



# **HAJJ CONVENTION COMMON COMPLAINTS AND MEDICAL PROBLEMS IN HAJJ TO MECCA**

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# The Objectives

- 1. Know the environmental changes in Hajj area
- 2. List the most common medical problems seen in Hajj
- 3. Discuss the pre travel assessment, especially in people with chronic diseases


# The '**Five Pillars**' of Islam are the foundation of Muslim life:

1. Faith or belief in the **Oneness of God** and the finality of the **Prophet hood** of Muhammad.
2. Establishment of the **Daily Prayers**.
3. Concern for and **almsgiving** to the needy (**Zakah**).
4. Self-purification through **Fasting**.
5. The **Pilgrimage** to Makkah for those who are able (**Hajj**).

# Common Medical Problems During Hajj

- Hajj is an annual pilgrimage to Mecca
- Performed by Muslims who can afford it
- Starts from the **1<sup>st</sup> zhul hajjah** and culminates on the **10<sup>th</sup> zhul hajjah**, the day of Eid
- Annually 2.5-3 million people from all over the world visit Mecca and Medina around this period



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- The season of Hajj varies every year as it follows the lunar Islamic calendar
  - The Lunar month goes back 10 days every year
  - Therefore, the diseases too vary depending on the temperature in the two holy cities ( Mecca and Medina).



# Saudi Arabia

- International Boundary
- Road
- Minor Road
- River
- ★ National Capital
- City or Town

0 100 200 KM  
0 100 200 Miles

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**SAUDI ARABIA**

**IRAN**

**IRAQ**

**KUWAIT**

**BAHRAIN**

**QATAR**

**UNITED ARAB EMIRATES**

**OMAN**

**JORDAN**

**SYRIA**

**ISRAEL**

**EGYPT**

**SUDAN**

**ERITREA**

**YEMEN**

**Persian Gulf**

**Red Sea**

**Arabian Sea**

**Tigris**

**Jerusalem**

**Amman**

**Beersheba**

**Tel Aviv**

**Ar Rutbah**

**Al Musayyib**

**Al Hillah**

**An Najaf**

**An Nasiriyah**

**Dezful**

**Masjed Soleyman**

**Ahvaz**

**Basra**

**Abadan**

**Kuwait**

**Bandar-e Bushehr**

**Bandar-e 'Abbas**

**Manama**

**Ad Dammam**

**Az Zahran**

**Ra's al Khaymah**

**Dubayy**

**Abu Dhabi**

**Al Ayn**

**Dank**

**Doha**

**Umm Sa'id**

**Al Kharj**

**Ha'il**

**Buraydah**

**Unayzah**

**Medina**

**Yanbu'al Bahr**

**Rabigh**

**Jeddah**

**Mecca**

**At Ta'if**

**Al Bahah**

**Abha**

**Khamis Mushayt**

**Najran**

**Jizan**

**Jaza'ir Farasan**

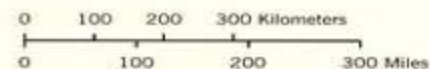
**Dahlak Archipelago**

**Kassala**

**Port Sudan**

# Saudi Arabia

- International boundary
- Province (*minṭaqah*) boundary
- National capital
- Province (*minṭaqah*) center
- Railroad
- Road
- Track



Lambert Conformal Conic Projection, SP 14N/32N




Boundary representation is not necessarily authoritative.



Pilgrims wear special clothes: simple garments that strip away distinctions of class and culture, so that all stand equal before God (Ihram).



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- Hajj is considered as a dynamic system
  - On arrival the Hajj goes for Tawaf, the circumambulation the Ka`bah 7 times
  - Then perform the Sa`i, jogging 7 times between the hills of Safa and Marwah (500m $\times$ 7=3.5 kilometer)
  - On Arafat they assemble from morning until sunset

المملكة العربية السعودية

Saudi Arabia

الميقات ① Mikat  
(arrival and change)

مكة

Mecca ② ⑦

(circling the Kaaba)

③

منى

Mina (encampment)

⑥

الجمرات

Plain of Mina

⑤

Muzdalifah

مزدلفة

عرفات

④

Plain of Arafat

The Jamraat  
(stoning the pillars)



**As-Sa'y**


Men noemt de dhikr die weergegeven is.

**Al-Marwa**

**As-Safa**

De man dient te rennen tussen de groene vlaggen (lampen), dit is het diepste punt van de rivier (voorheen).

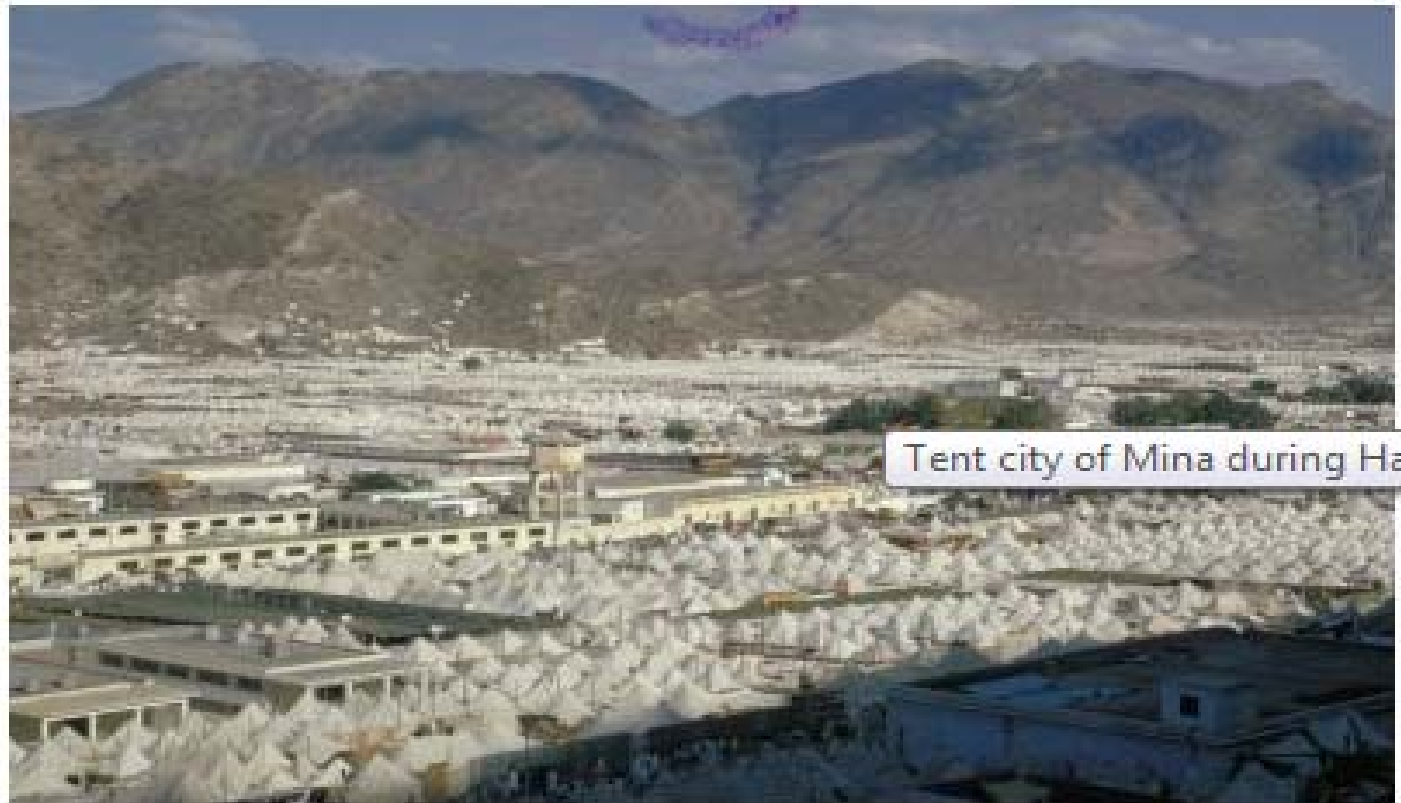


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- After sunset a mass exodus starts from Arafat to Muzdalifah, an open plain, where they spend most of the night
  - Then they head towards Mina, where they spend 3 days in camps
  - Here 2 rites are performed: stoning the devil and sacrificing an animal
  - Return to Mecca for farewell circumambulation

## Day 1 of the Pilgrimage (8th of Dhul-Hijjah)

2 of 6

< [Prev](#) [N](#)



Tent city of Mina during Hajj

During Hajj, Mina turns into an enormous tent city housing millions of pilgrims

*S. M. Amin/Saudi Aramco World/PADIA*

## In pictures: Muslim pilgrimage or Hajj



The day-long station at Arafat symbolises Muslims' wait for the day of judgement. They spend the day praying





muslims': (N

# In pictures: Muslim pilgrimage or Hajj





The pilgrims make a sea of white as they stream in their thousands onto the plain of Arafat.

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- All rites of the Hajj entail **strenuous physical effort**
  - **Overcrowding** is another major problem
  - **Accommodation** is difficult to find and is very expensive
  - **Lack of sleep** and physical exhaustion can affect the elderlies
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A wide-angle photograph capturing a massive crowd of Hajj pilgrims at night. The scene is illuminated by numerous bright stadium lights, creating a hazy, golden glow. The pilgrims are densely packed, filling the foreground and extending into the distance. Many are wearing traditional white ihram clothing, while others are in more varied attire. The background shows a large, open area, possibly a stadium or a large gathering space, with a fence visible on the left side. The overall atmosphere is one of a significant religious event.

Nearly two million Hajj pilgrims make their way to Muzdalifah




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- The huge ocean of humanity constitutes males and females of all age groups
  - Medical illnesses are therefore not uncommon
  - The various categories of common problems faced by a Hajj are:
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- **I. Age related:** Fatigue, dehydration, falls, trauma, and chances of stampede
- **II. Infections:** URTI are very common during Hajj
- **Lower RTI, Open TB, Meningococcal meningitis** are rare
- **III. Heat related:** problems are common if Hajj falls during the summer.

- Sun burn on the face, shoulder, and chest can be seen.
- Heat exhaustion and rarely heat stroke is encountered
- **IV. Metabolic:** problems like hypo- or hyper-glycemia are common. Diabetic Ketoacidosis is rare


Khan SA, Bhat AR, Khan LA Hypoglycemia in diabetics during Hajj. Saudi Med J 2002;23(12):1548

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- **V. Cardiovascular** problems like accelerated HTN, angina, MI, CHF are common
  - Patients with **AF** are often found collapsed
  - Reasons: missing the dose stopping the treatment or exertion.
  - **VI. Miscellaneous:** flare up of psychiatric disorders is occasionally seen



# Respiratory Tract Infection

- People from all over the world and Unavoidable closeness facilitate easy spread of those illnesses
- Fatigue, and lack of sleep lower one's immunity and resistance
- **Acute URTI is very common**
- **Epidemics of flu-like illnesses** are also very common

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- Nearly all URTI are viral
  - Try Sxtic measures first for sore throat or flu:
  - Paracetamol, cough suppressant, gargle with salt water, ice cubes or lozenges, drink hot water with lemon and honey
  - Wash hands frequently
  - Flu is spread through the air by coughing , sneezing, or hand contact

- 
- **Should seek medical care in:**

Prolonged illness with purulent nasal secretion, fever, facial pain, sore throat with fever, shortening of breath , productive cough with fever or shortening of breath

# Gastrointestinal problems

- **Diarrhea** : 30% traveler's diarrhea ,especially among elderly, Diabetic and chronic IBD
- **Constipation: very common , due to**
- **Dehydration, stress, not eating enough amounts of fruits and vegetables and eating lots of canned food**



# Heat Exhaustion

- Commonly caused by dehydration and loss of body fluids
- Manifested by weakness, headache, dizziness, nausea, vomiting and diarrhea
- Treatment: Resting, getting out of sun/heat, sponging the body with water and fanning it, and aggressively replacing fluids and salts.
- Can progress to heat stroke, if not taken seriously

# Heat Stroke

- The body loses its ability to regulate body temperature, which can reach up to 106F(41C)
- Hallmarks: physical collapse, confusion, coma
- This medical emergency must be treated aggressively with rapid cooling and IV-fluids
- If not treated, permanent damage to kidneys, heart, or liver may result
- Mecca Body Cooling Unit(BCU)

## **A physiological body-cooling unit for treatment of heat stroke.**

**Weiner JS, Khogali M.**

The high incidence of heat stroke during the Mecca pilgrimage in hot weather prompted the development of a new method of rapidly cooling hyperpyrexial patients. A cooling bed was devised which achieved a high rate of evaporative cooling by spraying patients with water at 15 degrees C and warm air, which reached the body surface at 30-35 degrees C. The cooling bed also made possible the administration of ancillary treatment both efficiently and hygienically.

# Preventing Heat Illness

- Prevent dehydration(dark yellow urine)
- Drink enough water to urinate every 2-3 hours
- Don`t be exposed to direct sunlight
- Use ventilated vehicles
- Drink plenty of Zam-zam water
- Don`t walk for long periods
- Avoid crowded places, and not rush when performing rites
- Rest and sleep as needed

# Accidental Injuries

- **Trauma** during Hajj is a real surgical problem
- **Orthopedic and Neurosurgical** cases are the most common surgical cases during the Hajj period
- **Traffic** and Hajj movement should be improved
- Hajjies should be taught to avoid crowdedness
- **Stampede** is a serious problem during the ritual of stoning the devil.
- They built many accessways, footbridges( 5 levels) and emergency exits






[www.hicaz.2000.com](http://www.hicaz.2000.com)


# Lebanese Medical Delegation

- During 2008(1429 Hijri ) season
- 20,000 Lebanese Hajjis
- 4500-5000 Patients seen in Arafat and Mina
- 50% had viral URTI
- Other common medical problems:
- Dehydration, Gyn bleeding, heat exhaustion
- This year, Only 5500 Hajji are allowed , because of H1N1 pandemic

# Advice to the Hajj

- Bring enough supplies of the OTC medications
- Take multivitamins daily
- Consult your physician if you have chronic medical illness, such as Asthma, DM , CHF,
- Go for daily walk before your journey
- Use facemask
- If you wear eyeglasses, bring an extra one with a plastic frame
- Get The mandatory Meningococcal Quadrivalent Vaccine ACYW-135, and the flu vaccine as well
- Dental checkup, at least 2 months before leaving

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- A list of ongoing health problems, such as heart disease, DM, COPD , etc...
  - A list of current medications you are taking
  - A list of allergies to medications, food, insects, and animals
  - Pay attention to your personal safety:
  - Stick to the group and the schedule, don`t walk alone, especially after dark, rules of the road

- 
- Do it when you are  
YOUNG  
HEALTHY  
and STRONG

Thank You