

# CREATING A CLEAR 20/20 ERM VISION TO TAKE ON TOMORROW'S RISKS



**AFERM**  
Association for Federal  
Enterprise Risk Management

**13<sup>TH</sup> ANNUAL  
ERM SUMMIT**

# Risk Sensing & Data Driven Risk Management

Patrick Murphy, Commissioner  
New York State Division of Homeland  
Security and Emergency Services

Cynthia Vitters, Deloitte Practice Leader  
Enterprise Risk Management  
Government & Public Services

Breakout B-1





# How Risk Sensing & Data-Driven Risk Management supported the COVID-19 pandemic response in New York State



**The New York Times**  
 VOL. CLXXIX No. 58465 NEW YORK, FRIDAY, MARCH 21, 2020 \$3.00

**JOB LOSSES SOAR; U.S. VIRUS CASES TOP WORLD**

*New Data Shows Staggering Toll of Outbreak*

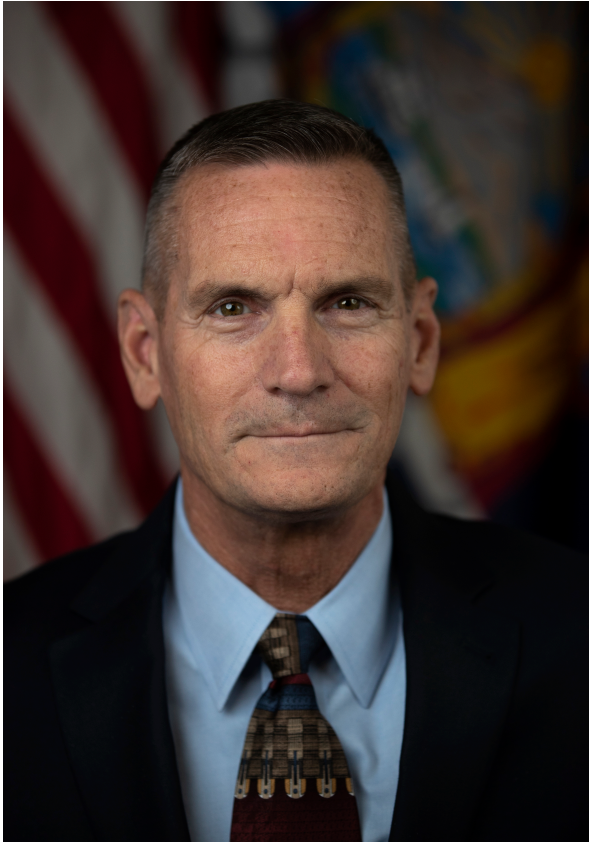
**Under Trump, Unfilled Posts Hinder Action**

**Online Class With No Way To Get There**

**Courage at a Brooklyn Hospital, At the Front of an Invisible War**

**With Supplies Waning, Workers Soldier On**

# Speakers



Patrick Murphy, Commissioner  
NYS Division of Homeland Security and Emergency Services



Cynthia Vitters, Deloitte Practice Leader  
ERM Government & Public Services





# Sample Risk Reports

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Draft work product – for internal use only

## DHSES | Executive Summary Page

Overview
<ul style="list-style-type: none"> <li>As of Friday night, the U.S. death toll surpassed 51,000 (<a href="#">WaPo</a>)</li> <li>Globally, there are 2.7M confirmed positive cases and 190,418 deaths (<a href="#">NYT</a>)</li> <li>Brooklyn has the most coronavirus deaths of any county in the U.S. (<a href="#">NBC</a>)</li> </ul>

Issues	Today
Global	<ul style="list-style-type: none"> <li>World leaders launch WHO initiative to collaborate on tests, vaccine development, and drug access, but the U.S., India, China, and Russia will not participate (<a href="#">Retuvers</a>)</li> <li>After pressure from China, EU softens report on China's pandemic-related disinformation (<a href="#">NYT</a>)</li> <li>In advance of Eid, Indonesia bans all forms of travel through end of May (<a href="#">CNN</a>)</li> <li>Belgium to begin gradually relaxing measures in May (<a href="#">Bloomberg</a>)</li> </ul>

### Legend

Updated from last report

Issues	Today	Significant Developments
National		<ul style="list-style-type: none"> <li>Number of hospitalizations and people on ventilators continues to fall in NJ, but Gov. Murphy expresses alarm that the virus is spreading more quickly in some counties where it had been slowing down; number of hospitalized patients in the state is down 17% from 10 days ago (<a href="#">NYT</a>)</li> <li>President Trump says he will not approve an emergency loan for the U.S. Postal Service if they do not quadruple their package shipping prices (<a href="#">WaPo</a>)</li> <li>About 1,000 protestors demonstrated against stay-at-home measures in Madison, Wisconsin on Friday, making it one of the largest demonstrations to date (<a href="#">NYT</a>)</li> <li>Gov. Hogan hopes to lift MD stay at home order in May (<a href="#">CBS</a>)</li> <li>Navy recommends reinstatement of USS Theodore Roosevelt Commander who raised alarm about coronavirus outbreak on ship; Secretary Esper has yet to make a decision on the Navy's recommendation (<a href="#">WSJ</a>)</li> </ul>



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## Issues Gaining Traction

- Team of researchers from 3 universities say oft-quoted IHME model is flawed and its accuracy has been decreasing ([WSJ](#))

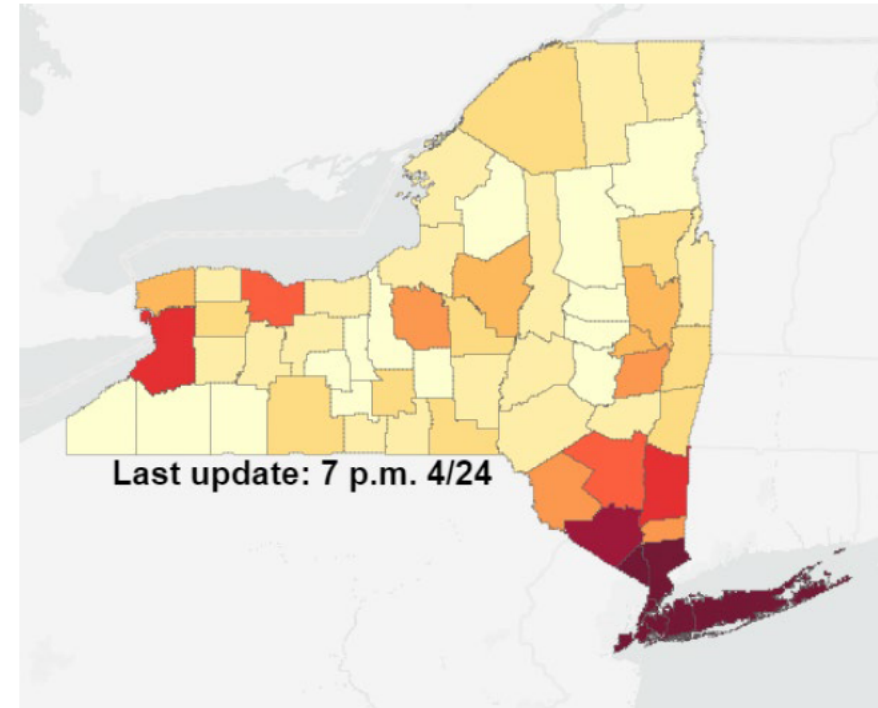
## Trending on Twitter

### Regional

- Lysol
- #COVID-19
- #NFLDraft2020

## Map of confirmed COVID cases<sup>1</sup>

NYS, as of 4/24/20, 7:00 PM ET



<sup>1</sup><https://www.syracuse.com/coronavirus/2020/03/see-new-york-state-map-of-coronavirus-cases-county-by-county.html>



# Sample Risk Reports

## DHSES | Rapid Response Efforts and Regional Aggregate View

Security  
Emergen  
Services

### Legend

Updated from last report

### Daily priorities and Key Objectives

#### High Priority Actions

1. Testing site and field operations: increase testing site and walk up sites, efficient allocation of PPE and test kits, antibody tests
2. Logistics for distribution of available PPE, supplies to agencies, hospitals, counties
3. Support to Mortuary Affairs as deaths expand outside of NYC
4. Support to our most vulnerable populations in hospitals and nursing homes
5. Alternate Care Facilities: finish work at the Javits center, determine facilities to support/put on hold
6. Coordination of patient movement throughout state
7. Coordination Council Stand-Up: operations for patient and resource movement
8. Management of Hand Sanitizer Task Force

Level	Issue	Select Coverage
<b>Regional</b>		
Capital	<ul style="list-style-type: none"> <li>• Albany County now up to 31 deaths in the battle against COVID-19</li> <li>• Largest anesthesiologist group in Capital Region furloughs staff</li> <li>• Rensselaer County triples home meal deliveries</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">CBS6</a></li> <li>• <a href="#">Times Union</a></li> <li>• <a href="#">CBS6</a></li> </ul>
Central NY	<ul style="list-style-type: none"> <li>• Twenty-five total COVID-19 related deaths now in Onondaga County</li> <li>• Mayor Palmieri and the City of Utica are offering a zero-interest loan to city businesses for the retention of low to moderate-income employees in response to the COVID-19 pandemic</li> <li>• Syracuse faces \$30M budget shortfall</li> <li>• Utica College announced Friday that it is freezing tuition for the 2020-21 academic year for undergraduate and graduate students on all campuses</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Spectrum Local N</a></li> <li>• <a href="#">Twitter</a></li> <li>• <a href="#">Syracuse.com</a></li> <li>• <a href="#">Utica OD</a></li> </ul>
Finger Lakes	<ul style="list-style-type: none"> <li>• 96 dead in Monroe County as confirmed COVID-19 cases reach 1,217</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">13WHAM</a></li> </ul>
Long Island	<ul style="list-style-type: none"> <li>• As of Friday, April 24, there have been 32,765 confirmed COVID-19 cases in Nassau, with Suffolk just behind at 31,160</li> <li>• Long Island man is first in nation charged with price-gouging PPE under Defense Production Act</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Daily Voice</a></li> <li>• <a href="#">Daily Voice</a></li> </ul>





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## DHSES | Highlighted Issues and Discussions (1 of 2)

### Issues identified

**U.S. states promoting apps that could prove essential to ending the coronavirus lockdown may be headed for a showdown with the two Silicon Valley companies that control key software on 99% of smartphones over the collection of sensitive GPS location data.** Apple Inc and Alphabet Inc's Google plan to release technology jointly in the coming weeks for digital contact tracing through Bluetooth sensors on phones. Public health authorities have determined that the technology is crucial to apps that will alert people when they have been close to people who have tested positive for the novel coronavirus. Google and Apple have sought to build public trust by emphasizing that the changes they are making to Bluetooth to allow the tracing apps to work will not tap phones' GPS sensors.

But the states pioneering the apps - North and South Dakota, and Utah - say allowing public health authorities to use GPS in tandem with Bluetooth is key to making the system viable. The Bluetooth technology will enable users to be notified if they crossed paths with a coronavirus carrier, but will not specify where the encounter happened, information crucial to authorities who want to identify hotspots for virus transmission and move fast to stop outbreaks.

Apple and Google said on Friday that they still have not decided how to proceed.

Thomas Oxley, an interventional neurologist at Mount Sinai Beth Israel wasn't even on call the day he received the page to come in. There weren't enough doctors to treat all the emergency stroke patients, and he was needed in the operating room. The patient's chart appeared unremarkable at first glance - no medications or underlying conditions. He had been feeling fine, when suddenly, he had trouble talking and moving the right side of his body. Imaging showed a large blockage on the left side of his head. Oxley gasped when he got to the patient's age and COVID-19 status: 44, positive. The man was among several recent stroke patients in their 30s to 40s who were all infected with the coronavirus. The median age for that type of severe stroke is 74.

**Reports of strokes in the young and middle-aged - not just at Mount Sinai, but also in many other hospitals in communities hit hard by the novel coronavirus - are the latest twist in our evolving understanding of its connected disease, COVID-19.** The analyses suggest coronavirus



# Sample Risk Reports

DHSES | Trending Conversations / Issues – as of 4/24/2020, 5:00 PM ET

#	Conversation Topic	Insight Summary	Real-Time Activity			Overall Prediction <sup>1</sup>	
			Share of Voice <sup>2</sup>	Velocity <sup>3</sup>	Sentiment	24 hr. Potential	72 hr. Potential
1	Hospitalized COVID-19 patients were already suffering from chronic health issues	<ul style="list-style-type: none"> <li>A study published in the Journal of the American Medical Association (JAMA) has gained the attention of news outlets and social media users. News outlets report that the majority of hospitalized COVID-19 patients had at least one chronic health problem. Social media users appear to question the U.S. healthcare system's efficacy with statements such as "easy and equal access to healthcare for all Americans would have helped negate the current crisis."</li> <li><a href="https://www.nytimes.com/2020/04/23/health/coronavirus-patients-risk.html?smid=tw-nytimes&amp;smtyp=cur">https://www.nytimes.com/2020/04/23/health/coronavirus-patients-risk.html?smid=tw-nytimes&amp;smtyp=cur</a></li> <li><a href="https://jamanetwork.com/journals/jama/fullarticle/2765184?questAccessKey=906e474e-0b94-4e0e-8eaa-606ddf0224f5&amp;utm_source=For%20The%20Media&amp;utm_medium=referral&amp;utm_campaign=ftm_links&amp;utm_content=tfi&amp;utm_term=042220">https://jamanetwork.com/journals/jama/fullarticle/2765184?questAccessKey=906e474e-0b94-4e0e-8eaa-606ddf0224f5&amp;utm_source=For The Media&amp;utm_medium=referral&amp;utm_campaign=ftm_links&amp;utm_content=tfi&amp;utm_term=042220</a></li> <li><a href="https://twitter.com/Brandon_Bird/status/1253480097295724544">https://twitter.com/Brandon_Bird/status/1253480097295724544</a></li> </ul>	~2% of discussion	↔	Negative	↔	↓
2	Impact of UV light and disinfectants on COVID-19	<ul style="list-style-type: none"> <li>President Trump's statement regarding the use of disinfectants and UV light to treat COVID-19 has garnered notable media attention. The New York State Department of Health (NYSDOH) responded to Trump's statement by requesting that New Yorkers refrain from ingesting disinfectants or cleaning products. Social media users appear supportive and thankful for the advice and facts provided by the NYSDOH with comments such as "In no way should anyone be ingesting or injecting themselves with disinfectant or cleaning products" and "I hope no one will try this."</li> <li><a href="https://edition.cnn.com/2020/04/24/politics/donald-trump-disinfectant-uv-light/index.html">https://edition.cnn.com/2020/04/24/politics/donald-trump-disinfectant-uv-light/index.html</a></li> <li><a href="https://twitter.com/HealthNYGov/status/1253667634182307846">https://twitter.com/HealthNYGov/status/1253667634182307846</a></li> <li><a href="https://twitter.com/lessiehogeboom/status/1253670142111858690">https://twitter.com/lessiehogeboom/status/1253670142111858690</a></li> <li><a href="https://twitter.com/Marylovesphones/status/1253671130944208897">https://twitter.com/Marylovesphones/status/1253671130944208897</a></li> </ul>	~3% of discussion	↑	Negative	↑	↑

**LEGEND:** (Sentiment / Conversation Direction / Velocity Direction)

	Positive/Growth		Negative/Growth		Mixed/Growth		Growing Velocity
	Positive/Decline		Negative/Decline		Mixed/Decline		Declining Velocity
	Positive/Static		Negative/Static		Mixed/Static		Static Velocity















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DHSES | Trending Conversations / Issues – as of 4/24/2020, 5:00 PM ET

Security & Emergency Services 

#	Conversation Topic	Insight Summary	Real-Time Activity			Overall Prediction <sup>1</sup>	
			Share of Voice <sup>2</sup>	Velocity <sup>3</sup>	Sentiment	24 hr. Potential	72 hr. Potential
4	"Rent freeze" proposal for NYC residents	<ul style="list-style-type: none"> <li>The conversation revolving around the NYC Rent Guidelines Board (RGB) receiving requests for a rent freeze is gaining attention. The RGB met virtually to discuss the possibility of granting this request and has not released any decisions yet, but will further discuss this matter on April 30<sup>th</sup>. NYC Mayor de Blasio expressed his support of the rent freeze request, explaining that tenants are facing a variety of problems and a rent freeze is required. Social media users primarily expressed agreement with this proposal and voiced opinions such as "Let's do it. FOR the People." Some users also suggested, "Start with the banks, suspend mortgage payments, and landlords must then be required to suspend rent" for all types of home owners.</li> <li><a href="https://www.ny1.com/nyc/all-boroughs/news/2020/04/24/rent-guidelines-board-meets-remotely-amid-growing-calls-for-rent-freeze-">https://www.ny1.com/nyc/all-boroughs/news/2020/04/24/rent-guidelines-board-meets-remotely-amid-growing-calls-for-rent-freeze-</a></li> <li><a href="https://twitter.com/NYCMayor/status/1253500391024705539">https://twitter.com/NYCMayor/status/1253500391024705539</a></li> <li><a href="https://twitter.com/aero_kleen/status/1253508273321410561">https://twitter.com/aero_kleen/status/1253508273321410561</a></li> <li><a href="https://twitter.com/StevieZBrooklyn/status/1253503756483821574">https://twitter.com/StevieZBrooklyn/status/1253503756483821574</a></li> </ul>	~1% of discussion		Positive		

**LEGEND:** (Sentiment / Conversation Direction / Velocity Direction)

	Positive/Growth		Negative/Growth		Mixed/Growth		Growing Velocity
	Positive/Decline		Negative/Decline		Mixed/Decline		Declining Velocity
	Positive/Static		Negative/Static		Mixed/Static		Static Velocity

