24.21262415v1 Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity: reinfections versus breakthrough infections (31)	https://thehill.com/business-a-lobbying/business-a-lobbying/574387-nba-struggles-with-vocal-vaccine-holdouts NBA struggles with vocal vaccine holdouts (28)	https://wapo.st/39I9yVh N.C. hospital system fires about 175 workers in one of the largest-ever mass terminations due to a vaccine mandate (88)	https://thehill.com/business-a-lobbying/business-a-lobbying/574387-nba-struggles-with-vocal-vaccine-holdouts NBA struggles with vocal vaccine holdouts (4)	https://wapo.st/39I9yVh N.C. hospital system fires about 175 workers in one of the largest-ever mass terminations due to a vaccine mandate (42)	https://abcn.ws/30vHtR Teens turn to COVID-19 vaccine advocacy as most state laws prohibit minors from being vaccinated without consent (9)

10

Top Influencers by County September 24 – September 30

❑ The top 5 influencers* for each region related to COVID19/vaccines are as follows:

Allegheny	Butler	Cambria	Fayette	West Moreland	Beaver	Somerset
sammie5121	takeheartmonica	DiontaeClaypool	BroncoBaby10 (high bot score)	missi_matthews	colin_dunlap	Rosebud1668
KDKA	TheDanKingerski	LuvSavingMoney	gsfulton	MartyGriffinKD	warriors_cv	TopProspectsTF
WTAE	TaylorHaasePGH	TacoVision	gigi419 (antivax, high bot score)	rita_washko	TribLiveHSSN	karylcc
MarkMaddenX	KatelynsWTAE	Griffin_LaRue3	mommydog67	WorldofOutlaws	PghSportsNow	PFennen
beprior	MadisonKingPA	CrispinHavener	LaBelle50 (high bot score)	erjmanlasvegas	mvukovcan	Derek_Thomas33

*influencers are defined as accounts with tweets often spread by others (ordered by out-degree centrality)

1/11/2022



11

Top Influencers by City September 24 – September 30

❑ The top 5 influencers* for each region related to COVID19/vaccines are as follows:

Philadelphia	Chester	Norristown	Pittsburgh	Erie	Allentown/Bethlehem	Other
TheNBACentral	CarolG117 (high bot score)	GovernorTomWolf	sammie5121	ETNreisenweber	ScooterCasterNY	POTUS
JoyAnnReid	FOX29philly	ElectionWiz	KDKA	havardlj	EricBoehlert	RepThomasMassie
GeorgePapa19	CureHipHop (high bot score)	conspiracyb0t	WTAE	AppletoZucchini	PAHealthDept	JackPosobiec
anish_koka	drcraigwax	Funky8_0 (high bot score)	MarkMaddenX	tcjones2007	reopenpa	AnaCabrera
PHLPublicHealth	JohnHayes4Pa5	Wseparates (high bot score)	beprior	DBChirpy (high bot score)	AdamBaldwin	nocturnal_ly

*influencers are defined as accounts with tweets often spread by others (ordered by out-degree centrality)

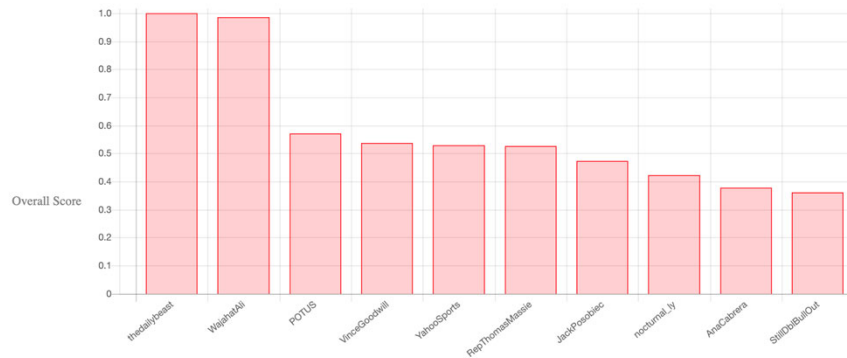
1/11/2022



12

Analysis of Tweeters - Super Spreaders

- ❑ Super Spreaders are users which generate content that is shared often, and hence spread information effectively.



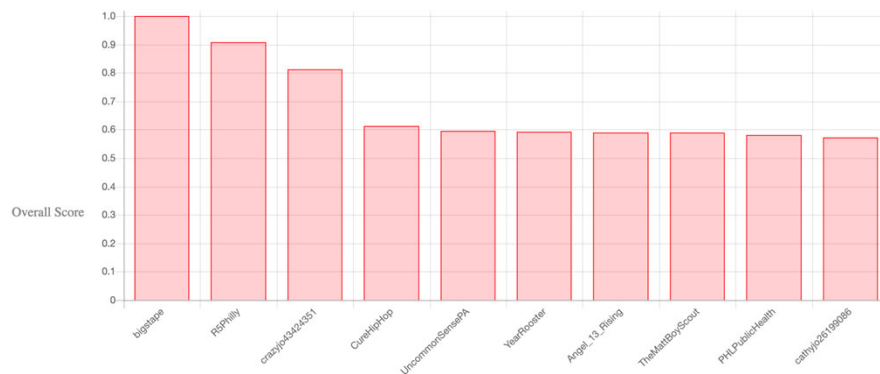
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13

Analysis of Tweeters - Super Friends

- ❑ Super Friends are users that exhibit frequent two-way communication, facilitating large or strong communication networks.



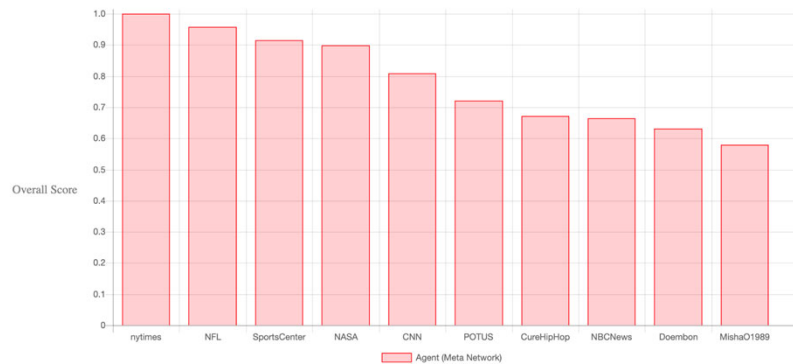
1/11/2022



14

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.



1/11/2022



15

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
DLoesch	954
POTUS	809
JackPosobiec	600
catturd2	576
CDCDirector	532
GovernorTomWolf	520
CDCGroV	423
MartinKulldorff	415
MollyJongFast	370
CNN	361

1/11/2022



16

Trending PA stories September 24 – September 30

- ❑ [nbcnews.com](https://www.nbcnews.com) - 'Vigilante treatments': Anti-vaccine groups push people to leave ICUs (156 Mentions)
- ❑ [vaccines.gov](https://www.vaccines.gov) - Vaccines.gov - Find COVID-19 vaccine locations near you (129 Mentions)
- ❑ thegatewaypundit.com - Former Notre Dame Professor Who Said, "Damn the Unvaccinated" Dies Two Weeks After Receiving 3rd Covid Shot (113 Mentions)
- ❑ [cnn.com](https://www.cnn.com) - NBA legend Kareem Abdul-Jabbar calls for unvaccinated players to be removed from teams (104 Mentions)
- ❑ [youtube.com](https://www.youtube.com) - Johnson & Johnson: 'Kids Shouldn't Get A F*cking [COVID] Vaccine;' There are "Unknown Repercussions" (91 Mentions)
- ❑ [washingtonpost.com](https://www.washingtonpost.com) - N.C. hospital system fires about 175 workers in one of the largest-ever mass terminations due to a vaccine mandate (88 Mentions)

1/11/2022



19

Trending PA tweets September 24 – September 30

If you're vaxxed and still wearing a mask and staying away from people, please retweet because sometimes people try to make me feel different.

347
Retweets

2



Occupy Democrats
[@occupydemocrats](https://twitter.com/occupydemocrats)

BREAKING NEWS: Basketball legend Kareem Abdul-Jabbar demands that the NBA "remove all unvaccinated players and coaches from their teams," saying "there's no room for anyone" who "puts lives at risk" because they "refuse to do the necessary research." RT IF YOU'RE WITH KAREEM!

214
Retweets

There is a lot of vaccine misinformation out there, but calling Michael Porter Jr. one of the NBA's biggest stars is where I draw the line.

203
Retweets

4



Occupy Democrats
[@occupydemocrats](https://twitter.com/occupydemocrats)

BREAKING: Federal judge rules in favor of a Kentucky hospital system's COVID vaccine mandate, turning down a legal request to end the mandate by anti-vaxxer hospital employees — who will now be fired for putting their patients and coworkers' lives at risk. RT TO THANK THE JUDGE!

155
Retweets

Orlando Magic's Jonathan Isaac says he isn't getting the covid vaccine because he has natural immunity and data shows he isn't at risk at all from covid. Well said:
<https://t.co/AJmvlNRyff>

151
Retweets

1/11/2022




20

Trending PA tweets September 24 – September 30

The state of Florida now has the 41st highest covid rate in the country. Cases are down 57% in the past 14 days without a mask mandate or vaccine mandates. Just sharing the data since most in the media won't. <https://t.co/INc4c5oAWI>

138
Retweets

8  **Occupify Democrats**
[@occupydemocrats](https://twitter.com/occupydemocrats)

BREAKING: New York Governor Kathy Hochul signs executive order to deploy the National Guard, retired health workers, new grads, and those licensed in other states and countries to fill in for anti-vaxxer nurses who quit over the vaccine mandate. RT IF YOU SUPPORT GOVERNOR HOCHUL!

127
Retweets

Only one state trooper in Massachusetts resigned over the vaccine mandate. Not dozens. Have a nice Tuesday.

137
Retweets


COVID Update: When vaccine requirements are announced, whether in the military, a company, or a hospital, there is attention paid to the often dozen(s) who protest. Less attention is paid to the thousands who get vaccinated. 1/

123
Retweets

If you are quitting public service because of vaccine mandates, you were never there to actually serve.

120
Retweets

1/11/2022

CASOS
21 
Carnegie Mellon University

21

Top PA Twitter Authors September 24 – September 30

By mentions	By influence
@doembon	@6abc
@iridescentashes	@malcolmnance
@kirkturner777	@fox29philly
@cdekeane	@accuweather
@bob_levitt	@nbcphiladelphia
@mishao1989	@phillyinquirer
@pennslytckysue	@nbcshilly
@chris_1791	@wpxi
@mbfrat	@cbsphilly
@radajjoei	@upsidestories

1/11/2022

22

Trending negative PA stories September 24 – September 30

- ❑ wbvtv.com - 'A devastating shock': UNCW student brain dead due to COVID-19 complications, mother pleads for young people to get vaccinated (27 Mentions)
- ❑ childrenshealthdefense.org - Sign Up for our Free News and Updates! (16 Mentions)
- ❑ irishcentral.com - COVID patient who left Donegal hospital with anti-vaxxer's help has died (15 Mentions)
- ❑ medrxiv.org - Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity: reinfections versus breakthrough infections (15 Mentions)
- ❑ thecovidblog.com - Karen Croake Heisler: 67-year-old former Notre Dame professor says "damn the unvaccinated," dead 12 days after third Pfizer mRNA injection - The COVID Blog (13 Mentions)
- ❑ covid-datascience.com - Interpreting VAERs: What is the expected background death rate for the USA vaccinated population? (11 Mentions)
- ❑ washingtonpost.com - YouTube is banning prominent anti-vaccine activists and blocking all anti-vaccine content (11 Mentions)

1/11/2022



25

Trending Negative PA tweets September 24 – September 30

BREAKING: New Alabama bill will give employees the right to take legal action against their employer if they are injured by the vaccine

87
Retweets

BREAKING: Oklahoma senator James Lankford introduced "Stop Vaccine Mandates Act" 🇺🇸

31
Retweets

BREAKING: New Alabama bill will give employees the right to take legal action against their employer if they are injured by the vaccine.

41
Retweets

💡 VACCINE MANDATE?—a young 20-year-old UNC student is now brain dead from #COVID19 complications—his mother begged, cajoled, nagged him to #vaccinate—she now begs you. 🗣️ damning—@UNC_System doesn't mandate vaccines—he caught COVID 2 days after arriving. 🇺🇸
<https://t.co/lpssudNsxc> <https://t.co/wSuRavS1Aw>

27
Retweets

I think it's dangerous the media doesn't engage in more conversation around vaccine injury and death. There is an obligation to get the full truth out to the public, but that's not happening.

27
Retweets

1/11/2022

*support for vaccines may appear in this section if the comments on that post were expressing criticism of that post.



26

Trending Negative PA tweets September 24 – September 30

If the Biden Administration has the legal authority to force you to get an experimental vaccine then the Constitution and the Bill of Rights are null and void.

21
Retweets

8  Young Americans for Liberty
@yaliberty

Hidden inside the 2,500-page, \$3.5 trillion spending bill is a provision that imposes fines of \$70K to \$700,000K on employers who refuse to comply with Biden's vaccine mandate. This is medical tyranny.

17
Retweets

FDA in their virtual meeting: "we were falsely misled by (Pfizer) about the safety of the vaccine...Heart attacks are 71x higher than other vaccines...the vaccines are killing two people for every one life saved". <https://t.co/ToxoKj4o3g>

20
Retweets

2/ Two days after leaving the hospital, Joe was unable to breathe and returned in an ambulance. His wife denounced the anti-vaxxers. Joe died on Friday. Further details via @IrishCentral <https://t.co/wuqUJbmOjm>
<https://t.co/2M9lZxE5tB>

15
Retweets

1/11/2022

These "vaccines" are killing people and nobody is stopping it

12
Retweets



27

Top PA Negative Twitter Authors September 24 – September 30

By mentions	By influence
@jsm2334	@malcolmnance
@mishao1989	@chris_1791
@radajjoei	@bigjoebastardi
@doembon	@wjactv
@kirkturner777	@joegooding
@nysom	@godandthebear
@cdekeane	@unclehotep
@gehaunna	@paigewolf
@pennslytckysue	@jgpharmd
@williamssharonna	@cdekeane

*support for vaccines may appear in this section if the comments on that post were expressing criticism of that post.

1/11/2022



28

Trending Posts on Facebook September 24 – September 30

WTAE-TV Pittsburgh
Sep 29, 2021 at 1:12 PM

JUST IN: Allegheny County employees must show proof of vaccination against COVID-19 by Dec. 1. The county said anyone who is in violation or does not meet an exception will face termination. MORE >> on [wtae.com/3zUGIRs](https://www.wtae.com/3zUGIRs)
See less

BREAKING NEWS
ALLEGHENY COUNTY TO REQUIRE COVID-19 VACCINE FOR EMPLOYEES

1.7K 1.0K 1.0K

WPXI-TV Pittsburgh
Sep 29, 2021 at 9:00 AM

United Airlines has begun the process to fire employees who refused to get the COVID-19 vaccine after the company made it mandatory.

United Airlines set to fire nearly 600 for refusing to take COVID-19 vaccine
WPXI.COM

1.5K 1.0K 200

Wendy Bell Radio
Sep 28, 2021 at 8:59 AM

BREAKING NEWS!!!
9/27/21 So WHY isn't the MSM telling you THIS??? How about some ENCOURAGING information about Covid that TOTALLY debunks the mainstream's BS? Get ready! We've got that and MORE!!!

11.6K POST VIEWS 44.4K TOTAL VIEWS
2.4K 3.7K 679

WPXI-TV Pittsburgh
Sep 28, 2021 at 9:51 AM

The Pittsburgh Bureau of Police is mourning the loss of Officer Brian Rowland, who died of COVID-19 at age 47: wpxi.tv/3zPnL2C

3.1K 1.2K 252

KDKA-TV | CBS Pittsburgh
Sep 29, 2021 at 6:45 AM

The State Police Association of Massachusetts said dozens of troopers have submitted their resignation papers as a result of the state's COVID vaccine mandate.

Dozens Of Massachusetts State Police Troopers Resigning Over COVID
PITTSBURGH.CBSLOCAL.COM

1.6K 994 203

1/11/2022

29
Carnegie Mellon University

29

Trending Posts on Facebook September 24 – September 30

WPXI-TV Pittsburgh
Sep 24, 2021 at 5:29 PM

The Centers for Disease Control and Prevention has released more recommendations for masks in schools with data that backs up its position that masks work to prevent the spread of the...
See more

MASKS IN SCHOOLS: THE CDC JUST RELEASED NEW DATA THAT SUPPORTS WEARING THEM IN ORDER TO PREVENT COVID-19.

more on [wpxi.com](https://www.wpxi.com)

1.2K 513 62

WTAE-TV Pittsburgh
Sep 29, 2021 at 1:05 PM

NEW COVID-19 PROTOCOLS: Starting Oct. 4, proof of full vaccination or a negative test result within 72 hours will be required for entry to all shows at Star Lake.

Star Lake to require proof of vaccination or negative test for entry to concerts
WTAE.COM

1.3K 575 306

WTAE-TV Pittsburgh
Sep 29, 2021 at 2:13 PM

"Out of more than 35,000 team members, fewer than 200 across more than 800 locations opted to leave rather than comply with the vaccination mandate."

A hospital system fired 175 employees who didn't get a COVID-19 vaccine. Over
WTAE.COM

483 446 67

KDKA-TV | CBS Pittsburgh
Sep 27, 2021 at 8:15 PM

A Butler Transit Authority bus driver has died following a short battle with COVID-19.

Butler Transit Authority Bus Driver Dies After Short Battle With COVID-19
PITTSBURGH.CBSLOCAL.COM

1.1K 465 70

WPXI-TV Pittsburgh
Sep 25, 2021 at 10:39 AM

GOOD NEWS! Governor Tom Wolf announced on Friday that 85 percent of Pennsylvanians aged 18 and older have received their first COVID-19 vaccination.

Gov. Wolf: Pennsylvania Hits COVID-19 Vaccination Milestone
WPXI.COM

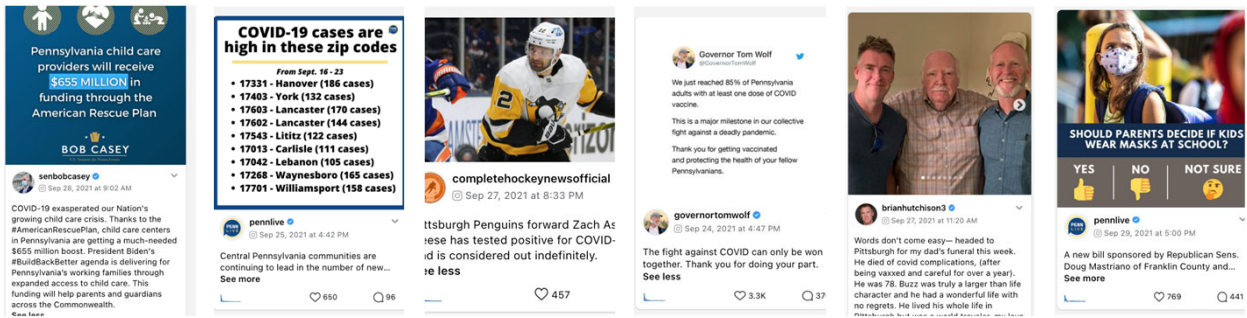
1.1K 534 26

1/11/2022

30
Carnegie Mellon University

30

Trending Posts on Instagram September 24 – September 30

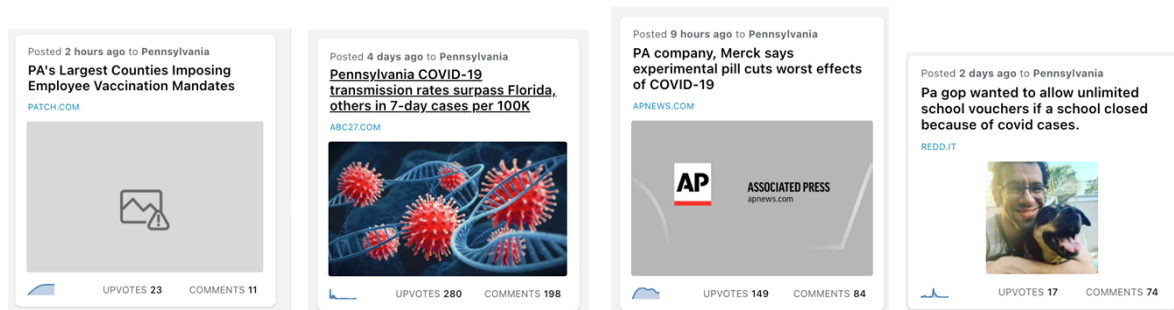


1/11/2022



31

Trending Posts on Reddit September 24 – September 30



1/11/2022



32

General Trends September 24 – September 30

- ❑ This week, overall trending stories covered more issues about mandates and booster shots, also a lot of the stories cover sports and COVID-19;
- ❑ Trending story this week: <https://thehill.com/business-a-lobbying/business-a-lobbying/574387-nba-struggles-with-vocal-vaccine-holdouts> NBA struggles with vocal vaccine holdouts;
- ❑ Other trending story covered mandates and vaccination: <https://floridapolitics.com/archives/458805-diaz-review-vaccine-mandates/> Manny Diaz wants to 'review' existing non-COVID-19 vaccine mandates; <https://wapo.st/39ll9yH> N.C. hospital system fires about 175 workers in one of the largest-ever mass terminations due to a vaccine mandate; <https://www.medrxiv.org/content/10.1101/2021.08.24.21262415v1> Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity: reinfections versus breakthrough infections; <http://hill.cm/kjt6KGV> United Airlines to lay off nearly 600 workers who refused to get vaccinated
- ❑ Mandates and Masks conversations are still popular as well as the conversations about mandates at school, mentions of children/kids, vaccine passports, natural immunity, boosters;
- ❑ Many stories covered recent YouTube disinformation elimination campaign <https://www.nbcnews.com/tech/tech-news/youtube-cracks-anti-vaccine-videos-bans-major-accounts-rcna2400> YouTube cracks down on anti-vaccine videos, bans major accounts;
- ❑ Trending disinformation stories: <https://www.zerohedge.com/covid-19/pfizer-launches-final-study-covid-drug-thats-suspiciously-similar-ivermectin> Pfizer Launches Final Study For COVID Drug That's Suspiciously Similar To 'Horse Paste'; thegatewaypundit.com - Former Notre Dame Professor Who Said, "Damn the Unvaccinated" Dies Two Weeks After Receiving 3rd Covid Shot; youtube.com - Johnson & Johnson: 'Kids Shouldn't Get A F*cking [COVID] Vaccine'; There are "Unknown Repercussions"; thecovidblog.com - Karen Croake Heisler: 67-year-old former Notre Dame professor says "damn the unvaccinated," dead 12 days after third Pfizer mRNA injection - The COVID Blog
- ❑ Facebook, Instagram, and Reddit messages also cover issues about vaccination for children, boosters, and COVID mandates.

1/11/2022



33

For More Information

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- ❑ CASOS website – <http://www.casos.cs.cmu.edu/>
- ❑ Social Cybersecurity Working Group - <http://social-cybersecurity.org>
- ❑ Facebook: [@IDEasCMU](https://www.facebook.com/IDEasCMU)
- ❑ Twitter: [@IDeaSCMU](https://twitter.com/IDeaSCMU)
- ❑ YouTube: [IDeaS Center](https://www.youtube.com/IDeaS_Center)
- ❑ Ask to be on our Email-Distro Lists

1/11/2022

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34