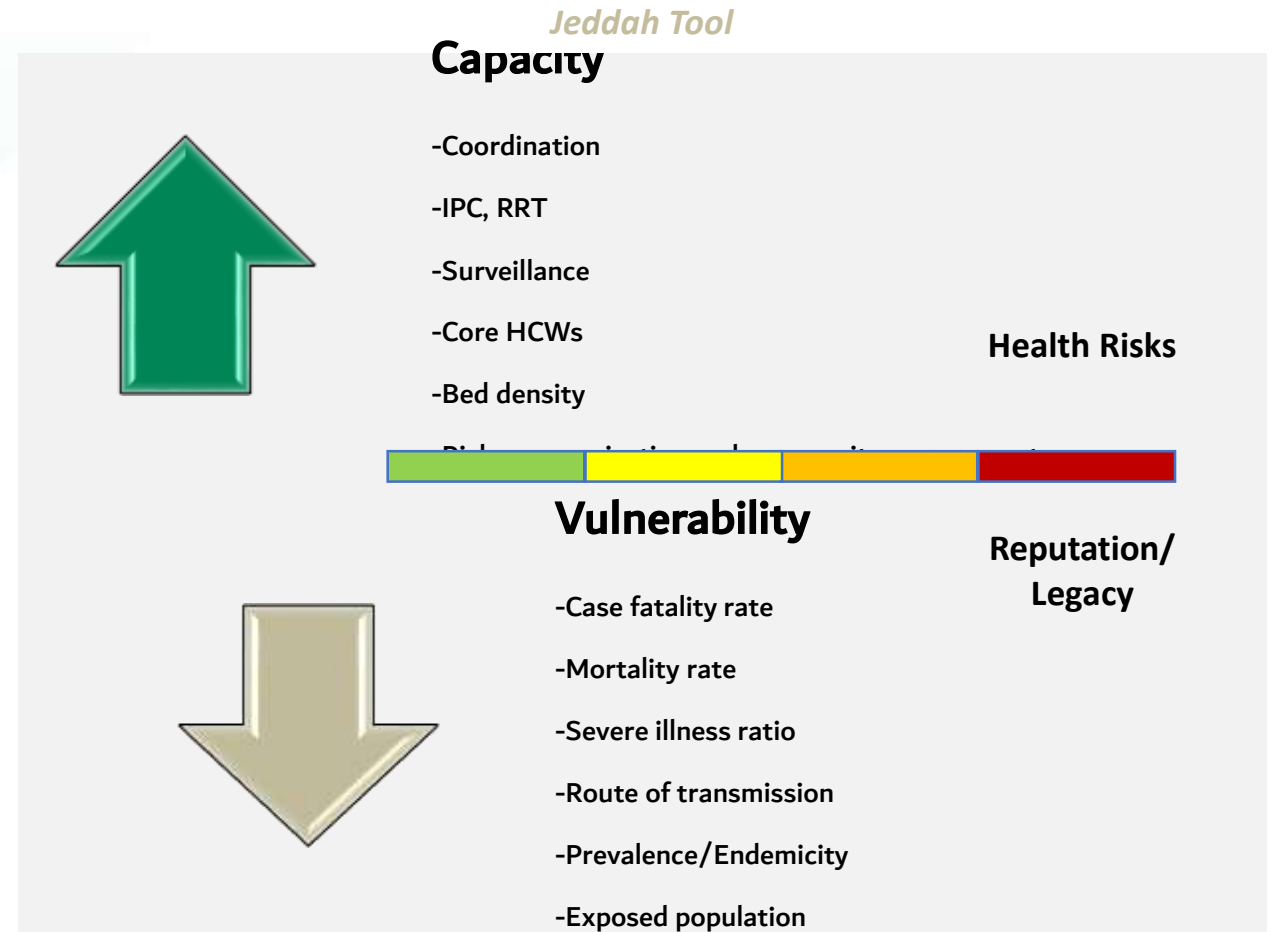


# Strategic Health Risk Assessment

1442H Religious Mass Gatherings

## Aim of Risk Assessment

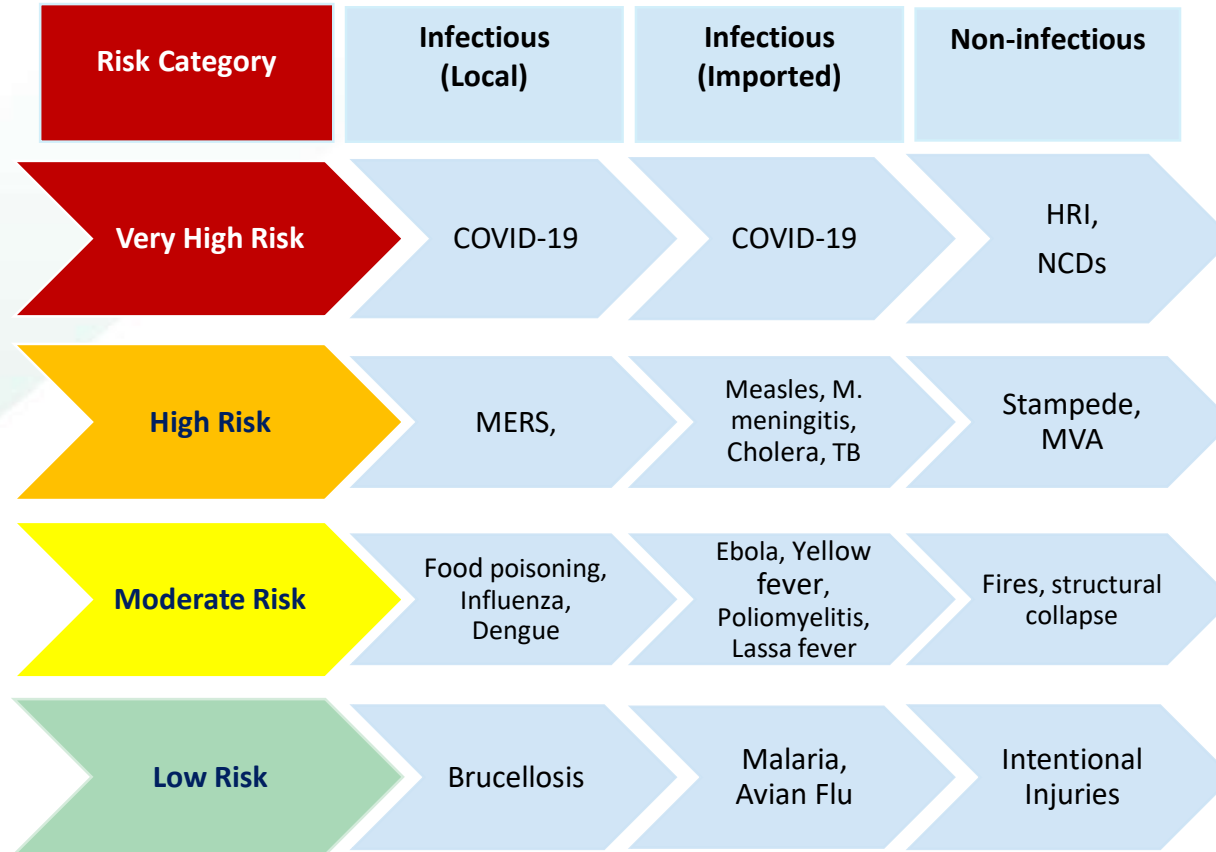
- Identify and prioritize the main hazards that are potential threats
- Explore the vulnerability of the population to hazards
- Assess the existing health system capacities
- Estimate the main health risks
- Estimate the health risks from COVID-19 during Hajj
- Recommend appropriate preventive



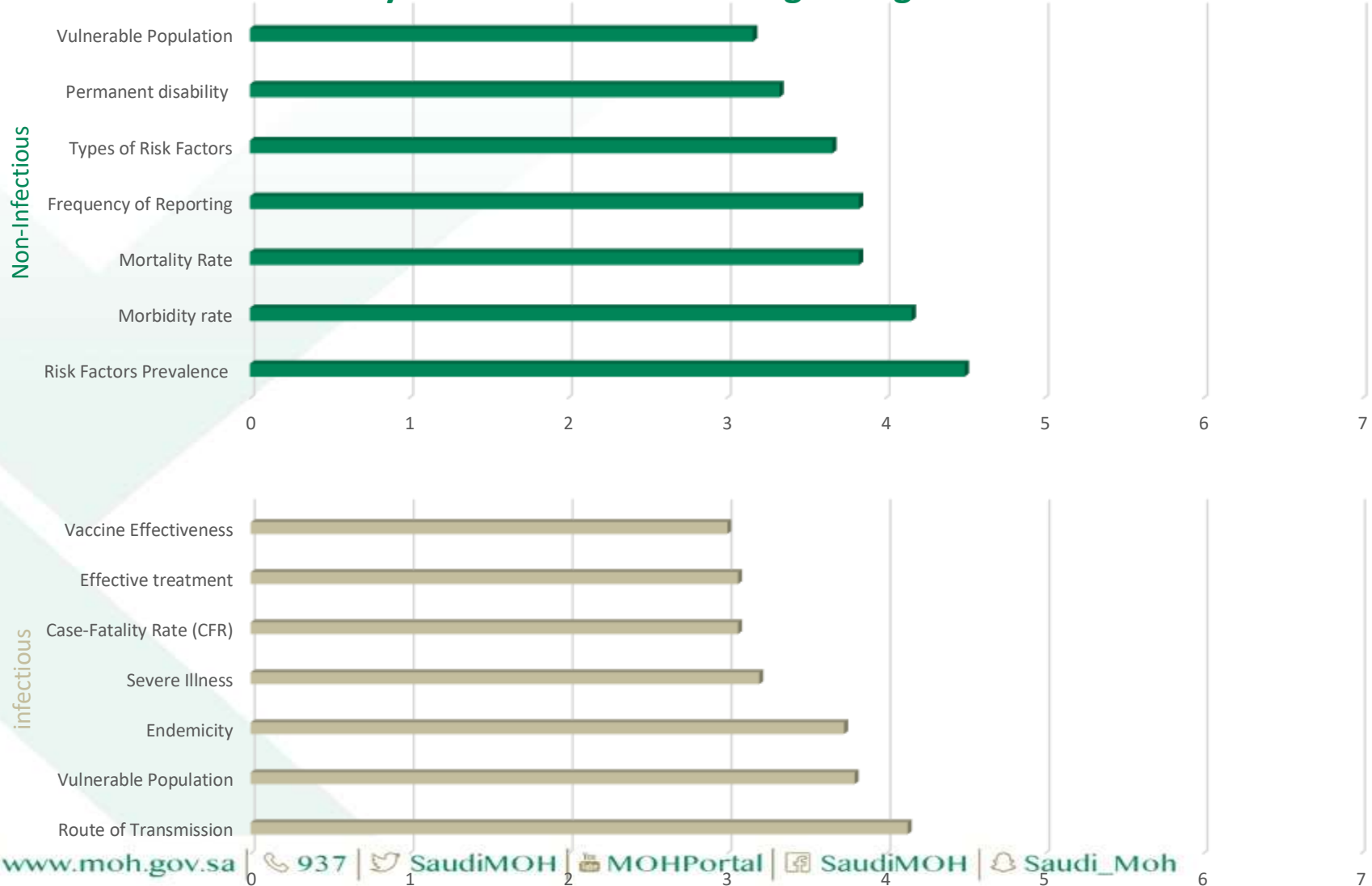
### Risk Ranking for 1442 h – 2021.

#### Risk Estimate Assumptions:

- ❖ Significant reduction in the population of pilgrims
- ❖ International pilgrims will not participate in Hajj
- ❖ Capacities are similar to last Hajj Season

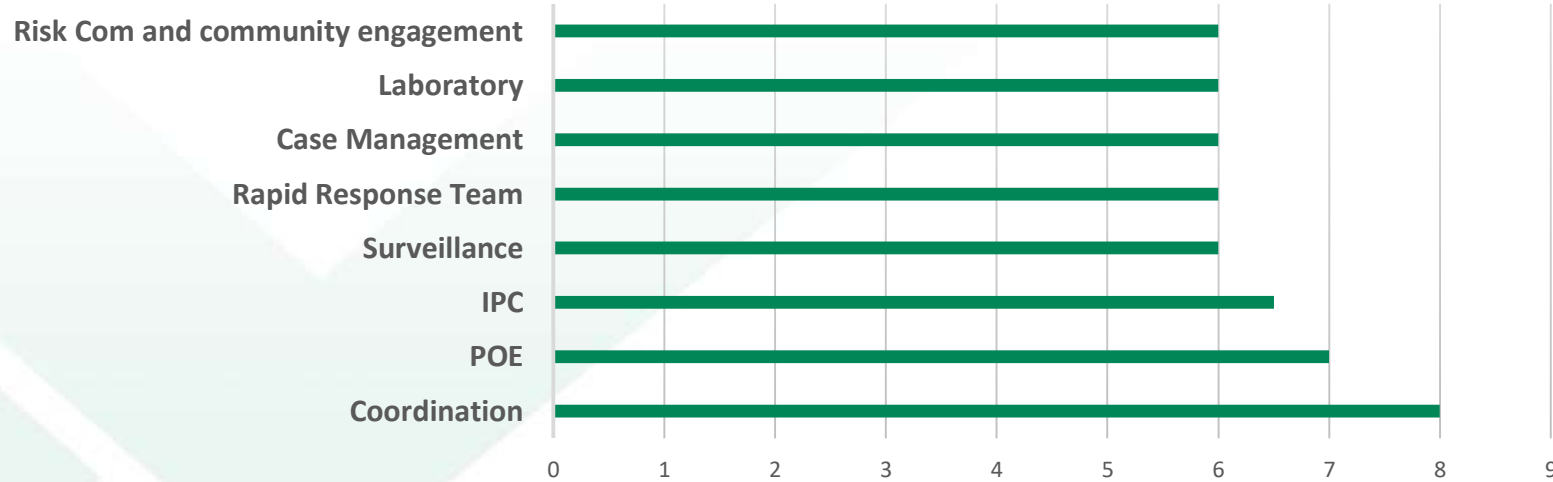


### Vulnerability assessment in ascending strength

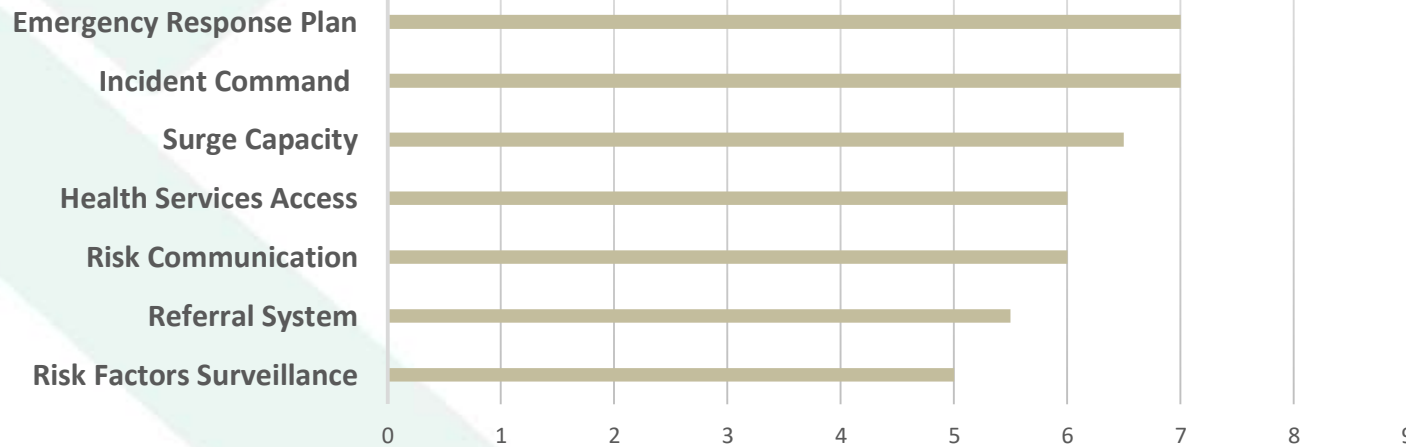


## Capacity assessment in ascending strength

Infectious



Non-Infectious



## Snapshot into COVID 19 global status (26 April 2021):

#	Country, Other	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered	Active Cases	Serious, Critical	Tot Cases/ 1M pop	Deaths / 1M pop	Population
	Globally	147,826,019	+45,194	3,123,608	+1,159	125,821,027	18,881,384	110,401	18,965	400.7	7,794,798,739

Total doses given so far 1.01 billion doses among 235 million individuals ( 3 % of global population)

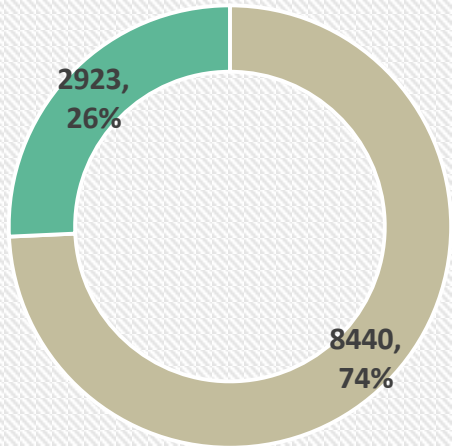
## Risk of COVID-19 variants to spread during mass gatherings:

- Globally, three significant variants of concern (VOCs) have been identified, informally associated with the name of the country where they were first noted. They are referred to as:
  1. the “UK” (B.1.1.7)
  2. the “South Africa” (B.1.351)
  3. the “Brazil” (P1) variants
- Lately, a new variant was detected in India (B1.617), which has two important mutations - L452R and E484Q.
- Variants raise the risk of:
  1. Increased transmissibility
  2. Increased severity and risk of hospitalization
  3. Decreased vaccine effectiveness



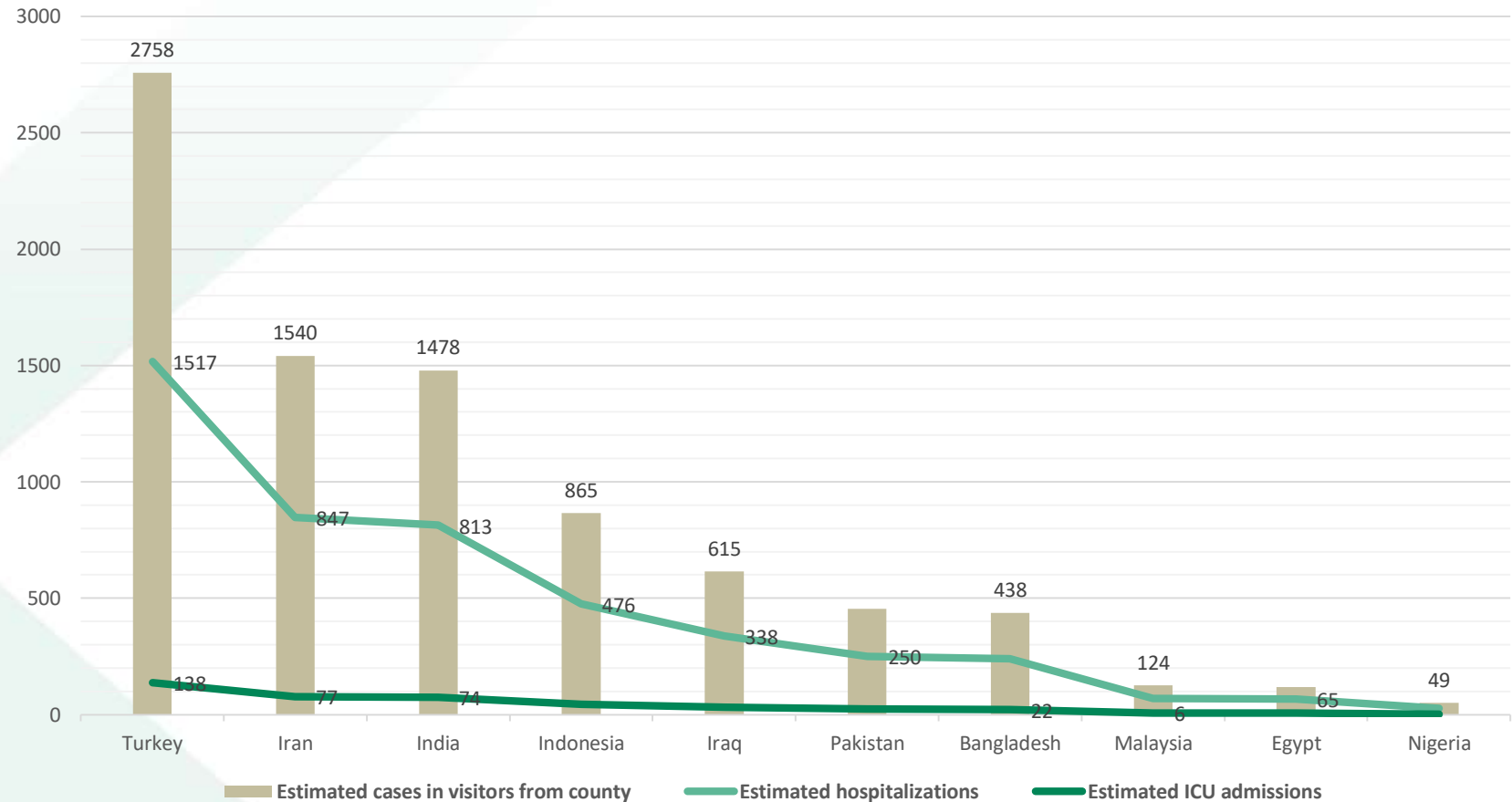
## Modelling expected number of imported cases/1,000,000 visitor population, based on country attack rate, and global disease severity index

Expected COVID-19 cases



■ Top 10 countries ■ KSA

Number of cases: 11364  
Ward Admissions: 6250  
ICU admissions: 568





## Projected COVID-19 bed capacity for different population size with current control measures

Bed needs/ population	2.5 Million		1 Million		500,000		100,000		50,000		10,000	
	Ward	ICU	Ward	ICU	Ward	ICU	Ward	ICU	Ward	ICU	Ward	ICU
<b>(National and International population)</b>	46053	25329	18421	10132	9211	5066	1842	1013	921	507	184	101
<b>(National population only)</b>	28795	15837	11518	6335	5759	3167	1152	633	576	317	115	63

## Class of Recommendation Measures/interventions

### General Measures

#### Planning/Disease surveillance/Training

- Provide unified electronic health record for pilgrim and visitors
- Complete the health early warning system (HEWS)
- Provide refresher courses for all core HCWs, focusing on diseases surveillance, case management and IPC

### COVID-19

#### Coordination/Planning

- Clear ICS and SOP for suspending or restructuring Umrah and Hajj
- Limit the number of attendees and include only those who are vaccinated if possible
- Exclude pilgrims aged  $\geq 65$  years, pregnant women, those with comorbidity and children aged  $\leq 15$  years
- Pilgrims should be accommodated in known fixed accommodation
- The length of stay in the Kingdom/Hajj area should not exceed 10 days
- Mobilize adequate number of trained healthcare personnel without jeopardizing staff capacity in other areas

## Class of Recommendation Measures/interventions

### COVID-19

#### Screening/IPC

- All individuals should be screened and quarantined for 2 weeks before arrival
- Vaccinated attendees could resume domestic travel and refrain from testing before or after travel or self-quarantine after travel
- All pilgrims should be accommodated, transported and mobilized for performance of rituals as a cohort
- Vaccinated attendees could stay indoors with vaccinated individuals without wearing masks or physical distancing.
- A cohort should consist of at most 50 people, alongside service providers assigned exclusively to individual cohort
- An isolation area should be designated in each housing and ritual site
- Maintain a distance of 2 meters between pilgrims at all times during public gatherings.
- Facemask use during outdoor and group activities should be mandatory
- Ensure adequate supply of PPE and monitor IPC measures in health facilities

#### Surveillance

- Active surveillance should be undertaken in housing and ritual areas with linkage to HEWS

## Class of Recommendation Measures/interventions

### COVID-19

#### Risk Communication/ Community Engagement

- A Hajj risk communication plan should be developed and shared with foreign ministries and Hajj organizers

#### Case Management

- A contingency plan for health services delivery, including pathway for care seeking and referral policy should be shared ahead of Hajj

### Infectious Diseases (Contd)

#### Hemorrhagic Fevers (Ebola, Lassa fever)

- Strengthen the contingency plan for response to hemorrhagic fever outbreak
- Conduct entry screening for visitors arriving from Congo (DRC)
- Monitor closely the Lassa fever situation in Nigeria and coordinate with the Nigerian health authorities for exchange of surveillance data.

#### Vector-borne diseases (Dengue, Yellow fever)

- Develop a sustainable plan for vector surveillance in vulnerable areas
- Coordinate with the municipality regarding vector control for dengue in urban areas

#### Meningococcal Meningitis

- Consider recommending the conjugate meningococcal vaccine as mandatory requirement .

#### Measles

- Strengthen measles surveillance

## Class of Recommendation Measures/interventions

### Foodborne diseases

- Discourage street hawking in the Hajj areas
- Monitor the food supply of accredited vendors
- Strengthen the capacity of foodborne diseases investigation teams, including diagnostics and logistics

### Non-Infectious Conditions

#### NCDs

- Routinely collect and analyze NCDs data through the unified health records for planning
- Screen for NCDs risk factors pre-arrival
- Establish an international post-Hajj referral protocol for continuity of care

#### HRI

- Strengthen risk communication capacity for HRI
- Ensure the implementation of the national HRI management guidelines

#### Stampede/crush

- Ensure adequate crowd management and remove traffic bottlenecks

#### MVA/injuries

- Provide speedbumps and traffic cameras in appropriate areas
- Monitor the use of seat belts and other safety measures by both passengers and drivers

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## Class of Recommendation Measures/interventions

### Unspecific

- Provide emergency service health posts in designated
- Strengthen the coordination between national agencies, and
- Conduct joint drills involving incident managers across relevant agencies

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- Provide emergency service health posts in designated
- Strengthen the coordination between national agencies, and
- Conduct joint drills involving incident managers across relevant agencies
- International coordination and active participation and consultation with all stakeholders : OIC, Islamic boards, WHO, CDCs, IATA , Hotel chains and Media
- Link surveillance data with all concerned countries