



### Mass Gathering Risk Assessment: Hajj 1446H (2025)

Developed internally by Gulf CDC Public Health Emergency Department on 25 May 2025 and produced on 29 May 2025.

#### I. Background of the Mass Gathering

#### (a) Overview

Hajj is the annual religious ritual gathering of Muslims that takes place in Makkah, Saudi Arabia, and it is one of the largest annual mass gatherings in the world. Every year, more than one million people perform Hajj. Historically, the number of pilgrims reached nearly 3 million in some years; however, last year, 1445/2024 the number of pilgrims surged to 1,833,164, similarly to the year before 1444/2023, 1,845,045, marking a significant increase from the number of pilgrims in 1443/2022, 926,062 due to COVID-19 restrictions (1–3). The historical travel origin of the pilgrims is described in Figures 1 and 2, and the countries with the largest Hajj Quota (1445/2024) are listed in Table 1.





Figure 1: Percentage of pilgrims' original destination, 1445/2024 (1)

Figure 2: Percentage of external pilgrims by country, 1445/2024 (1)

Table 1: 10 countries	with the laraest	Haii Ouota	(1445/2024) (4):
Tuble 1. 10 countries	with the hargest	nujj Quotu	(1773)2027)(7).

Country	Hajj Quota 1445/2024
Indonesia	221,000
Pakistan	180,000
India	175,025
Bangladesh	127,198
Nigeria	95,000
Iran	87,550
Algeria	41,300
Turkey	37,770
Egypt	35,375
Sudan	32,000





Hajj is a mass gathering that has a high possibility of spreading infectious diseases and requiring public health monitoring. The risk of infectious disease transmission during Hajj may extend to the local population, other GCC countries, and the home population of returning pilgrims after Hajj. There is several public health risks increased in mass gatherings such as Hajj, including heat-related illnesses and the risk of transmission of respiratory diseases, food and water-borne diseases, and meningococcal diseases (5–7). Some large infectious disease outbreaks that previously occurred during Hajj were:

- Meningococcal disease: In 1987, serogroup A caused an outbreak, while serogroup W135 was responsible for outbreaks in 2000 and 2001 (8).
- Cholera: In 1821, an estimated 20,000 pilgrims died during the Hajj due to a cholera epidemic, which started in India in 1817 and spread across the world. Similarly, in 1865, an estimated 15,000 out of 90,000 pilgrims died due to the cholera epidemic that spread throughout the world (9).

Other public health hazards have been documented in the past, such as heat-related illnesses, stampedes, and suffocation. In Hajj season 1997/1417, a fire occurred in Mina tents, which led to the death of 343 people and the injury of more than 1,500 people as a result of a gas cylinder explosion (10).

Therefore, a risk assessment of prevailing priority hazards would support identifying appropriate public health precautions to be considered by health authorities in GCC countries to prevent or reduce the potential emergencies that could occur in the region as a result of Hajj.

#### (b) Potential Hazards

There are several hazards to be considered in preparation for the upcoming Hajj pilgrimage in 2025. These include:

- Infectious diseases with a risk of immediate transmission (e.g. COVID-19, measles, etc).
- Infectious diseases that can have high consequences but are typically reported sporadically (i.e. MERS, mpox, anthrax, meningococcal disease, avian influenza, Crimean Congo hemorrhagic fever, ebola, botulism, kyasanur forest disease, marburg virus disease).
- Infectious diseases that do not present as an immediate transmission risk during the Hajj but have a risk of long-term establishment in Saudi Arabia due to the presence of a competent vector (i.e., chikungunya, malaria, yellow fever, zika, dengue) as well as the potential of introducing or importing a new vector to the Hajj region.
- Injuries due to stampedes caused by overcrowding.
- Heat-related illnesses include heat stroke and exhaustion due to prolonged outdoor exposure to high temperatures.
- Fires due to accidental events (such as gas canister explosions).
- Food-borne and water-borne diseases/outbreaks.
- Complications from non-communicable diseases.





The Gulf CDC has reviewed the potential hazards and prioritized the assessment of infectious disease transmission (first three hazards listed above) as a focus for this report.

#### II. Risk Assessment

#### (a) Risk Question

What is the risk of infectious disease <u>transmission occurring in the GCC in the next 3 months</u> as a result of the 2025 Hajj based on the diseases with the highest chance of importation or exportation during/after Hajj?

#### (b) Likelihood & Impact

Diseases with the highest importation or exportation (Importation likelihood refers to the chance of one case of the disease being imported to Saudi Arabia within the Hajj period, around 30 days and Exportation likelihood refers to the chance of one case of the disease being exported from Saudi Arabia as a result of the Hajj) have been identified based on the epidemiological situation in the top 10 countries where the highest number of pilgrims would come from according to 1445/2024 Hajj Quota (4) (see Appendix A for importation likelihood) and based on the national priorities set by the Ministry of Health of Saudi Arabia (11).

**Note:** Risk has been calculated based on the levels of **likelihood** and **impact** of the transmission across the GCC countries (see **Appendix B** for the **risk matrix**) and the **Risk Level** is shown for the identified diseases in the tables below. Details of the analyses conducted to allocate the levels of **likelihood** and **impact** are documented in a separate internal report (available upon request), and only high-level assessment outcomes disease-by-disease are summarized below.





COVID-19						
Negligible	Very Low	LLow	Moderate	High	Critical	
Gulf CDC Risk A	ssessment of this	a Hazard				
COVID-19 is an	infectious diseas	e caused by the	SARS-CoV-2 viru	s. Most individua	als infected with	
the virus will ex	perience mild to	moderate respir	atory illness and	recover without	needing special	
treatment. CO	VID-19 has a high	likelihood of spr	eading due to its	s respiratory natu	ure, especially in	
close-contact s	ettings (12). Glo	bally, COVID-19	cases reported	to WHO have b	een decreasing,	
within the last	month (to 27 Ap	oril 2025) (13). Ir	n contrast, the L	P.8.1 variant cire	culating globally	
accounted for	37.5% of sequen	ced cases during	g April 2025, as	its global growtl	h appears to be	
plateauing (14).	. Additionally, FLi	RT COVID variant	s have been repo	rted in many cou	intries. The term	
"FLiRT" encomp	basses a range of	variants, includin	g KP.2, JN.1.7, ar	nd other variants	starting with KP	
or JN, that have	e independently a	acquired similar r	mutations. Vaccii	nes targeting JN.	1 produce some	
cross-reactive a	ntibodies (15). Th	ne Saudi Ministry	of Health has rec	ommended that	all pilgrims aged	
12 and above I	be vaccinated. As	s for pilgrims fro	m Saudi Arabia,	vaccination agai	inst COVID-19 is	
mandatory (16). Qatar health authorities have also mandated the vaccination for pilgrims (17).						
Health education was provided to the community about the COVID-19 disease and preventive						
measures across the GCC countries; several pilgrims may opt to use masks during pilgrimage to						
reduce persona	al risk, and the v	vaccination cove	rage for COVID-:	19 is high in the	e GCC countries	
resulting in a "r	noderate" impact	t.				

Influenza						
Negligible	Very Low	Low	Moderate	High	Critical	
Gulf CDC Risk A	ssessment of this	a Hazard	-			
Individuals infe	cted with influe	nza frequently e	experience an im	mediate onset o	of cough, fever,	
headache, and	myalgia. Influenz	a has a high like	lihood of spreadi	ing due to its res	piratory nature	
and some pract	ices during Hajj tl	hat could enable	its transmission (	18). However, th	e Saudi Ministry	
of Health has a	dvised that all ex	ternal pilgrims re	ceive vaccination	and has mandat	ed vaccinations	
for internal pilgrims. United Arab Emirates, Bahrain, and Oman health authorities have also						
mandated the vaccination for pilgrims (19–21). Additionally, constant and active vaccination						
campaigns that	raise awareness	and promote ir	nfluenza preventi	on have been co	onducted across	
GCC countries.						





Measles					
Negligible	Very Low	Low	Moderate	High	Critical
Gulf CDC Risk A	ssessment of this	s Hazard			
Measles is a sev	vere disease caus	sed by a virus. It s	spreads easily wh	ien an infected p	erson breathes,
coughs or snee	zes. Measles has	an incubation p	eriod of 10-12 da	ays. Based on the	e current global
epidemiological	l situation due to	increasing vaccin	ation hesitancy, r	neasles can be in	nported through
Hajj from multi	ple countries and	d spread as pilgri	ms return to the	ir home countrie	s after the Hajj.
Current estimat	tes suggest that	the likelihood of	a measles case b	peing imported o	luring Hajj from
Pakistan (65.14	%) is the highest	, followed by Nig	eria (3.51%), Irar	n (0.97%). Howev	ver, pilgrims are
not considered	a high-risk group	for measles, as t	he primary at-risl	<pre>&lt; individuals are d</pre>	children and the
unvaccinated po	opulation (22). Tl	he Saudi Ministry	of Health has rec	ommended that	all pilgrims have
completed the	required vaccina	tions in their nat	ional vaccination	schedule, inclu	ding vaccination
against diphthe	ria, tetanus, pert	ussis, polio, meas	sles, varicella, and	d mumps (16). Th	e GCC countries
have high vaccir	nation coverage a	against measles in	2024 with high d	etection and resp	oonse capacities
for measles; this	s would contribut	te to early detecti	on and managem	ent of any increa	sed importation
of measles case	s.				

Cholera						
Negligible	Very Low	Low	Moderate	High	Critical	
Gulf CDC Risk A	ssessment of this	Hazard				
Cholera is a ba	cterial disease th	nat causes severe	e diarrhoea and o	dehydration. The	ere has been an	
increasing num	ber of cholera o	outbreaks globall	y, increasing the	e likelihood of ir	nfected pilgrims	
arriving from co	untries with ongo	oing cholera outb	reaks. The curren	it ongoing sevent	h global cholera	
pandemic is cau	used by the bacte	erium <i>Vibrio chol</i>	<i>erae,</i> with El-Tor	strain (serogroup	o O1) being one	
of the dominar	nt strains and co	onsidered haemo	lytic (23). Based	on estimates, th	ne likelihood of	
cholera one cas	e being imported	l during Hajj is 46	.99% from Sudan	i, 3.64% from Bar	ngladesh, 2.44%	
from Nigeria, 0.08% from Egypt, and 0.07% from India resulting in "unlikely" likelihood importation.						
Strong WASH infrastructure and high healthcare capacity in the GCC will effectively prevent local						
transmission. Th	he overall impact	of a potential ou	tbreak is expecte	d to be "moderat	te" due to these	
existing mitigat	ion measures.					

Crimean-Congo Hemorrhagic Fever (CCHF)							
Negligible	Very Low	Low	Moderate	High	Critical		
Gulf CDC Risk A	ssessment of this	Hazard					
Crimean-Congo	Hemorrhagic Fe	ever (CCHF) is a v	widespread disea	ise caused by a	tick-borne virus		
(Nairovirus) of t	he <i>Bunyaviridae</i>	family. CCHF case	es have been incr	easing in a neigh	bouring country		
to GCC, Iraq, w	here forty-five co	onfirmed cases a	nd nine deaths w	ere reported in 2	2025 (24). CCHF		
poses a low risk	to the GCC popu	ulation, as the lik	elihood of outbre	eaks is considered	d "likely" due to		
Eid Al-Adha occ	urring during the	summer months	, which coincides	with a potential	peak in viraemic		
animals due to increased tick activity. However, the impact is considered "moderate" due to existing							
robust public health measures like case surveillance, isolation protocols, potential implementation							
of travel and livestock screening programs from high-risk regions, and awareness campaigns held							
around Eid Al-A	dha, which serve	to mitigate outb	reak risks.				





Dengue					
Negligible	Very Low	Low	Moderate	High	Critical
Gulf CDC Risk A	ssessment of this	s Hazard			
Dengue is a veo	ctor-borne diseas	e that can be im	ported during Ha	ijj. The likelihood	l of one dengue
case being imp	orted during Haj	j is estimated to	be 91.27% from	Indonesia, 45.9	7% from Sudan,
33.73% from In	dia, 25.41% from	Bangladesh, 12.8	81% from Pakista	n and 3.92% fron	n Iran. It is likely
for cases to be	imported during	the Hajj period.	However, the sur	veillance and ca	se management
capacities of GC	C countries are h	igh enough to det	tect and treat the	se imported case	s early, meriting
a "low" impact	on case fatality ra	ates. In addition,	although autocht	honous transmis	sion has already
been establishe	ed in some GCC o	countries as well	as the importation	on of cases throu	ughout the year
from global and	neighbouring co	untries, the Hajj r	nass gathering its	elf might not hav	e a bigger effect
on Dengue imp	ortation into the	GCC. However,	there remains a o	chance of local tr	ansmission due
to the present	e of competent	vectors in seve	eral GCC countri	es. The possible	extent of this
transmission is	currently unknow	vn due to informa	ation unavailabilit	ty, and it is difficu	ult to determine
outbreak risk w	ith limited data o	on vector/s.			

Meningococcal di	isease					
Negligible	Very Low	Low	Moderate	High	Critical	
Gulf CDC Risk Asse	essment of this H	azard				
Meningococcal disease is a severe disease caused by the bacterium <i>Neisseria meningitides</i> . It is potentially fatal within 24 hours of infection and requires urgent medical care (25). In 2025, 17 cases with a history of travel to Makkah were reported globally between 7 January and 18 March, with serogroup <i>W135</i> identified. Seven cases were reported from WHO Eastern Mediterranean Region, and three cases were reported from the WHO Europe Region. In contrast, the remaining cases are individuals with travel history from countries in the WHO South-East Asia Region (26). From the top						
10 countries that 0.14% likelihood However, all pilg Madinah, Jeddah, Hajj area (Makkah permits are not is entry also adminis epidemics or cour Most of the GCC schedules and hav	pilgrims will be a of importing on rims (internal an , Taif) in contact a ) is only permissik sued if vaccinatio ster antibiotics to ntries at risk of m countries have r ve robust public h	rriving from this e meningococca d external) and are required to ha ole for individuals in proof is not pro pilgrims from cou eningitis epidem meningococcal va ealth systems an	year, current est I case from Turl seasonal worker ave a valid vaccir carrying Hajj per ovided. Saudi He untries with frequ ics if deemed ne accine included i d infrastructure t	imates indicate key and 0.10% is in the Hajj z nation certificat mits (and Hajj v alth authorities uent meningoco cessary (16) (se in their routine that can detect	that there is a from Nigeria. ones (Makkah, e. Entering the isas), and these at the point of occal meningitis ee Appendix C). e immunization and respond to	





Мрох						
Negligible	Very Low	Low	Moderate	High	Critical	
Gulf CDC Risk A	ssessment of this	s Hazard				
Mpox is a viral	zoonotic disease	caused by monl	keypox virus (MP	XV). Symptoms o	of mpox include	
skin rash or mu	ucosal lesions wh	nich can last 2–4	weeks accompar	nied by fever, he	adache, muscle	
aches, back pair	n, low energy and	d swollen lymph r	nodes. Transmissi	on occurs throug	h direct contact	
with infected in	dividuals or rece	ntly contaminate	d objects. Two di	istinct clades of r	npox have been	
circulating glob	ally circulating:	clade I (subclad	es la and lb) as	sociated with o	utbreaks in the	
Democratic Rep	oublic of Congo, a	ind clade II (subcl	ade IIa and IIb) as	sociated with ou	tbreaks in some	
African countrie	es (27). The likelil	nood of one mpo	x case being impo	orted during Hajj	from the top 10	
countries is est	imated to be 1.	99% from Nigeria	a, and 0.55% fro	m Pakistan. Pilgr	ims from other	
countries expe	riencing outbrea	ks may be prefo	orming Hajj. Outs	side of Africa, se	everal countries	
including GCC o	ountries have re	ported travel-linl	ked cases of mpo	x clade Ib wheth	er having direct	
or in-direct link	s to affected cou	ntries in Africa (28	8). However, the	transmission of a	case during the	
Hajj period is "u	unlikely". Mpox p	oses a low morb	idity and mortalit	y risk, with the lo	ow transmission	
potential. Vacc	ination capacity	in GCC countries	s varies, it's offe	red for self-iden	tifying high-risk	
groups (one GC	C country), healt	hcare workers an	d specific laborat	ory personnel (2	GCC countries),	
and contacts of cases (2 GCC countries). Vaccination of healthcare workers at risk of mpox infection						
and post-exposure prophylaxis for close contact with a confirmed case has also commenced in Saudi						
Arabia. GCC co	untries have high	national capacit	ies established fo	or mpox prevent	ion and control,	
resulting in a "r	noderate" impac	t of mpox to GCC	countries.			

Middle Eastern Respiratory Syndrome Coronavirus (MERS-CoV)						
Negligible	Very Low	Low	Moderate	High	Critical	

Gulf CDC Risk Assessment of this Hazard

The majority of MERS-CoV infections to date have occurred due to exposure to dromedary camels. While human-to-human transmission of MERS-CoV can occur among close contacts, particularly in healthcare settings. The likelihood of a case being imported into Saudi Arabia is "negligible". However, there is a chance of an internal pilgrim being infectious during Hajj. Nevertheless, the human-to-human sustained transmission of MERS-CoV typically requires close-contact in nosocomial settings (29), so despite its respiratory nature, it is "unlikely" to spread during Hajj mass gatherings. However, robust public health surveillance in Saudi Arabia and the GCC countries are in place to identify and isolate cases rapidly.

Yellow Fever							
Negligible	Very Low	Low	Moderate	High	Critical		
Gulf CDC Risk A	ssessment of this	Hazard					
Yellow fever is a	a mosquito-borne	e disease conside	red to have a sev	ere pathogen sev	erity. The case-		
fatality rate for	severe cases is 3	30%–60% (30). Th	ne importation lik	elihood is consid	dered "unlikely"		
with the proba	bility of one cas	se being importe	ed only from Nig	geria is at 0.55%	. There are no		
approved treat	ments for yellow	ı fever. Saudi Ara	abia has mandat	ed the presentat	ion of a yellow		
fever vaccination	on certificate duri	ng applications fo	or Hajj visas/perm	nits for individual	s traveling from		
countries or are	eas at risk of yell	ow fever transm	ission (See Apper	ndix D). However	r, GCC nationals		
and long-term residents may not be routinely vaccinated, which could slightly increase the chance							
of importation. While the Aedes aegypti mosquito is present in the GCC, the virus itself is not							
circulating. Stro	ong public health	measures are in	n place in all cour	ntries to effective	ely manage any		
imported case.							





#### (c) Level of Confidence

The level of confidence in the assessment is **moderate**. The available data provides a reasonable basis for assessment. However, estimates have been produced by a mathematical model based on assumed parameters and do not accurately reflect the situation. Any estimates and their interpretation should be considered with caution.





#### V. Recommendations to GCC Countries

- 1. Review national policies for the vaccination of Hajj pilgrims and consider mandating COVID-19, influenza, and meningococcal vaccinations for all pilgrims.
- 2. Request Hajj clinics to ensure the validity of pilgrim's (1-year-old and above) meningococcal vaccination certificates and appropriate vaccination type and timing (including clear dates) as follows:
  - a. Quadrivalent (ACYW) Polysaccharide Vaccine, 10 days prior to arrival and should not exceed 3 years.
  - b. Quadrivalent (ACYW) Conjugated Vaccine within the last 5 years and at least 10 days prior to arrival.
- 3. Consider enforcement of vaccination and other public health measures for Hajj pilgrims, as set per Saudi Guidelines (see example in Appendix E).
- 4. Enhance Gulf CDC and GCC-national epidemic intelligence activities with a focus on Hajj zones (Makkah, Jeddah, Madinah, Taif) and languages spoken by pilgrims from the top ten countries.
- 5. Conduct a national risk assessment to identify any additional measures to be taken based on national needs (e.g., Bahrain recommends meningococcal vaccination for household contacts of Hajj pilgrims as an added precaution).
- 6. Enhance surveillance and laboratory capacities for early detection of infectious disease when preparing for Hajj season.
- 7. Promote timely case investigation, ensure stakeholder awareness of reporting pathways to the National IHR Focal Point, and facilitate rapid notification to and relevant GCC authorities and the Gulf CDC by establishing or strengthening datasharing agreements through the Gulf Surveillance Permanent Communication Network.
- 8. Strengthen risk communication efforts to ensure returning travelers are informed of potential post-travel health risks, encouraged to monitor for symptoms, and advised to report recent travel for Umrah or Hajj when seeking medical care.
- 9. Enhance vector surveillance and vector control programs and activities for vectorborne diseases.
- 10. Enhance preparedness and readiness measures for necessary medicines, supplies, and health awareness materials and tools.
- 11. Increase risk communication activities, particularly at travel clinics and Hajj centers, to raise pilgrim's awareness before coming to Hajj regarding personal protective measures against the high-priority diseases identified (e.g. hygiene, mask use, choosing a suitable barber, etc.).
- 12. Raise awareness of high-priority diseases identified for Hajj via regular communications (e.g. circulars) to all relevant public health professionals, particularly clinicians.
- 13. Launching public awareness campaigns to emphasize the importance and effectiveness of vaccination in preventing diseases, utilizing social media, traditional media, and community outreach initiatives (engaging religious leaders such as imams in Muslim communities).





- 14. Follow key health messages: before, during, and after Hajj, which was developed by WHE/EMRO and in close collaboration with the health authority in the Kingdom of Saudi Arabia (<u>https://www.emro.who.int/cpi/programmes/umrah-hajj-safety.html</u>).
- 15. Review screening measures at points of entry and exit (in all GCC countries for Hajj pilgrims) and conduct refresher training of staff, particularly on the high-priority disease.
- 16. Consider implementing enhanced screening measures for high-priority diseases identified from at-risk-countries for individuals transiting through major airports
- 17. Consider follow-up measures for Hajj returnees to enable high-priority disease profiling and early case identification, focusing on non-vaccine-preventable diseases and strains.
- 18. Promote coordination among ministries of health, civil aviation, immigration authorities, and Hajj tour operators to ensure harmonized implementation of vaccination and entry requirements, including pre-departure checks.





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#### VII. Appendices

# Appendix A: Importation likelihood ratios of Infectious diseases in the top 10 countries with the most Hajj visas granted and where the highest number of pilgrims is expected to come from.

Table 1. Average Importation Likelihood of Active Infectious Diseases within the next 30 days, as of 21May 2025 (BlueDot, 2025) in the Top 10 Origin Countries of most pilgrims for 2024.







Importation likelihood refers to the chance of **one case of the disease** being imported to Saudi Arabia within the **next 30 days.** The blanks in the table represent importation likelihoods that were not computed due to disease counts not identified in the last 60 days.

#### Appendix B: Gulf CDC Risk Characterization Matrix

Likelihood	Impact					
	Negligible	Minor	Moderate	Major	Severe	
Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	
Unlikely	Negligible	VERY LOW	LOW	LOW	MODERATE	
Likely	Negligible	LOW	LOW	MODERATE	MODERATE	
Highly likely	Negligible	LOW	MODERATE	MODERATE	HIGH	
Almost certain/sure	Negligible	MODERATE	MODERATE	HIGH	CRITICAL	

## Appendix C: Countries/areas with frequent epidemics of meningococcal meningitis and countries at risk for meningitis epidemics (WHO International Travel and Health, 2015):

	Africa	
Nigeria	Ethiopia	Burkina Faso
South Sudan	Gambia	Burundi
Rwanda	Ghana	Cameroon
Senegal	Guinea	Central African Republic
Sudan	Guinea-Bissau	Chad
Tanzania	Kenya	Côte d'Ivoire
Тодо	Mali	DR Congo
Uganda	Mauritania	Eritrea
Niger	Benin	

## Appendix D: Countries/areas at risk of Yellow Fever transmission, as per the WHO International Travel and Health Guidelines, are:

America		Africa		
Guyana	Argentina	Ghana	Angola	
Panama	Venezuela	Guinea	Benin	
Paraguay	Bolivia	Guinea-Bissau	Burkina Faso	
Peru	Brazil	Kenya	Burundi	
Surinam	Colombia	Liberia	Cameroon	
Ecuador	Trinidad and Tobago	Mali	Central African Republic	
	French Guiana	Mauritania	Chad	
		Niger	Congo	
		Nigeria	Côte d'Ivoire	
		Senegal	DR Congo	
		Sierra Leone	Equatorial Guinea	
		Sudan	Ethiopia	
		Gambia	Gabon	
		Тодо	South Sudan	





Uganua
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Appendix E: Vaccines required for internal and external pilgrims (Saudi Ministry of Health 1446/2025 2025)



try of Health	ملكة:	اج من خارج الم	للحج
شــــلل الأطفال	الحمــــى الصفــراء	الحمى الشوكية النيسيريـــــــة	التطعيم التطعيم
للقادمين من الدو التي يســري فيهـ شلل الأطفال <u>من</u> ا	للقادمين من الدول التي يسـري فيهــا الحمى الصفراء <u>هنا</u>	لم يتلقوا اللقـــاح خلال 3 أو 5 سنـوات الماضية حسب نوع التطعيم	م لم_ن
لا تقل عن 4 أسابيع ولا تزيــد عن سنـــة	قبـــــل الحــــج	دتـــى 10 أيــــــام ز	ف) الم
مية بجرعة أعطيت خلا للاشتراطات الصحية و	يّنا - 19 والانفلونزا الموس براض المستهدفة وفقاً	بال التحصين ضد فيروس كورو , جانب تحديث التحصين ضد الأر	یوصی باستکر عام ۱445 هـ إلر





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