

## WHO 對於韓國政府高層的建議

(High-level messages <http://www.wpro.who.int/mediacentre/mers-hlmsg/en/>)

1. 應立即加強全國醫療機構的感染管制措施。
2. 所有出現發燒或呼吸道症狀的病人，應詢問：有無接觸 MERS 病人；是否曾出入已確診 MERS 病人曾到過的醫療機構；出現症狀前 14 天是否曾往中東的旅遊史。當病人有上述事實時，應立即向衛生主管部門通報並在診斷確認前，作為疑似個案管理。
3. MERS 病例的密切接觸者在健康管理期間不宜遠行。
4. 強烈建議學校恢復上課，因為在韓國或其他國家皆未發現學校與 MERS 傳播的相關性。
5. 為防止更多病例發生，所有衛生部門必須繼續實施的最重要基本公共衛生措施包括：
  - (1) 盡早且完整的確認和調查所有的接觸者
  - (2) 確實檢疫/隔離和監控所有疑似病例及接觸者
  - (3) 全面落實感染管制措施
  - (4) 避免感染者和接觸者出外旅行，尤其是出國
6. 地方政府必須全面投入並動員參與國家防治策略，共同對抗此一龐大且複雜的疫情。
7. 在疾病預防和控制措施的同時，應採取措施加強國內和國際的信心和信

任。最重要的是提高風險溝通。衛生福利部應以韓文和英文定期提供包括流行病學現況、調查結果和疾病控制措施等內容的更新信息。

8. 急需增額的應變人員以因應疫情，並為目前已在處理疫情的工作人員提供備勤支援。
9. 指派特定醫院作為疑似 MERS 病例的安全分流和評估之用。這需要訓練有素的人員，醫院管理，以及與社會大眾的溝通。
10. 規劃執行綜整性的調查研究以消弭知識差距，包括血清流行病學研究，應可盡快完成並將結果與大眾溝通。
11. 韓國應確保該國足以妥適因應未來可能發生的疫情，尤其需要：加強需收治重大傳染病人的醫療機構的應變能力，包括增加負壓隔離病房數；考慮如何減少“doctor shopping”的習慣；培養更多的感染管制專家，傳染病專家，實驗室專家，流行病學家和風險溝通專家；並加強公共衛生量能和領導能力，包括韓國疾病預防控制中心（KCDC）。



## High-level messages

### Assessment

- This outbreak in the Republic of Korea, which started with the introduction of MERS-CoV infection into the country by a single infected traveller, was amplified by infection in hospitals and movement of cases within and among hospitals.
- A combination of older and new cases continues to be reported, but the epidemic curve shows that the number of new cases occurring each day appears to be declining. This decline has coincided with much stronger contact tracing, monitoring and quarantine, suggesting that disease control measures are working. These measures are greatly facilitated by expanded laboratory testing. However, several weeks will be required to confirm the impact of the measures and whether the outbreak is fully controlled.
- Several factors appear to have contributed to the initial spread of this virus.
  - The appearance of MERS-CoV was unexpected and unfamiliar to most physicians
  - Infection prevention and control measures in hospitals were not optimal
  - Extremely crowded Emergency Rooms and multi-bed rooms contributed significantly to nosocomial infection in some hospitals.
  - The practice of seeking care at a number of medical facilities ("doctor shopping") may have been a contributing factor
  - The custom of having many friends and family members accompanying or visiting patients may have contributed to secondary spread of infection among contacts.
- The rapid increase in numbers of cases has led to much speculation as to whether there may be new contributing factors to transmission. It is too early to draw definitive conclusions at this time, but certain observations can be made:
  - There is no strong evidence at present to suggest that the virus has changed to make the virus more transmissible.
  - Thus far, the epidemiological pattern of this outbreak appears similar to hospital-associated MERS-CoV outbreaks that have occurred in the Middle East. However, this Mission has not been able to determine whether environmental contamination, inadequate ventilation, or other factors have had a role in transmission of the virus in this outbreak. There is a compelling need for further investigation.
- While there is no evidence at present of ongoing community transmission of MERS-CoV in the Republic of Korea, continued monitoring for this possibility is critical. Because the outbreak has been large and complex and more cases can be anticipated, the Government should remain vigilant and continue intensified disease control, surveillance, and prevention measures until the outbreak is clearly over.

### High Level Recommendations for Government

1. Infection prevention and control measures should immediately be strengthened in all health care facilities across the country.
2. All patients presenting with fever or respiratory symptoms should be asked about: contact with a MERS patient; visits to a healthcare facility where a MERS patient has been treated; and history of travel to the Middle East in the 14 days before symptom onset. Any patient with positive responses should be promptly reported to public health authorities and managed as a suspected case while the diagnosis is being confirmed.
3. Close contacts of MERS cases should not travel during the period when they are being monitored for the development of symptoms.
4. Strong consideration should be given to re-opening schools, as schools have not been linked to transmission of MERS-CoV in the Republic of Korea or elsewhere.
5. The most important steps needed to stop further cases involve continued implementation of basic public health measures by all health authorities. These include:
  - a. early and complete identification and investigation of all contacts
  - b. robust quarantine/isolation and monitoring of all contacts and suspected cases
  - c. full implementation of infection prevention and control measures; and
  - d. prevention of travel, especially internationally, of infected persons and contacts

6. Local governments must be fully engaged and mobilized in the national fight against this large and complex outbreak.
7. In parallel with disease prevention and control measures, steps should be taken to strengthen domestic and international confidence and trust. The most important actions involve improving risk communications. The Ministry of Health and Welfare should provide regularly updated information (in Korean and English) on the epidemiological situation, investigations, and disease control measures.
8. Additional staff (for "surge capacity") are urgently required for the response and to provide relief for staff already working on the outbreak.
9. Selected hospitals should be designated for safe triage and assessment of suspected MERS cases. This will require trained personnel, facility management, and communication with the public.
10. Comprehensive research studies designed to close critical gaps in knowledge, including sero-epidemiologic studies, should be completed and the results widely communicated as quickly as possible.
11. The Republic of Korea should ensure that it is able to optimally respond to future outbreaks. In particular, it should strengthen the medical facilities needed to deal with serious infectious diseases, including increased numbers of negative-pressure isolation rooms; consider how to reduce the practice of "doctor shopping"; train more infection prevention and control specialists, infectious disease experts, laboratory scientists, epidemiologists, and risk communication experts; and invest in strengthening public health capacities and leadership, including at Korea Centers for Disease Control and Prevention (KCDC).