MASS GATHERING HELTH RISK

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DEFINITION

- CONCENTRATION OF PEOPLE AT A SPECIFIC LOCATION FOR A SPECIFIC PURPOSE OVER A SET PERIOD OF TIME WHICH HAS THE POTENTIAL TO STRAIN THE PLANNING AND RESPONSE RESOURCES OF THE COUNTRY OR COMMUNITY

HEALTH RISKS ARE ASSOCIATED WITH MGS

- TRANSMISSION OF INFECTIOUS DISEASE
- NON-COMMUNICABLE DISEASE
- TRAUMA AND INJURIES (OCCUPATIONAL OR OTHERWISE)
- ENVIRONMENTAL EFFECTS (SUCH AS, HEAT RELATED ILLNESSES, DEHYDRATION, HYPOTHERMIA)
- ILLNESSES RELATED TO THE USE OF DRUGS AND ALCOHOL
- AND DELIBERATE ACTS, SUCH AS TERRORIST ATTACKS

INFECTIOUS DISEASES TRANSMISSION

- **ROUT OF INFECTIOUS DISEASES TRANSMISSION**
  - **DIRECT CONTACT TRANSMISSION**
  - **FOMITE TRANSMISSION**
  - **AEROSOL (AIRBORNE)**
  - **ORAL (INGESTION)**
  - **VECTOR-BORNE**

INCUBATION PERIODS OF COMMON TRAVEL-RELATED INFECTIONS[A]

SHORT INCUBATION (<10 DAYS)	
Malaria Arboviruses, including dengue, yellow fever, Japanese encephalitis, Zika, chikungunya Hemorrhagic fevers: Lassa, Ebola, South American arenaviruses, CCHF (if tick bite) Respiratory viruses, including SARS Typhoid and paratyphoid Bacterial enteritis *Rickettsia*: spotted fever group—Rocky Mountain spotted fever, African tick typhus, Mediterranean spotted fever, scrub typhus, Q fever	Bacterial pneumonia, including *Legionella* Relapsing fever Amebic dysentery Meningococcemia *Brucella* (rarely) Leptospirosis Fascioliasis Rabies (rarely) African trypanosomiasis (acute), East African (rarely)

INCUBATION PERIODS OF COMMON TRAVEL-RELATED INFECTIONS[A]

MEDIUM INCUBATION (10–21 DAYS)	
Malaria	Cytomegalovirus
Flaviviruses: tick-borne encephalitis and Japanese encephalitis	Toxoplasma
Hemorrhagic fevers: Lassa, Ebola, Crimean-Congo	Amebic dysentery
Hemorrhagic fever (if blood exposure)	Histoplasmosis
Acute HIV infection	Brucella
Typhoid and paratyphoid	Leptospirosis
Giardia	Babesiosis
Rickettsia: flea-borne, louse-borne, and scrub typhus,	Rabies
Q fever, spotted fevers (rare)	East African trypanosomiasis (acute)
	Hepatitis A (rarely)
	Measles

INCUBATION PERIODS OF COMMON TRAVEL-RELATED INFECTIONS[A]

LONG INCUBATION (>21 DAYS)	
Malaria	Epstein-Barr virus, including mononucleosis
Schistosomiasis	Amebic liver disease
Tuberculosis	Leishmaniasis
Acute HIV infection	Brucella
Viral hepatitis	Bartonellosis (chronic)
Filariasis	Babesiosis
Q fever	Rabies
Secondary syphilis	West African trypanosomiasis (chronic)
	Cytomegalovirus

DIARRHEA IN TRAVELERS

- **ACUTE TRAVELER'S DIARRHEA**
  - DEFINITION
  - ETIOLOGY
  - CLINICAL MANIFESTATION
  - DIAGNOSIS
- **PERSISTENT DIARRHEA IN THE TRAVELER**

FOODBORNE DISEASES

- FOODBORNE SYNDROMES CAUSED BY MICROBIAL AGENTS OR THEIR TOXINS
- NAUSEA AND VOMITING LASTING LESS THAN 24 HOURS
- WATERY DIARRHEA WITHOUT FEVER LASTING 1 TO 2 DAYS
- PERSISTENT DIARRHEA LASTING 2 OR MORE WEEKS
- DIARRHEA, ABDOMINAL CRAMPS, AND FEVER
- CRANIAL NERVE PALSIES AND
- DESCENDING PARALYSIS
- SYSTEMIC ILLNESS

CHOLERA

- EPIDEMIOLOGY
- CLINICAL MANIFESTATIONS
- DIAGNOSIS
- TREATMENT

TABLE 214.1 How to Approach Rehydration in Patients With Suspected Cholera

		DEGREE OF DEHYDRATION		
		None (<5%)	**Some (5%–10%)**	**Severe (>10%)**
Assess degree of dehydration	Mentation	Alert	Restless, irritable	Lethargic or unconscious
	Eyes	Normal	Sunken	Sunken
	Skin turgor	Normal recoil	Slow recoil	Very slow recoil (>2 s)
	Pulse	Normal	Rapid, low volume	Weak or absent
	Thirst	Drinks normally	Thirsty, drinks eagerly	Drinks poorly or unable to drink
Approach to rehydration[a]	Fluid replacement	Ongoing losses only	75 mL/kg in addition to ongoing losses	>100 mL/kg in addition to ongoing losses
	Preferred route of administration	Oral[b]	Oral or intravenous	Intravenous
	Timing	Usually guided by thirst	Replace fluids over 3–4 h	As rapidly as possible until circulation is restored; complete the remainder of fluids within 3 h
	Monitoring	Observe until assured ongoing losses can be adequately replaced by ORS	Observe every 1–2 h until all signs of dehydration resolve and patient urinates	Once circulation is established, monitor every 1–2 h

TABLE 214.3 Antimicrobial Options for Treating Patients With Cholera

CLASS	ANTIBIOTIC	PEDIATRIC DOSE[a]	ADULT DOSE	COMMENTS
Macrolides	Erythromycin Azithromycin	12.5 mg/kg/dose qid × 3 days 20 mg/kg × single dose	250 mg qid × 3 days 1 g × single dose	Single-dose azithromycin is often preferred therapy, especially in children, and has been shown to be more effective than ciprofloxacin in randomized trials in regions where reduced susceptibility to fluoroquinolones is common.[144,145] There are rare reports of macrolide resistance.
Fluoroquinolones	Ciprofloxacin	15 mg/kg/dose bid × 3 days	500 mg bid × 3 days	In highly susceptible strains, single-dose ciprofloxacin compares favorably against erythromycin[146] and doxycycline[147] in randomized trials. Reduced susceptibility to fluoroquinolones has become common in endemic areas and is associated with treatment failure.[144,148]
Tetracyclines	Tetracycline Doxycycline	12.5 mg/kg/dose qid × 3 days 4–6 mg/kg × single dose	500 mg qid × 3 days 300 mg × single dose	Antibiotic resistance to all tetracyclines is common.[73] Empirical use is often reserved for outbreaks caused by documented susceptible isolates. In general, tetracyclines are not recommended for pregnant women or children less than 8 years old.

PHARYNGITIS

- DEFINITION: ACUTE PHARYNGITIS IS TYPICALLY DESCRIBED AS THE TRIAD OF SORE THROAT, FEVER, AND PHARYNGEAL INFLAMMATION CHARACTERIZED BY ERYTHEMA AND EDEMA.
- ETIOLOGY: VIRUSES ARE THE SINGLE MOST COMMON CAUSE OF PHARYNGITIS
- PATHOGENESIS

PHARYNGITIS

- PATHOGENESIS
- MICROBIOLOGY:
  - GROUP A STREPTOCOCCUS
  - NON–GROUP A STREPTOCOCCUS
  - FUSOBACTERIUM NECROPHORUM
  - ARCANOBACTERIUM HAEMOLYTICUM
  - CORYNEBACTERIUM DIPHTHERIAE
  - NEISSERIA GONORRHOEAE
- MICROBIOLOGY:
  - ATYPICAL BACTERIA
  - EPSTEIN-BARR VIRUS
  - HUMAN IMMUNODEFICIENCY VIRUS
  - ADENOVIRUS
  - ENTEROVIRUSES
  - HERPES SIMPLEX VIRUS

PHARYNGITIS

- **COVID**
  - **IDSA GUIDELINES ON THE TREATMENT AND MANAGEMENT OF PATIENTS WITH COVID-19**

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با تشکر از توجه شما