Navajo Area Indian Health Service COVID-19 Situation Awareness

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Thu, 3/26/20, 12pm MDT

Big Caveat…

- This is a rapidly evolving situation and changing by the hour (if not the minute)…

In the news…

- FEMA now the agency leading the US COVID-19 response
- President Trump would like to ease nationwide social distancing guidelines by Easter, April 12 to ease economic impact
- Doctors and nurses in Zimbabwe went on strike (3/25/20) for lack of available PPE
- 2020 Summer Olympics in Tokyo postponed

Global Cases and Deaths

- Globally: 460,250 cases/20,857 deaths
  - China: 81,661 cases/3,285 deaths
  - Italy: 74,386 cases/7,503 deaths
  - US: 74, 386 cases/894 deaths
  - Spain: 47, 611 cases/3,445 deaths
  - Germany: 37,323 cases/206 deaths

US Cases and Deaths

- 3rd country in the world with the highest confirmed cases
  - US: 74, 386 cases/894 deaths
- States with the highest cases/deaths:
  - New York: 30,811 cases/ 285 deaths (192 cases NYC)
  - New Jersey: 4,402 cases/ 62 deaths
  - California: 2,675 cases/ 59 deaths
  - Washington: 2,472 cases/ 125 deaths

IHS Areas Cases (as of 3/23/20)

IHS Area	Tested	Positive	Negative
Alaska	1	0	0
Albuquerque	33	0	6
Bemidji	10	0	6
Billlings	76	1	36
California	120	3	23
Great Plains	48	1	29
Nashville	3	0	0
Navajo	629	29	332
Oklahoma City	52	0	6
Phoenix	30	1	7
Portland	118	7	48
Tucson	3	0	1
Total	1123	42	494

Locally Cases and Deaths

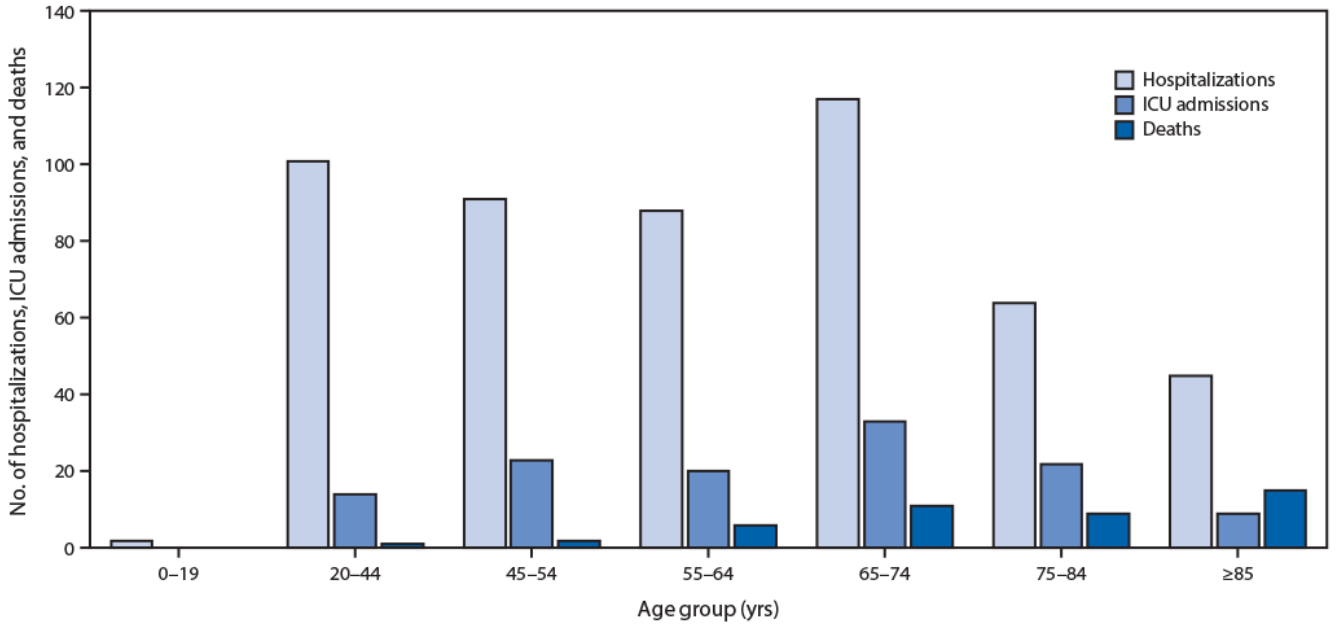
- Colorado: 912 cases/11 deaths (#13 state with highest cases)
- Arizona: 401 cases/6 deaths
- Utah: 298 cases/1 death
- New Mexico: 100 cases/1 death
- Navajo Nation: 49 cases as of 3/24/2020)
  - Navajo County : 30
  - Apache County: 7
  - Coconino County: 6
  - San Juan: 2
  - McKinley: 4
  - Link here: http://www.ndoh.navajo-nsn.gov/COVID-19

CDC Guideline Updates

- Since last week webinar (3/17/20), CDC has posted more than 80 updates to their site
  - Link here: https://www.cdc.gov/coronavirus/2019-ncov/whats-new-all.html
  - PPE Burn Rate Calculator (3/25/20)
  - Guidance for homeless service providers (3/25/20)
  - Updated guidance for outpatient hemodialysis facilities (3/24/20)
  - Guidance for correctional and detention facilities (3/23/20)
- As of 3/24/20, changes made:
  - Allowance for self or HCW-collected nasal swabs as an acceptable specimen type if NP swab is not possible
  - Allowance for self or HCW-collected nasal turbinate swabs as an acceptable specimen type if NP swab is not possible

Severe Outcomes Among Patients with COVID-19 United States, Feb 12 – Mar 16, 2020 MMWR, Mar 18, 2020

FIGURE 2. Coronavirus disease 2019 (COVID-19) hospitalizations,* intensive care unit (ICU) admissions,† and deaths,§ by age group — United States, February 12– March 16, 2020



* Hospitalization status missing or unknown for 1,514 cases.

† ICU status missing or unknown for 2,253 cases.

§ Illness outcome or death missing or unknown for 2,001 cases.

Severe Outcomes Among Patients with COVID-19 United States, Feb 12 – Mar 16, 2020 MMWR, Mar 18, 2020

TABLE. Hospitalization, intensive care unit (ICU) admission, and case–fatality percentages for reported COVID–19 cases, by age group —United States, February 12–March 16, 2020

	%*		
Age group (yrs) (no. of cases)	Hospitalization	ICU admission	Case-fatality
0–19 (123)	1.6–2.5	0	0
20–44 (705)	14.3–20.8	2.0–4.2	0.1–0.2
45–54 (429)	21.2–28.3	5.4–10.4	0.5–0.8
55–64 (429)	20.5–30.1	4.7–11.2	1.4–2.6
65–74 (409)	28.6–43.5	8.1–18.8	2.7–4.9
75–84 (210)	30.5–58.7	10.5–31.0	4.3–10.5
≥85 (144)	31.3–70.3	6.3–29.0	10.4–27.3
Total (2,449)	**20.7–31.4**	**4.9–11.5**	**1.8–3.4**

COVID-19 in a Long-Term Care Facility
King County, Washington, Feb 27 – Mar 9, 2020
MMWR, Mar 18, 2020

TABLE. Characteristics of patients with COVID-19 epidemiologically linked to facility A among residents of King and Snohomish counties — Washington, February 27–March 9, 2020

Characteristics	No. (%)			
	Resident (n = 81)	Health care personnel (n = 34)	Visitor (n = 14)	Total (n = 129)
Median age, yrs (range)	81 (54–100)	42.5 (22–79)	62.5 (52–88)	71 (22–100)
Sex				
Men	28 (34.6)	7 (20.6)	10 (71.4)	45 (34.9)
Women	53 (65.4)	27 (79.4)	4 (28.6)	84 (65.1)
Hospitalized				
Yes	46 (56.8)	2 (5.9)	5 (35.7)	53 (41.1)
No	3 (3.7)	30 (88.2)	9 (64.3)	42 (32.6)
Unknown	32 (39.5)	2 (5.9)	0	34 (26.4)
Died				
Yes	22 (27.2)	0	1 (7.1)	23 (17.8)
No	59 (72.8)	34 (100.0)	13 (92.9)	106 (82.2)
Chronic underlying conditions*,†				
Hypertension§	56 (69.1)	0	2 (14.3)	58 (45.0)
Cardiac disease	46 (56.8)	3 (8.8)	2 (14.3)	51 (39.5)
Renal disease	35 (43.2)	0	1 (7.1)	36 (27.9)
Diabetes mellitus	30 (37.0)	3 (8.8)	1 (7.1)	34 (26.4)
Obesity	27 (33.3)	0	3 (21.4)	30 (23.3)
Pulmonary disease	26 (32.1)	2 (5.9)	2 (14.3)	30 (23.3)
Malignancy	11 (13.6)	0	0	11 (8.5)
Immunocompromised	8 (9.9)	0	0	8 (6.2)
Liver disease	5 (6.2)	0	0	5 (3.9)

* Percentages represent the number with information on the comorbidity, irrespective of missing data.
† Data on chronic underlying conditions were missing for four health care personnel and two visitors with COVID-19.
§ Hypertension was the only reported chronic underlying condition for 6 residents and 1 visitor with COVID-19.

Impact of non-pharmaceutical interventions (NPIs) to reduce COVID19 mortality and healthcare demand Imperial College UK, Mar 16, 2020

- COVID-19 is the most serious threat since 1918 flu (H1N1) pandemic
- Mitigation (reduce R, but not <1) vs. Suppression (reducing R <1) strategies
- Will need to continue mitigation strategies for 18 months or more
- Vaccine will take at least 12-18 months to develop
- In an unmitigated epidemic, with R0 = 2.4, model predicts 81% of people will become infected in UK and US and model predicts 510,000 deaths in UK and 2.2 million in the US (this does not account for possible negative effects of healthcare system being overwhelmed)

Impact of non-pharmaceutical interventions (NPIs) to reduce COVID19 mortality and healthcare demand Imperial College UK, Mar 16, 2020

- Key-takeaways:
  - China not only hospitalized cases that needed to be admitted, but also hospitalized milder cases to reduce onward transmission from cases in the household and other settings
  - Population-wide social distancing, home isolation of cases and school/university closure have the largest impact to suppress threshold below R =1
  - These strategies need to be in place for 18 months or more
  - Interventions need to be in place well before healthcare capacity is overwhelmed
  - Even if all patients can be treated, it is still predicted that there will be 250,000 deaths in UK and 1.1-1.2 million deaths in the US

Keeping the Coronavirus From Infecting Health-Care Workers
Atul Gawande, New Yorker, Mar 21, 2020

- Tactics that work (as seen in Singapore & Hong Kong)
  - All HCW wear surgical masks, gloves, proper hand hygiene, disinfect surfaces in between patient consults
  - Have separate respiratory ward/clinic – with separate teams
  - Social distancing practiced in hospitals, waiting room chairs 6 feet apart
  - Direct interactions among staff members are conducted at a distance
  - Doctors and patients stay six feet apart except during examinations
  - Coordinated, unified communications with clear, transparent, up-to-date guidelines and data

Thank you!

- Questions?