COMMENTARY

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COVID-19 Pandemic: A Collection of Relevant Publications from Military Medicine

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The most recent coronavirus, SARS-CoV-2 and its subsequent coronavirus disease 2019 (COVID-19),[1] has reached pandemic proportions requiring unprecedented actions. One established resource for national emergencies has been our nation's military. The Department of Defense mobilized National Guard, Reserve, and Active Duty service members to support the COVID-19 response and thereby accessed the nation's largest source for medical surge capacity. Our purpose for this commentary was to review over 80 years of publications in Military Medicine and identify a collection of relevant articles to the topic of COVID-19. These selected articles examine various aspects of infectious diseases, epidemics, and pandemics as analyzed through the lens of military medical experts. Our objective was to identify a selection of pertinent published military medical articles readily accessible with free access on the Military Medicine website.

In synthesizing this information, we conducted a review of published articles in Military Medicine's database from July 1940 to January to February 2020. The search terms were pandemic influenza, disease outbreaks, and infectious disease influenza. From reviewing the articles, groupings emerged that characterized our collection of articles.

Six groupings were determined: (1) experience with influenza epidemics and pandemics; (2) encounters with other infectious diseases outbreaks in a deployed environment; (3) policy and position articles; (4) potential high-risk military groups and environments; (5) differential, biological warfare, or natural outbreak; and (6) pandemic strategies. These were editorial choices with articles organized around these six groupings (Table I).

In summary, the military and Military Medicine has a wealth of prior experience and information with influenza and infectious disease to bring forward to aide in the COVID-19 pandemic.[2,3] We hope you find this information helpful. The Military Medicine and AMSUS will provide free access to the articles listed in Table I at our website (https://academic.oup.com/milmed).

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TABLE I. Military Medicine Published Articles Organized by Themes

Experience with influenza epidemics and pandemics

Influenza

- Riley P, Cost AA, Riley S: Intra-weekly variations of influenza-like illness in military populations. *Mil Med* 2016; 181(4): 364–68.
- Jeffery DD, Cohen M, Brooks A, Linton A, Gromadzki R, Hunter C: Impact of the 2009 influenza (H1N1) pandemic on the United States Military Health Care System. *Mil Med* 2013; 178(6): 653–58.
- McNeill KM, Vaughn BL, Brundage MB, Li Y, Poropatich RK, Gaydos JC: Clinical presentations for influenza and influenza-like illness in young, immunized soldiers. *Mil Med* 2005; 170(1): 94–7.
- Likos AM, Neville J, Gaydos JC: Influenza outbreak and response preparedness in the Air National Guard. *Mil Med* 2002; 167(11): 929–33.
- Olson JG, Irving GS, Ksiazek TG, Rendin RW: An explosive outbreak of influenza caused by A/USSR/77-like virus on a United States Naval Ship. *Mil Med* 1979; 144(11): 743–45.
- Ritzinger FR: Disease transmission by aircraft. *Mil Med* 1965; 130(7): 643–47.

1918–1919 Influenza

- Shanks GD, Burroughs S, Sohn JD, et al: Variable mortality from the 1918–1919 influenza pandemic during military training. *Mil Med* 2016; 181(8): 878–82.
- Snyder TL: Navy support to civilian authorities during the 1918 influenza pandemic—history's lessons and recommendations for future work. *Mil Med* 2009; 174(11): 1223–27.
- Clarke T, Jr.: Pandemic, 1918. *Mil Med* 2016; 181(8): 941–42.
- Hrenoff AK: The influenza epidemic of 1918–1919 in San Francisco. *Mil Surg* 1941; 89(5): 805–11.

Encounters with other infectious disease outbreaks in a deployed military environment

- Cross ER, Hermansen LA, Pugh WM, White MR, Hayes C, Hyams KC: Upper respiratory disease in deployed U.S. Navy shipboard personnel. *Mil Med* 1992; 157(12): 649–51.
- Whittaker DR, Callan JE, Campbell JT, McCarten MD: Viral Gastroenteritis: The USS THEODORE ROOSEVELT experience. *Mil Med* 2004; 169(9): 747–50.
- Vyas KJ, Delaney EM, Webb-Murphy JA, Johnston SL: Psychological impact of deploying in support of the U.S. response to Ebola: a systematic review and meta-analysis of past outbreaks. *Mil Med* 2016; 181(11–12): e1515–31.
- Dembek ZF, Mothershead JL, Chekol T, et al: Operational perspective of lessons learned from the Ebola crisis. *Mil Med* 2017; 182(1–2): e1507–13.
- Potter RN, Tremaine LA, Gaydos JC: Mortality surveillance for infectious diseases in the U.S. Department of Defense (1998–2013). *Mil Med* 2017; 182(3): e1713–18.
- Lanteri C, Mende K, Kortepeter M: Emerging infectious diseases and antimicrobial resistance (EIDAR). *Mil Med* 2019; 184(Suppl. 2): 59–5.
- Wojcik B, Humphrey R, Czejdo B, Hassell L: U.S. Army disease and nonbattle injury model, refined in Afghanistan and Iraq. *Mil Med* 2008; 173: 825–35.
- Potter RN, Tremaine LA, Gaydos JC: Mortality surveillance for infectious diseases in the U.S. Department of Defense (1998–2013). *Mil Med* 2017; 182(3): e1713–18.

Policy and position papers

- Otto JL, Barnett DJ, Fisher C, Lipnick R, DeFraites RF: Department of Defense position on patient movement during influenza A (H1N1) pandemic: implications for actions now. *Mil Med* 2010; 175(3): 138–9.
- Feighner BH, Chrétien JP, Murphy SP, et al: The pandemic influenza policy model: a planning tool for military public health officials. *Mil Med* 2009; 174(6): 557–65.
- Decker JA, DeBord DG, Bernard B, et al: Recommendations for biomonitoring of emergency responders: focus on occupational health investigations and occupational health research. *Mil Med* 2013; 178(1): 68–75.

Potential high risk military groups and environments for infectious disease

- Potter RN, Tremaine LA, Gaydos JC: Mortality Surveillance for infectious diseases in the U.S. Department of Defense (1998–2013). *Mil Med* 2017; 182(3): e1713–18.
- Riddle MS, Sherman SS, Kilbane EM, Putnam SD: A multivariate analysis of factors associated with differential disease and nonbattle injury and morbidity aboard ships of the U.S. Naval 5th Fleet during peacetime deployment. *Mil Med* 2004; 169(10): 787–94.
- Withers MR, Christopher GW: Aeromedical evacuation of biological warfare casualties: a treatise on infectious diseases on aircraft. *Mil Med* 2000; 165(Suppl. 3): 1–21.
- McKenzie RT, Boren DM: Analysis of environmental issues for nursing aboard the USNS Mercy (T-AH 19). *Mil Med* 2001; 166(6): 463–9.

Differential, biological warfare, or natural outbreak?

- Chen X, Chughtai AA, MacIntyre CR: A systematic review of risk analysis tools for differentiating unnatural from natural epidemics. *Mil Med* 2017; 182(11–12): e1827–35.
- Cieslak TJ, Kortepeter MG, Wojtyk RJ, Jansen H-J, Reyes RA, Smith JO: Beyond the dirty dozen: a proposed methodology for assessing future bioweapon threats. *Mil Med* 2017; 183(1–2): e59–65.
- Noah DL, Sobel AL, Ostroff SM, Kildew JA: Biological warfare training: infectious disease outbreak differentiation criteria. *Mil Med* 1998; 163(4): 198–201.
- Bryce L, Koenig M, Jerke KH: A large-scale study of respiratory virus infection over 2 years using the Luminex xTAGRVP assay. *Mil Med* 2012; 177(12): 1533–38.
- MacIntyre CR: Biopreparedness in the age of genetically engineered pathogens and open access science: an urgent need for a paradigm shift. *Mil Med* 2015; 180(9): 943–9.

Pandemic strategies: surveillance, preparations, and planning, prediction modeling, monitoring

- Sobieraj JA, Reyes J, Dunemn KN, et al: Modeling hospital response to mild and severe influenza pandemic scenarios under normal and expanded capacities. *Mil Med* 2007; 172(5): 486–90.
- Otto JL, Lipnick RJ, Sanchez JL, DeFraites RF, Barnett DJ: Preparing military installations for pandemic influenza through tabletop exercises. *Mil Med* 2010; 175(1): 7–13.
- Need JT, Mothershead JL: Strategic national stockpile program: implications for military medicine. *Mil Med* 2006; 171(8): 698–702.
- Fuller J, Hanley K, Schultz R, et al: Surveillance for febrile respiratory infections during Cobra Gold 2003. *Mil Med* 2006; 171(5): 357–9.
- Kronmann KC, Ampofo W, Nzussouo T, et al: Building military influenza surveillance capacity in West Africa. *Mil Med* 2013; 178(3): 306–14.
- Canas LC, Lohman K, Pavlin JA, et al: The department of defense laboratory-based global influenza surveillance system. *Mil Med* 2000; 165(Suppl. 2): 52–6.
- Williams RJ, Cox NJ, Regnery HL, et al: Meeting the challenge of emerging pathogens: the role of the United States Air Force in global influenza surveillance. *Mil Med* 1997; 162(2): 82–6.

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