

# PA Vaccine Conversations on Twitter

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Vaccine Hesitancy Project Update based on on August 5, 2022 – August 11, 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 August 5 – August 11

- ❑ Masks, Mandates, Boosters, Children, Race, Military are trending this week;
- ❑ Trending stories: [washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security](https://www.washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security) Sen. Johnson suggests ending Medicare, Social Security as mandatory spending programs; [nytimes.com/2022/08/08/philadelphia-monkeypox-vaccine-inequity-racial-demographics](https://www.nytimes.com/2022/08/08/philadelphia-monkeypox-vaccine-inequity-racial-demographics) U.S. Moves to Stretch Out Monkeypox Vaccine Supply; [billypenn.com/2022/08/08/philadelphia-monkeypox-vaccine-inequity-racial-demographics](https://www.billypenn.com/2022/08/08/philadelphia-monkeypox-vaccine-inequity-racial-demographics) Are Philly's monkeypox vaccines going mostly to white people? The Health Department won't yet release data to confirm or deny the rumor; [bit.ly/3CIme0v](https://bit.ly/3CIme0v) COVID-19 Vaccines for Children and Teens; [youtu.be/-GXvV6Pybns](https://youtu.be/-GXvV6Pybns) There was an unexpected 40% increase in 'all cause deaths' in 2021; [publicsource.org/monkeypox-virus-vaccine-pittsburgh-allegheny-county-need-to-know-2022](https://publicsource.org/monkeypox-virus-vaccine-pittsburgh-allegheny-county-need-to-know-2022) Monkeypox in Pittsburgh? Here's what you need to know; [cbsnews.com/news/polio-virus-hundreds-of-infections-possible-new-york-health-department](https://www.cbsnews.com/news/polio-virus-hundreds-of-infections-possible-new-york-health-department) New York Health Department says hundreds of people may be infected with polio virus; [medicine.wustl.edu/news/among-covid-19-survivors-an-increased-risk-of-death-serious-illness](https://medicine.wustl.edu/news/among-covid-19-survivors-an-increased-risk-of-death-serious-illness) Among COVID-19 survivors, an increased risk of death, serious illness; [politico.com/news/2022/08/04/biden-administration-plans-public-health-monkeypox-00049831](https://www.politico.com/news/2022/08/04/biden-administration-plans-public-health-monkeypox-00049831) Biden administration declares monkeypox a public health emergency; [cnn.com/2022/07/26/monkeypox-explainer-symptoms-risk-factors-prevention-vaccine-info.html](https://www.cnn.com/2022/07/26/monkeypox-explainer-symptoms-risk-factors-prevention-vaccine-info.html) Monkeypox: What to know about the new public health emergency, from symptoms to risk; [trib.al/4lFqexr](https://trib.al/4lFqexr) Universities' vaccine mandates helped stop virus deaths in their local counties, study says;
- ❑ Popular anti-vax tweets: I've seen more serious vax injuries in my medical practice in the past 6 months than in my previous 30 years combined; Man tracks down the doctor that gave one of his family members the covid vaccine and they died after taking it... <https://t.co/ceelUVHTgvc>

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## Popular anti-vax stories sorted by shares

Anti-vax, disinformation, and vaccine hesitancy stories sorted by the number of shares:

- ❑ [kanekoa.substack.com/p/twitter-censors-pfizer-injured-israeli](https://kanekoa.substack.com/p/twitter-censors-pfizer-injured-israeli) Twitter Censors Pfizer-Injured Israeli COVID Vaccine Director
- ❑ [dailysceptic.org/2022/08/06/vaccine-deaths-outnumber-covid-deaths-in-u-s-households-two-new-polls-confirm](https://dailysceptic.org/2022/08/06/vaccine-deaths-outnumber-covid-deaths-in-u-s-households-two-new-polls-confirm) Vaccine Deaths Outnumber Covid Deaths in U.S. Households, Two New Polls Confirm
- ❑ [t.me/vaxxpasolutions](https://t.me/vaxxpasolutions) Vaxx Deaths, Injuries Pass Solutions – Telegram channel
- ❑ [dailysceptic.org/2022/08/07/covid-vaccination-offers-no-protection-against-hospitalisation-official-u-k-data-suggest](https://dailysceptic.org/2022/08/07/covid-vaccination-offers-no-protection-against-hospitalisation-official-u-k-data-suggest) Covid Vaccination Offers No Protection Against Hospitalisation, Official U.K. Data Suggest
- ❑ [twitter.com/\\_RL\\_W/status/1443715102755201027](https://twitter.com/_RL_W/status/1443715102755201027) Vaccine adverse events due to inadvertent intravascular administration. The needle should be aspirated in order to determine whether a blood vessel has been struck. Aspiration, more information

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## Anti-vax stories sorted by the projected impact

- ❑ [dailysceptic.org/2022/08/07/covid-vaccination-offers-no-protection-against-hospitalisation-official-u-k-data-suggest](https://dailysceptic.org/2022/08/07/covid-vaccination-offers-no-protection-against-hospitalisation-official-u-k-data-suggest) Covid Vaccination Offers No Protection Against Hospitalisation, Official U.K. Data Suggest;
- ❑ [dailysceptic.org/2022/08/06/vaccine-deaths-outnumber-covid-deaths-in-u-s-households-two-new-polls-confirm](https://dailysceptic.org/2022/08/06/vaccine-deaths-outnumber-covid-deaths-in-u-s-households-two-new-polls-confirm) Vaccine Deaths Outnumber Covid Deaths in U.S. Households, Two New Polls Confirm;
- ❑ [t.me/vaxxpassolutions](https://t.me/vaxxpassolutions) Vaxx Deaths, Injuries Pass Solutions - Telegram channel;
- ❑ [kanekoa.substack.com/p/twitter-censors-pfizer-injured-israeli](https://kanekoa.substack.com/p/twitter-censors-pfizer-injured-israeli) Twitter Censors Pfizer-Injured Israeli COVID Vaccine Director;
- ❑ [twitter.com/RL\\_W/status/1443715102755201027](https://twitter.com/RL_W/status/1443715102755201027) Vaccine adverse events due to inadvertent intravascular administration. The needle should be aspirated in order to determine whether a blood vessel has been struck. Aspiration, more information

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## Countering disinformation August 5 – August 11

- ❑ Articles and fact-checking stories debunking disinformation for the last week:
- ❑ A Guide to Novavax's COVID-19 Vaccine <https://www.factcheck.org/2022/08/scicheck-a-guide-to-novavaxs-covid-19-vaccine/>
- ❑ Fact Check: Was animal testing skipped for Covid vaccines? <https://www.thip.media/health-news-fact-check/fact-check-was-animal-testing-skipped-for-covid-vaccines/33769/>
- ❑ YouTuber misinterprets Covid-19 vaccine evidence on children from Singapore <https://fullfact.org/health/john-campbell-youtube-singapore-children/>
- ❑ Monkeypox is not a government conspiracy to cover up 'vaccine-induced' diseases <https://fullfact.org/health/expose-monkeypox-covid-vaccine-aids-false/>
- ❑ Fact Check: Is the WHO chief still not jabbed? <https://www.thip.media/health-news-fact-check/fact-check-is-the-who-chief-still-not-jabbed/33700/>
- ❑ Fact check: No, getting the COVID-19 vaccine doesn't lower your immunity <https://www.cbs17.com/community/health/coronavirus/fact-check-no-getting-the-covid-19-vaccine-doesnt-lower-your-immunity/>

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## Measures for countering health disinformation

- ❑ Anti-vaccine narratives are still pervasive on social media, while there are not that many counter-narratives about the positive effects of vaccines;
- ❑ There is a need for a reframing of social media as a medically and socially valuable resource and platform because of its high impact on society;
- ❑ Healthcare organizations need to implement social media strategies to create and expand conversations countering disinformation on social media;
- ❑ It would be helpful for health communicators to cooperate with local influencers who could spread pro-vaccination messages. Another strategy could be to motivate health practitioners to use social media as a channel for communication with the public;
- ❑ "Strategies focused on meaningfully and safely engaging HCPs on social media, promoting interconnectivity across the medical and public health communities on COVID-19 vaccine truths, and sustaining these messaging efforts across vaccine implementation stages will be our best hope of preventing any more missed doses and promoting "misinformation immunity" for all." (Hernandez et al. 2021. "The COVID-19 vaccine social media infodemic: healthcare providers' missed dose in addressing misinformation and vaccine hesitancy.")

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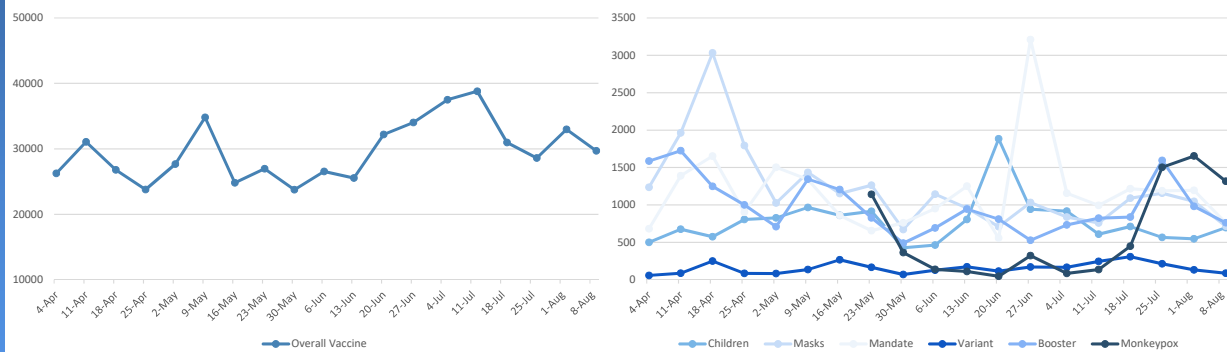
## Measures for countering health disinformation

- ❑ As a trusted source of information on vaccines, family physicians play a crucial role in driving vaccine acceptance;
- ❑ Sharing stories, building trust with patients, addressing pain associated with vaccination, presenting vaccination as the default approach early on, focusing on the benefits of protection, and being honest about side effects could also help to promote pro-vaccination attitudes (Shen & Dubey 2019. "Addressing vaccine hesitancy: Clinical guidance for primary care physicians working with parents");
- ❑ It is helpful to provide more information for the patients about the possible disinformation strategies they may deal with, such as manipulating emotions to promote misinformation and conspiracy theories to sow confusion and create division. Inoculation strategy may help to prepare the community by presenting counterarguments to misinformation and raising awareness of negative emotional appeals spread by anti-vaccine campaigns;
- ❑ Framing vaccination as a concrete, actionable strategy to reduce COVID-19 risk may help to address negative emotions, increase self-efficacy and ensure the feelings of control over reducing COVID-19 risk.

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## Trends (tweets per week in PA) August 5 – August 11



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## High Level View by City August 5 – August 11

	Total PA	Philadelphia		Pittsburgh		Erie		Allentown/Bethlehem		Other	
Conversation	Tweets	Tweets	%	Tweets	%	Tweets	%	Tweets	%	Tweets	%
Overall Vaccine	24775	11259	45.4%	9254	37.4%	247	1.0%	2646	10.7%	1369	5.5%
Vaccine Passports	54	27	0.2%	18	0.2%	2	0.8%	2	0.1%	5	0.4%
FDA Approval	76	35	0.3%	19	0.2%	2	0.8%	11	0.4%	9	0.7%
Boosters	394	185	1.6%	122	1.3%	6	2.4%	40	1.5%	41	3.0%
Employees	58	48	0.4%	5	0.1%			2	0.1%	3	0.2%
"Experimental"	65	37	0.3%	17	0.2%			9	0.3%	2	0.1%
Children	359	190	1.7%	90	1.0%	3	1.2%	53	2.0%	23	1.7%
Myocarditis	65	37	0.3%	13	0.1%	1	0.4%	13	0.5%	1	0.1%
Heart	190	103	0.9%	46	0.5%	1	0.4%	33	1.2%	7	0.5%
Masks	697	373	3.3%	140	1.5%	10	4.0%	83	3.1%	91	6.6%
Thrombosis/VITT	7	4	0.0%	2	0.0%					1	0.1%
Mandates	745	433	3.8%	160	1.7%	13	5.3%	107	4.0%	32	2.3%
Natural Immunity	48	34	0.3%	10	0.1%			4	0.2%		
Efficacy	27	10	0.1%	8	0.1%			5	0.2%	4	0.3%
Omicron	46	37	0.3%	4	0.0%	4	1.6%	1	0.0%		
Delta Variant	62	48	0.4%			2	0.8%	1	0.0%	11	0.8%
Race	869	230	2.0%	554	6.0%	5	2.0%	55	2.1%	25	1.8%
Ivermectin	6	3	0.0%	1	0.0%		0.0%			2	0.1%
Military	197	105	0.9%	45	0.5%	4	1.6%	35	1.3%	8	0.6%
Breakthrough	6	6	0.1%				0.0%				

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Conversation topic trending this week over last:

- Racism



## High Level View by County August 5 – August 11

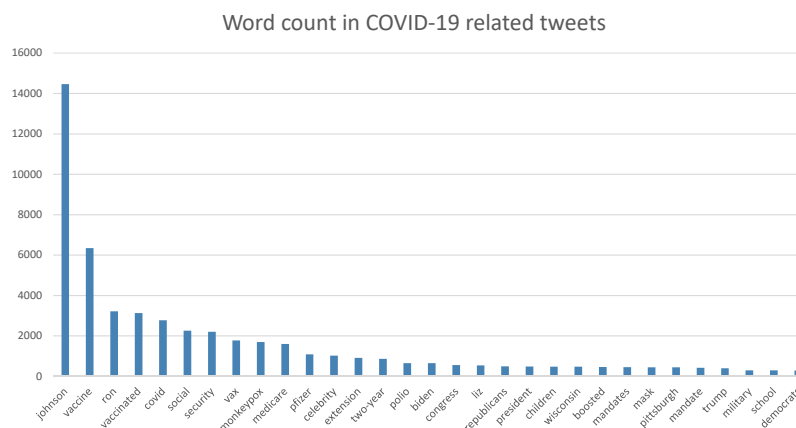
County	Allegheny	Beaver	Butler	Cambria	Fayette	Indiana	Somerset	Westmoreland
Overall Vaccine	9546	71	30	17	19	11	3	59
Vaccine Passports	18					2		
FDA	21							
Boosters	123		1	7		1		2
Employees	5					1		
"Experimental"	17							
Children	95		1	1	1			1
Myocarditis	14							
Heart	47					1		
Masks	161	2	5		3		1	3
Thrombosis/VITT	2							
Mandates	166	1			1	2		
Natural Immunity	10							
Efficacy	8							
Omicron	4							
Delta Variant	1							
Race	557						1	
Ivermectin	2							
Military	48				1			
Breakthrough								

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

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## Top Words Used per Week August 5 – August 11



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## Top Hashtags by County August 5 – August 11

- ❑ 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	Fayette	Somerset	Indiana
pfizer (121)	healthcareawarenessmonth (2)	covid (1)	darkbrandon (1)	novaccinemandates (2)
covid19 (60)		deletethegop (1)		novaccinepassports (2)
healthcareawarenessmonth (25)		polio (1)		
monkeypox (24)				
vaccine (22)				

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## Top Hashtags by City August 5 – August 11

- ❑ 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 (240)	pfizer (14)	healthcareawarenessmonth (71)	pfizer (121)	healthcareawarenessmonth (3)	pfizer (54)	monkeypox (17)
covid19 (93)	healthcareawarenessmonth (5)	pfizer (16)	covid19 (60)	covid19 (2)	healthcareawarenessmonth (29)	vaccine (12)
vaccine (90)	moderna (4)	monkeypox (9)	healthcareawarenessmonth (25)	pfizer (2)	covid19 (24)	healthcareawarenessmonth (11)
monkeypox (74)	monkeypox (4)	novavax (9)	monkeypox (24)	mrna (1)	vaccinesideeffects (18)	covid (6)
healthcareawarenessmonth (40)	vaccine (4)	vaccineinjuries (7)	vaccine (22)	vaccinated (1)	vaccine (17)	pfizer (6)

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## Top URLs by County August 5 – August 11

Allegheny	Butler + Beaver	Cambria	West Moreland
<a href="https://www.washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/">washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/</a> Sen. Johnson suggests ending Medicare, Social Security as mandatory spending programs (105)	<a href="https://www.washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/">washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/</a> Sen. Johnson suggests ending Medicare, Social Security as mandatory spending programs (4)	<a href="https://upnorthnews.com/2022/04/21/ron-johnson-thinks-a-gop-plan-for-tax-increases-and-the-potential-end-of-medicare-and-social-security-is-a-positive-thing/">upnorthnews.com/2022/04/21/ron-johnson-thinks-a-gop-plan-for-tax-increases-and-the-potential-end-of-medicare-and-social-security-is-a-positive-thing/</a> Ron Johnson Thinks a GOP Plan for Tax Increases and the Potential End of Medicare and Social Security Is a 'Positive Thing' (1)	<a href="https://www.washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/">washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/</a> Sen. Johnson suggests ending Medicare, Social Security as mandatory spending programs (4)
<a href="https://fxn.ws/3d4ma3e">fxn.ws/3d4ma3e</a> Biden tests positive for COVID-19 again, will continue isolation (20)	<a href="https://www.wsj.com/articles/covid-vaccine-mandates-heighten-school-inequity-children-education-virus-pandemic-booster-public-health-students-11659992066">wsj.com/articles/covid-vaccine-mandates-heighten-school-inequity-children-education-virus-pandemic-booster-public-health-students-11659992066</a> Covid Vaccine Mandates Heighten School Inequity (1)		<a href="https://trib.al/4lFqexr">trib.al/4lFqexr</a> Universities' vaccine mandates helped stop virus deaths in their local counties, study says (1)
<a href="https://youtu.be/-GXvV6Pybns">youtu.be/-GXvV6Pybns</a> There was an unexpected 40% increase in 'all cause deaths' in 2021 (20)			
<a href="https://publicsource.org/monkeypox-virus-vaccine-pittsburgh-allegheny-county-need-to-know-2022">publicsource.org/monkeypox-virus-vaccine-pittsburgh-allegheny-county-need-to-know-2022</a> Monkeypox in Pittsburgh? Here's what you need to know (18)			
<a href="https://cbsnews.com/news/polio-virus-hundreds-of-infections-possible-new-york-health-department/">cbsnews.com/news/polio-virus-hundreds-of-infections-possible-new-york-health-department/</a> New York Health Department says hundreds of people may be infected with polio virus (17)			

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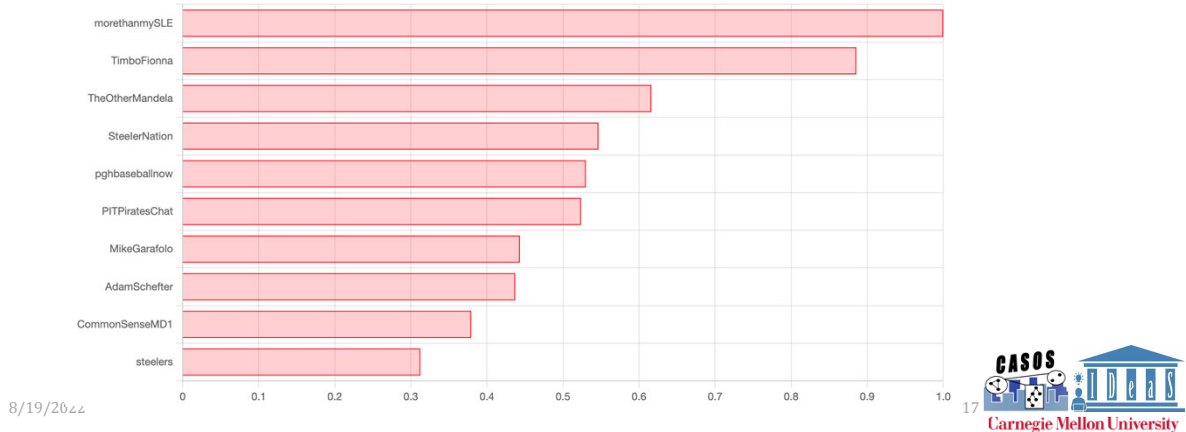
## Top URLs by City August 5 – August 11

Philadelphia	Chester	Norristown	Pittsburgh	Erie	Allentown/ Bethlehem	Other
<a href="https://nyti.ms/3p6Elmc">nyti.ms/3p6Elmc</a> U.S. Moves to Stretch Out Monkeypox Vaccine Supply (102)	<a href="https://www.washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/">washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/</a> Sen. Johnson suggests ending Medicare, Social Security as mandatory spending programs (21)	<a href="https://www.washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/">washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/</a> Sen. Johnson suggests ending Medicare, Social Security as mandatory spending programs (22)	<a href="https://www.washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/">washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/</a> Sen. Johnson suggests ending Medicare, Social Security as mandatory spending programs (105)	<a href="https://twitter.com/bkarahalios/status/1554937173643862016">twitter.com/bkarahalios/status/1554937173643862016</a> After mandating that all hospitals impose COVID-19 vaccine policies on their workers in the last year, Ford's solution to closures is to speed up the accreditation of international nurses. Zero mention of hiring back "already qualified" nurses. #onpoli (5)	<a href="https://www.washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/">washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/</a> Sen. Johnson suggests ending Medicare, Social Security as mandatory spending programs (74)	<a href="https://www.washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/">washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/</a> Sen. Johnson suggests ending Medicare, Social Security as mandatory spending programs (35)
<a href="https://www.washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/">washingtonpost.com/national-security/2022/08/03/ron-johnson-medicare-social-security/</a> Sen. Johnson suggests ending Medicare, Social Security as mandatory spending programs (165)	<a href="https://medicine.wustl.edu/news/among-covid-19-survivors-an-increased-risk-of-death-serious-illness">medicine.wustl.edu/news/among-covid-19-survivors-an-increased-risk-of-death-serious-illness</a> Among COVID-19 survivors, an increased risk of death, serious illness (7)	<a href="https://t.me/vaxpassolutions">t.me/vaxpassolutions</a> Vax Deaths, Injuries Pass Solutions (8)	<a href="https://fxn.ws/3d4ma3e">fxn.ws/3d4ma3e</a> Biden tests positive for COVID-19 again, will continue isolation (20)	<a href="https://www2.erie.gov/health/index.php">www2.erie.gov/health/index.php</a> Erie county health (3)	<a href="https://dailysceptic.org/2022/08/06/vaccine-deaths-outnumber-covid-deaths-in-u-s-households-two-new-polls-confirm">dailysceptic.org/2022/08/06/vaccine-deaths-outnumber-covid-deaths-in-u-s-households-two-new-polls-confirm</a> Vaccine Deaths Outnumber Covid Deaths in U.S. Households, Two New Polls Confirm (12)	<a href="https://cbsnews.com/news/polio-virus-hundreds-of-infections-possible-new-york-health-department/">cbsnews.com/news/polio-virus-hundreds-of-infections-possible-new-york-health-department/</a> New York Health Department says hundreds of people may be infected with polio virus (12)
<a href="https://billypenn.com/2022/08/08/philadelphia-monkeypox-vaccine-inequity-racial-demographics/">billypenn.com/2022/08/08/philadelphia-monkeypox-vaccine-inequity-racial-demographics/</a> Are Philly's monkeypox vaccines going mostly to white people? The Health Department won't yet release data to confirm or deny the rumor (36)	<a href="https://6abc.com/monkeypox-philadelphia-cases-vaccine-new-jersey/12096342/">6abc.com/monkeypox-philadelphia-cases-vaccine-new-jersey/12096342/</a> 'It still hurts': Philadelphia man with monkeypox shares story (4)	<a href="https://nytimes.com/2022/05/25/magazine/anti-vaccine-movement.html">nytimes.com/2022/05/25/magazine/anti-vaccine-movement.html</a> the Anti-Vaccine Movement's New Frontier (6)	<a href="https://youtu.be/-GXvV6Pybns">youtu.be/-GXvV6Pybns</a> There was an unexpected 40% increase in 'all cause deaths' in 2021 (20)	<a href="https://cbsnews.com/news/polio-virus-hundreds-of-infections-possible-new-york-health-department/">cbsnews.com/news/polio-virus-hundreds-of-infections-possible-new-york-health-department/</a> New York Health Department says hundreds of people may be infected with polio virus (2)	<a href="https://thehill.com/policy/healthcare/3587152-ron-johnson-suggests-medicare-social-security-be-approved-on-annual-basis">thehill.com/policy/healthcare/3587152-ron-johnson-suggests-medicare-social-security-be-approved-on-annual-basis</a> Ron Johnson suggests Medicare, Social Security be approved on annual basis (10)	<a href="https://youtu.be/KgVsd6qv14">youtu.be/KgVsd6qv14</a> Aspiration, more information (6)
<a href="https://bit.ly/3ClmeDv">bit.ly/3ClmeDv</a> COVID-19 Vaccines for Children and Teens (27)	<a href="https://cnbc.com/2022/07/26/monkeypox-explain-symptoms-risk-factors-prevention-vaccine-info.html">cnbc.com/2022/07/26/monkeypox-explain-symptoms-risk-factors-prevention-vaccine-info.html</a> Monkeypox: What to know about the new public health emergency, from symptoms to risk (2)	<a href="https://billypenn.com/2022/08/08/philadelphia-monkeypox-vaccine-inequity-racial-demographics/">billypenn.com/2022/08/08/philadelphia-monkeypox-vaccine-inequity-racial-demographics/</a> Are Philly's monkeypox vaccines going mostly to white people? The Health Department won't yet release data to confirm or deny the rumor (5)	<a href="https://publicsource.org/monkeypox-virus-vaccine-pittsburgh-allegheny-county-need-to-know-2022">publicsource.org/monkeypox-virus-vaccine-pittsburgh-allegheny-county-need-to-know-2022</a> Monkeypox in Pittsburgh? Here's what you need to know (18)	<a href="https://politico.com/news/2022/08/04/biden-administration-plans-public-health-monkeypox-00049831">politico.com/news/2022/08/04/biden-administration-plans-public-health-monkeypox-00049831</a> Biden administration declares monkeypox a public health emergency (2)	<a href="https://kanekoa.substack.com/p/twitter-censors-pfizer-injured-israeli">kanekoa.substack.com/p/twitter-censors-pfizer-injured-israeli</a> Twitter Censors Pfizer-Injured Israeli COVID Vaccine Director (8)	<a href="https://politico.com/news/2022/08/04/biden-administration-plans-public-health-monkeypox-00049831">politico.com/news/2022/08/04/biden-administration-plans-public-health-monkeypox-00049831</a> Biden administration declares monkeypox a public health emergency (5)
<a href="https://kanekoa.substack.com/p/twitter-censors-pfizer-injured-israeli">kanekoa.substack.com/p/twitter-censors-pfizer-injured-israeli</a> Twitter Censors Pfizer-Injured Israeli COVID Vaccine Director (20)	<a href="https://latimes.com/california/newsletter/2022-08-05/california-politics-the-last-vaccine-fight-ca-politics">latimes.com/california/newsletter/2022-08-05/california-politics-the-last-vaccine-fight-ca-politics</a> California Politics: Legislators face new threats in familiar vaccine fight (2)	<a href="https://dailysceptic.org/2022/08/07/covid-vaccination-offers-no-protection-against-hospitalisation-official-u-k-data-suggest">dailysceptic.org/2022/08/07/covid-vaccination-offers-no-protection-against-hospitalisation-official-u-k-data-suggest</a> Covid Vaccination Offers No Protection Against Hospitalisation, Official U.K. Data Suggest (5)	<a href="https://cbsnews.com/news/polio-virus-hundreds-of-infections-possible-new-york-health-department/">cbsnews.com/news/polio-virus-hundreds-of-infections-possible-new-york-health-department/</a> New York Health Department says hundreds of people may be infected with polio virus (17)	<a href="https://preprints.org/manuscript/2022080151/v1">preprints.org/manuscript/2022080151/v1</a> Cardiovascular Effects of the BNT162b2 mRNA COVID-19 Vaccine in Adolescents (2)	<a href="https://nyti.ms/3p6Elmc">nyti.ms/3p6Elmc</a> U.S. Moves to Stretch Out Monkeypox Vaccine Supply (8)	<a href="https://twitter.com/RL_W/status/1443715102755201027">twitter.com/RL_W/status/1443715102755201027</a> Vaccine adverse events due to inadvertent intravascular administration. The needle should be aspirated in order to determine whether a blood vessel has been struck. Aspiration, more information (5)



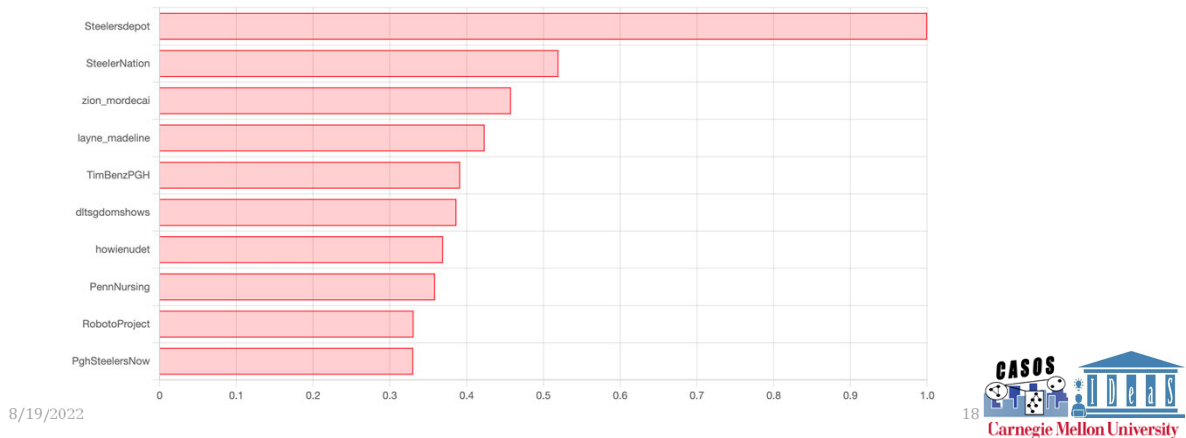
## Analysis of Tweeters - Super Spreaders

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



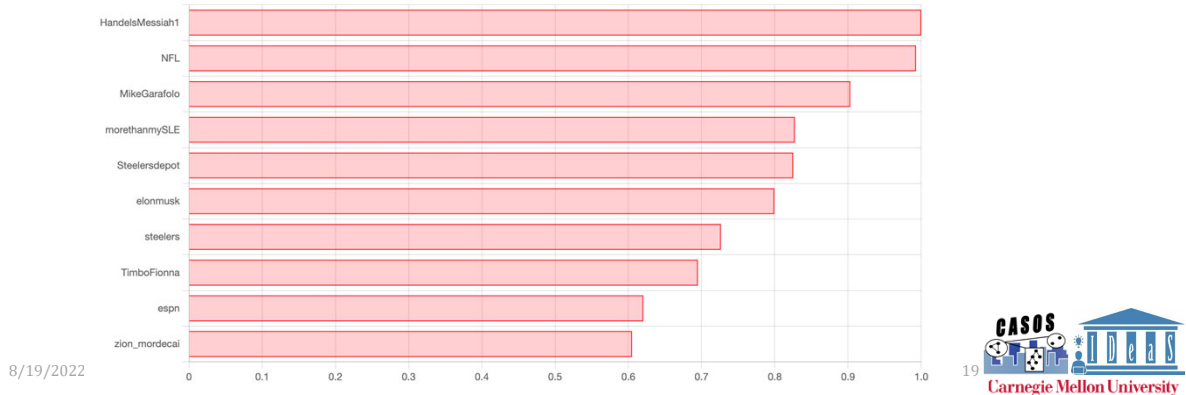
## Analysis of Tweeters - Super Friends

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



## 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.

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Agent Label	Value
morethanmySLE	900
TheOtherMandela	587
SteelerNation	375
TimboFionna	373
_SNPodcast	299
TotalSportsEnt	298
CommonSenseMD1	296
TerribleTailgat	296
ByKimberleyA	274
steelers	273
morethanmySLE	900
TheOtherMandela	587
SteelerNation	375

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CASOS Carnegie Mellon University

## Trending Tweets August 5 – August 11

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

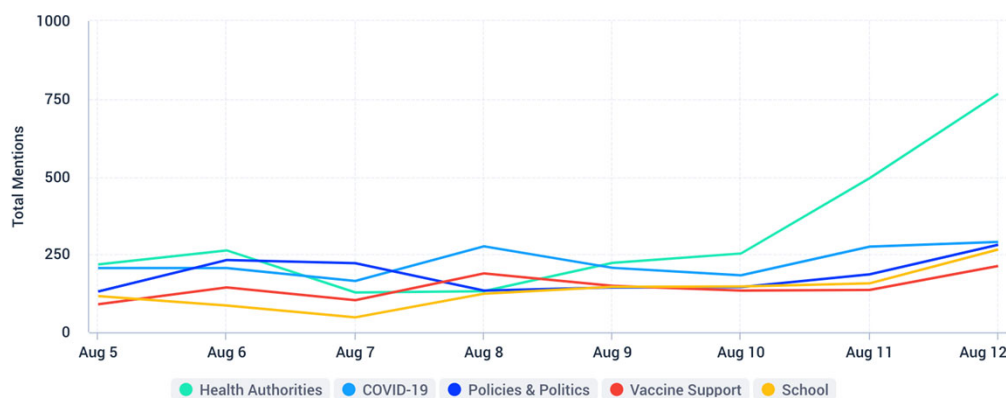
- ❑ I've seen more serious vax injuries in my medical practice in the past 6 months than in my previous 30 years combined.
- ❑ NEVER FORGET: Senator Ron Johnson wants to END Social Security and Medicare. TELL EVERYONE!
- ❑ Sen. Ron Johnson (R-Wis.) has suggested that Social Security and Medicare be eliminated as federal entitlement programs, and that they should instead become programs approved by Congress on an annual basis as discretionary spending. <https://t.co/AyESNcWbCn>
- ❑ The US finally declared monkeypox to be a public health emergency. VAX ME UP! STIMMY ME UP! NEOW!
- ❑ "No one can force me to quarantine, get a vaccine, wear a mask or register my gun but I can force you to have a child" is peak Republican
- ❑ Man tracks down the doctor that gave one of his family members the covid vaccine and they died after taking it... <https://t.co/ceeUVHTgyc>
- ❑ Breaking News: U.S. health officials plan to stretch out the monkeypox vaccine supply by allowing an injection method that uses one-fifth as much per shot. <https://t.co/WrcMpydVvy>
- ❑ One person in New York has contracted Polio and health officials are warning that there may be an outbreak. @Maggie\_Vespa is following the story. <https://t.co/LASKcD3gu4>
- ❑ Tune in as I sign two bipartisan bills that will hold those who commit fraud under COVID-19 small business relief programs accountable. <https://t.co/nWDHD1czzc>
- ❑ Ron Johnson just blocked a bill to cap insulin costs at \$35 a month. No one should have to choose between a medication their life depends on and putting food on the table. But Ron Johnson doesn't care—he's bought and paid for by the pharma lobby.

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## General PA Conversation August 5 – August 11



Source: VCTR Project Dashboard

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## PA Hashtag Cloud August 5 – August 11

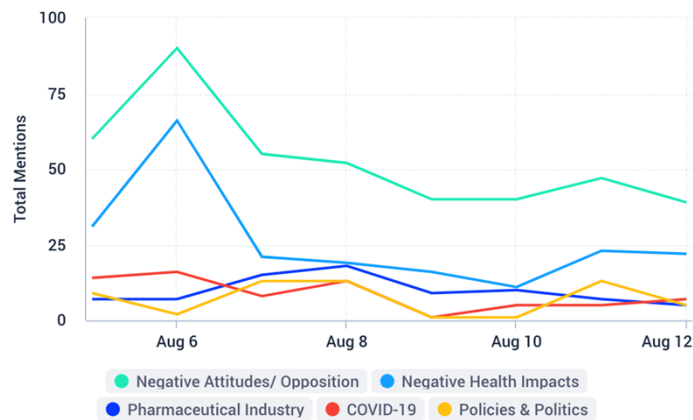


8/19/2022

Source: VCTR Project Dashboard



## Negative Attitudes August 5 – August 11

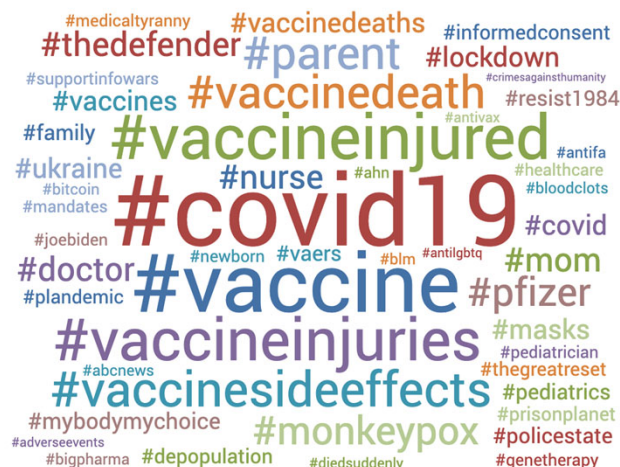


8/19/2022

Source: VCTR Project Dashboard



## Negative Hashtag Cloud August 5 – August 11



Source: VCTR Project Dashboard



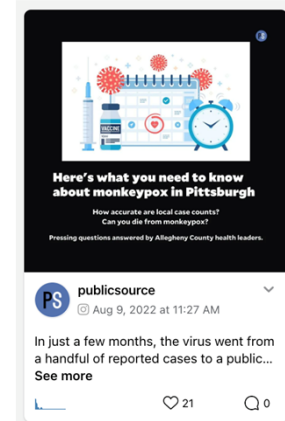
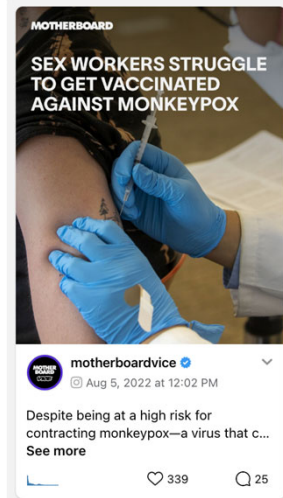
## Trending Posts on August 5 - August 11



Source: CrowdTangle Dashboard



## Trending Posts on Instagram August 5 – August 11

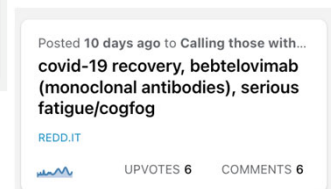
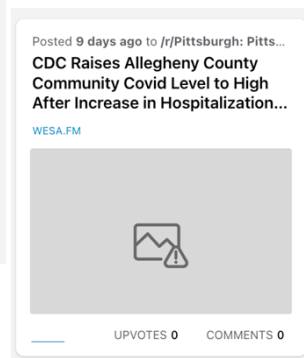
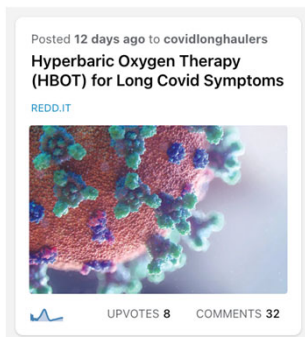


8/19/2022

Source: CrowdTangle Dashboard



## Trending Posts on Reddit August 5 – August 11



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Source: CrowdTangle Dashboard



## For More Information

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  - ❑ <http://www.casos.cs.cmu.edu/bios/carley/carley.html>
- ❑ IDeaS website - <https://www.cmu.edu/ideas-social-cybersecurity/>
- ❑ CASOS website - <http://www.casos.cs.cmu.edu/>
- ❑ Social Cybersecurity Working Group - <http://social-cybersecurity.org>
- ❑ Facebook: [@IDeasCMU](#)
- ❑ Twitter: [@IDeaSCMU](#)
- ❑ YouTube: [IDeaS Center](#)
- ❑ Ask to be on our Email-Distro Lists

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