

MCAA Guidance Material for Preventing Gastroenteritis in Aircrew

Why is it important?

Gastroenteritis is a prevalent medical condition characterized by symptoms such as diarrhea and vomiting. It represents the most common cause of in-flight impairment among aircrew. The majority of cases are attributed to viral or bacterial infections, typically contracted through the consumption of contaminated food or water, or via contact with infected individuals or contaminated surfaces.

The risk of infection is heightened during the winter months and is present both domestically and at down-route destinations. In-flight episodes of gastroenteritis among crew members pose a significant risk of incapacitation, potentially leading to medical emergencies and the diversion of the aircraft.

Common symptoms include nausea, vomiting, syncope (fainting), acute diarrhea, abdominal cramps, and lowgrade fever. The illness generally persists for several days, with severity and duration varying by individual and causative agent.

Preventive Measures to Reduce the Risk of Gastroenteritis

To minimize the risk of contracting gastroenteritis, particularly while down-route, the following hygiene and dietary precautions should be strictly observed:

Hand Hygiene

Wash hands thoroughly with soap and water after using the toilet and before handling food or beverages. Note: Alcohol-based hand sanitizers may not be effective against certain pathogens and should not be relied upon as a sole method of hand hygiene.

Food and Beverage Precautions

Avoid the consumption of high-risk foods, especially in regions with warm climates or where food safety standards may vary. These include:

- a) Cold meat and fish dishes served in warm environments
- b) Shellfish, molluscs, and oysters
- c) Undercooked food or food that has not been reheated thoroughly
- d) Salads, including rice or pasta-based salads, and fresh berries
- e) Raw fruits and vegetables that have not been washed and peeled prior to consumption
- f) Foods containing milk, cream, or ice cream
- g) Bottled or canned beverages with a broken or damaged seal
- h) Ice in drinks
- i) Freshly squeezed juices
- j) Fresh herbs, including those used as garnishes or in beverages

By adhering to these precautions, aircrew can significantly reduce the likelihood of gastrointestinal illness and maintain operational readiness during duty periods.

Drink bottled water in high-risk areas, for example, Asia, Africa, the Middle East and Central and South America.

Follow company policy on eating crew meals.

How do I know if I am fit to fly?

Gastroenteritis may present with a range of symptoms, including, in severe cases, loss of consciousness.

Flight crew experiencing any of the aforementioned symptoms must not operate an aircraft. Adherence to this guidance is essential to ensure flight safety and to comply with regulatory obligations

Management of Gastroenteritis

If symptoms of gastroenteritis develop, the following measures should be taken to support recovery and reduce the risk of complications:

- a) Hydration: Maintain adequate fluid intake to prevent dehydration. Take frequent small sips of fluid. When down-route, consume only sealed bottled water.
- b) Electrolyte Replacement: Use oral rehydration solutions or sachets, if available, to replenish lost electrolytes in addition to fluid.
- c) Avoid Aggravating Beverages: Refrain from consuming carbonated drinks and fruit juices, as these may exacerbate gastrointestinal symptoms.
- d) Rest: Remain in your accommodation and ensure sufficient rest to aid recovery.
- e) Symptom Management:
 - i. *Paracetamol* may be used to alleviate fever, aches, or general discomfort.
 - ii. *Loperamide* may be considered for the management of non-bloody diarrhea in the absence of fever.
- f) Diet: Resume a normal diet as soon as appetite and tolerance allow.
- g) Medical Attention: Seek medical evaluation if symptoms persist beyond 48 hours, if there are signs of significant dehydration (e.g. dizziness, decreased urine output, or fainting), or in the presence of bloody diarrhea.

Timely and appropriate management can reduce the duration and severity of illness and support a safe return to operational duties.

Crew Procedures in the Event of Gastroenteritis Symptoms

In the event that symptoms suggestive of gastroenteritis arise—regardless of whether vomiting or diarrhea is present—flight crew must adhere to the following protocol to ensure flight safety:

- a) **Immediate Notification**: Inform the other member(s) of the flight crew of your symptoms without delay, even if gastrointestinal symptoms have not yet fully developed.
- b) **Relief from Duty**: Arrange to be relieved from duty where operationally feasible. If immediate relief is not possible, ensure you are stood down at the end of the current sector.
- c) **Preparedness**: Ensure a sick bag is readily accessible to prevent contamination of flight controls or the central console in the event of sudden vomiting.
- d) **Incapacitation Protocol**: Any impairment caused by gastroenteritis must be managed as a medical emergency and treated in accordance with standard pilot incapacitation procedures.
- e) **Company Procedures**: Adhere strictly to your operator's established protocols for dealing with in-flight incapacitation events.
- f) **Mandatory Reporting**: Failure to report symptoms may endanger the safety of the flight and all individuals onboard.

Return to Duty Criteria

Flight crew must not return to operational duties until at least 48 hours have passed since the complete resolution of symptoms. If there is any uncertainty regarding fitness to fly, seek formal aeromedical advice from your Aeromedical Examiner (AME).