대한예방의학회/한국역학회 코로나19 TF 주간 정책 리포트 11호

2020.07.13.

❍ 안내

대한예방의학회/한국역학회 코로나19 TF 주간정책리포트를 통해 알리고자 하는 회원들의 코로나19 관련 발표(학회, 심포지엄 등)과 학술활동(논문, 보고서 등)에 대해 연락주시기 바랍니다. 또한 통계, 논문, 보고서 등 함께 나누고 싶은 내용이 있으면 보내주십시오. lhy0313@gmail.com으로 메일 주시면 정책리포트에서 소개하겠습니다.

01 코로나19 주목할 만한 통계

○ 미국의 국제보건기구인 Vital Strategies가 운영 중인 Prevent Epidemics 홈페이지 중 COVID-19 관련 자료(https://preventepidemics.org/covid19/resources/)에 발표된 보고서 “STAYING ALERT: Navigating COVID-19 Risk Toward a New Normal”(https://preventepidemics.org/covid19/resources/levels/)에는 유행상황별 단계 조정에 대한 기준을 제시하고 있음. 다음 세 단계를 제시하고 부록으로 미국상황에서의 예시를 보여주고 있으며, 아래 그림은 미국에서의 Alert system 지표와 기준임

- Step 1: Use evidence-based indicators to develop thresholds tailored to local context for all categories of the alert system
- Step 2: Translate each level into clear actions for communities
- Step 3: Develop communication tool and roll out plan so the community understands the system and the behaviors expected

COVID-19 Alert-Level System Indicators, Triggers and Thresholds*

Alert levels should be tailored to local context and agreed upon by a multi-stakeholder group. Before deciding on the thresholds for levels, you should ensure you are able to capture data regularly and be able to analyze and share it consistently.

Below is an example of an alert-level system with indicators and thresholds for USA States

Category	Key question	Indicator	Triggers to raise to a higher level (e.g., 2->3)	Triggers to lower level (e.g., 4->3)	Indicator threshold for each level			
					Level 1 New normal	Level 2 Low Alert	Level 3 Moderate Alert	Level 4 High Alert
Disease situation	What is the level of disease burden and how is it changing?	Daily case incidence** (new cases per 1M people per day)***	Increasing to meet new threshold over a 7-day period	Decreasing to meet new threshold over a 14-day period	<10/1M/day	10-19/1M/day	20-39/1M/day	40/1M/day or higher
	Are there early signs of a resurgence in cases?	Syndromic data (Influenza-like illness or COVID-19-like illness)	Increasing over a 5-day period	N/A	Near seasonal average	Near seasonal average	Near seasonal average or above seasonal average and declining	Above seasonal average or rising
Health care system	Do we have capacity to treat severe cases?	ICU availability of surge beds above current capacity	Meet threshold over a 3-day period	Meet threshold over 3-day period	40% or more	30-39%	20-29%	Less than 20%
	Are we protecting health care workers?	Number of health care worker infections	Increasing over a 7-day period	Decreasing over a 7-day period	No HCW infections	Decreasing	Decreasing	Increasing or unknown
Disease control	Are we testing enough to detect cases?	Percentage of tests that are positive	Increasing over a 7-day period	Decreasing over a 7-day period	< 5%	5-9%	10-14%	15% or higher
		Total testing per 1,000 people per day	Meet threshold over a 7-day period	Meet threshold over a 7-day period	>10	5-10	1.5-5	<1.5 per 1000 average per day
	Do we have robust contact tracing?	Percentage of new cases from quarantined contacts	Meet threshold over a 7-day period	Meet threshold over a 7-day period	50% or more	30-49%	10-29%	<10%

* Jurisdictions may decrease the overall level by one increment, and one increment only, if there is an openly made societal decision that the economic and/or social harms from the restrictions outweigh the benefits on control of Covid-19. In this case, it is especially important to ensure widespread adherence to physical distancing and safety practices. Before increasing a level, the potential impact on economic and social harms should also be considered.

** In the absence of reliable data on new cases, daily trends in new hospitalizations and/or deaths should be monitored.

*** Consider the heterogeneity and population density of the setting when determining risk level. If an isolated confined outbreak or rural area (e.g. population <50 per square mile), this generally has lower transmission risk than a distributed pattern throughout community or a dense area.

02 주요 논문과 보고서(2020.07.07.- 07.13)

1. 주요 논문

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Gaeta JM, De Las Nueces D, Munson DG, Barocas JA, Walsh KE. **Case 21-2020: A 66-Year-Old Homeless Man with Covid-19.** N Engl J Med. 2020 Jul 9;383(2):170-178. doi: 10.1056/NEJMcpc2002421.

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2. 주요 보고서

- **WHO**

Investing in and building longer-term health emergency preparedness during the COVID-19 pandemic (2020.07.06.) https://www.who.int/publications/i/item/investing-in-and-building-longer-term-health-emergency-preparedness-during-the-covid-19-pandemic

Transmission of SARS-CoV-2: implications for infection prevention precautions (2020.07.09) https://www.who.int/publications/i/item/modes-of-transmission-of-virus-causing-covid-19-implications-for-ipc-precaution-recommendations (경기도감염병관리지원단 홈페이지 gidcc.or.kr에 전문 번역되어 있음)

Maintaining a safe and adequate blood supply during the pandemic outbreak of coronavirus disease (COVID-19) (2020.07.10.) https://www.who.int/publications/i/item/maintaining-a-safe-and-adequate-blood-supply-during-the-pandemic-outbreak-of-coronavirus-disease-(covid-19)

- **기타**

CIDRAP. SARS-CoV-2 infection and COVID-19 surveillance: a national framework (2020.07.09.) https://www.cidrap.umn.edu/sites/default/files/public/downloads/cidrap-covid19-viewpoint-part5.pdf