

Flying Safely is more  
than taking care of  
the Ill or Injured  
passenger

**MedAire**  
An International SOS Company

EXPERT CARE, **EVERYWHERE.**

# What about you?

- ▶ Prepared for the unexpected?
- ▶ Prepared for the “what if” in the air?

@krlrgstk



NIGHTLY  
NEWS

# AGENDA

- ▶ Injuries, turbulence and more...
- ▶ Statistics
- ▶ Types of injuries
- ▶ Best Practices on medical case management
- ▶ Beyond the turbulence
  - What to do next?
  - Emotional trauma & support



# CASE STUDY 1: EMDC 110790 - 30<sup>th</sup> June



American Airlines  
Crew Support case  
Gander Canada



Injuries sustained during  
inflight from PHL to Europe



66 female was seated in the jump seat in  
back of aircraft eating her salad when  
the aircraft experienced severe  
turbulence, she was thrown from her seat  
and landed on the floor.



Aircraft diverted to Gander Canada  
where she was taken to the local ER



Diagnosis: Left femoral neck fracture –  
hospital did have CT and orthopedics.  
Surgery was performed within 12 hours of  
injury. Treating physician stated she would  
need extensive rehab



MedAire did daily medical monitoring



Patient was not able to fly on commercial  
flight, no flat bed seat available



Private air ambulance transfer was  
arranged for the 6<sup>th</sup> July.  
Air Ambulance transfer to rehab  
facility at her home in Virginia Beach.





# CASE STUDY 2: FMDC011007 5<sup>th</sup> Aug



Cathay Pacific  
Crew Support case  
Taiwan



Injuries sustained during  
inflight from HKG to Taiwan



33 female fell on both knees due to  
severe turbulence.  
Flight attendant could not walk or put  
any weight on knees



She was taken via ground ambulance  
from hotel to hospital



X-rays and evaluation  
No fractures were found – bilateral knee  
contusions. Unfit to operate.



Wheelchair needed for her flight home on  
commercial aircraft





# GENERAL STATS



**3.9%**  
(784/20038)

of MedLink (In-flight) cases concerned operating crewmembers in the first semester of 2018



**2.4%** PILOTS  
(19/784)

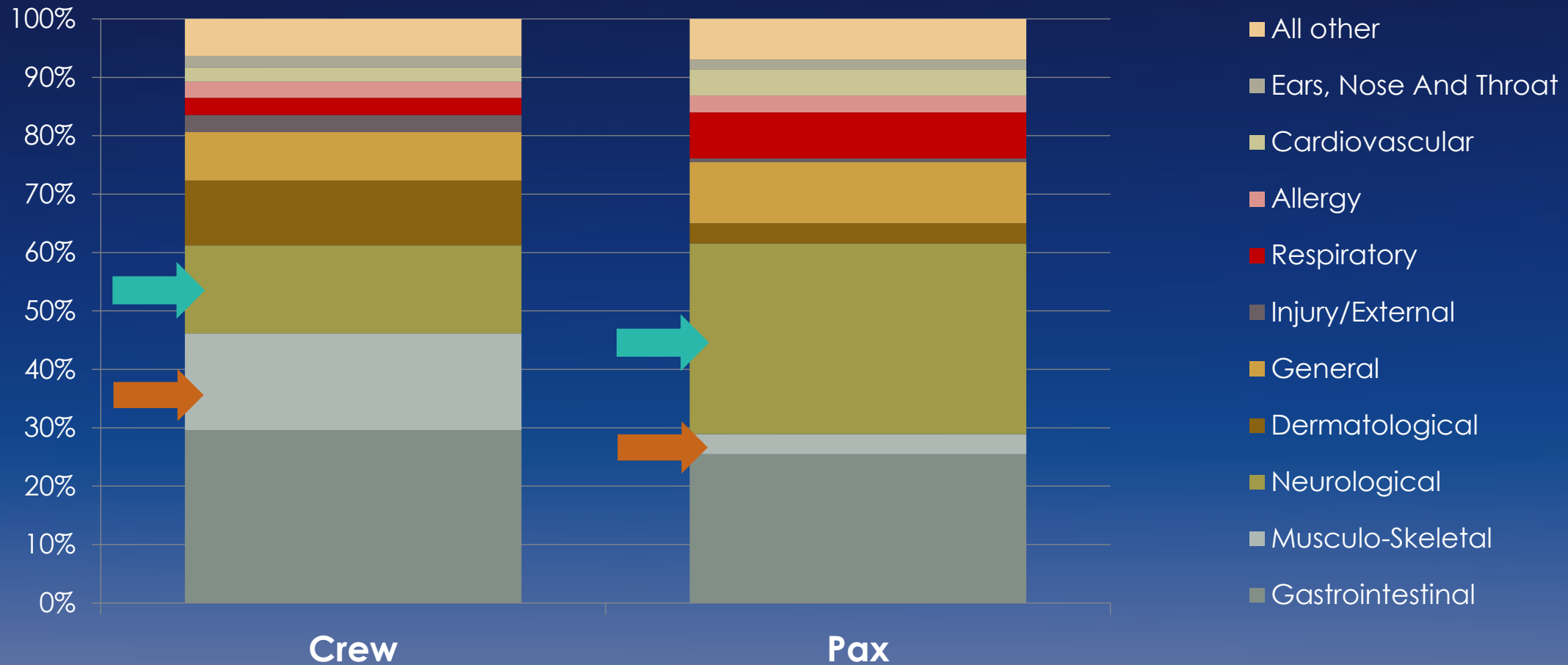


**97.6%** CABIN  
CREW  
(765/784)

\*Percentages vary from airline to airline

\*\*Many international carriers would have figures around 10% of IFMEs affecting crews

# DIAGNOSTIC CATEGORIES - CREW vs PAX



# TURBULENCE

**23** Cases mentioned turbulence

**20** Cases were associated with injury during turbulence

**3** Clusters of cases with more than 1 crewmember injured in the flight (2,2 and 3 respectively)

**3** Cases of nausea/vomiting after turbulence



# DIVERSIONS

18

DIVERSIONS

**2.3%** Crew cases

**1.9%** Passenger cases diverted

**1** Associated with turbulence

**2** Cases (11%) of cases involving pilots eventually diverted

**15** Cases (83.3%) involving cabin crew eventually diverted

- No cluster case diverted
- Suspected stroke was the most frequent reason for diversion (3 cabin crew / 1 pilot)

# SUMMARY OF STATS

- ▶ IFMEs affecting crews are not infrequent
  - **3.9% out of 20,038 cases handled by MedAire in 2018**
- ▶ GI issues are number 1 for crews
- ▶ Crews had significantly more injury-related cases and less neurological cases
- ▶ Diversion rates are not different for cases affecting crews and passengers
- ▶ Suspected stroke were the leading cause for diversions for crew cases and are also a frequent one for passengers

What should you do after such an event?

RUPTLY



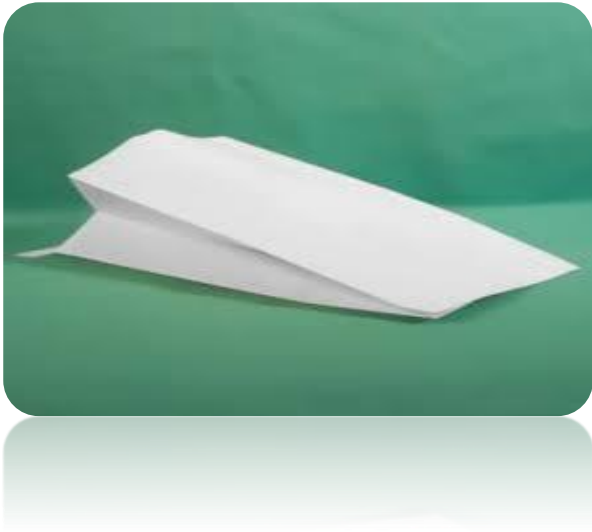


# POST TURBULENCE - INJURIES

When there are more passengers injured than working crew you need a system ensuring the crew treat those that need them the most:

- ▶ **Triage** is a process which has one crew member walking through the cabin identifying who needs to be taken care of first and which passengers can wait. Similar to what first responders utilize.
- ▶ The remaining **cabin crew will treat priority one passengers** before moving to priority two, and three passengers

# POST TURBULENCE TRIAGE



- ▶ **One crew member assigned to triage all passengers injured**
- ▶ **Utilize sick bags to identify the priority** – the bag will be left on the patient's chest (after given a priority ranking) for rest of crew to identify who they treat first
- ▶ **30 seconds per passenger** - as triage person (based on 30 second assessment/intervention such as open airway, control severe bleeding)

# TRIAGE PRIORITIES

## ▶ **PRIORITY 0 OR X**

obviously dead or not breathing (leave them)

## ▶ **PRIORITY 1 IMMEDIATE**

critical passenger who requires first aid intervention. Passenger is breathing but requires medical attention within 60 minutes or they will die (severe bleeding, crush injuries, etc)

## ▶ **PRIORITY 2 DELAYED**

passenger who has serious injuries but not expected to deteriorate over next few hours (fractured hip) Likely to survive

## ▶ **PRIORITY 3 MINOR**

walking wounded with minor injuries- can assist self

Once all passengers triaged, start over and see if any passenger has deteriorated or improved (change priority status if needed)



# TURBULENCE - PLANNING / COMMUNICATIONS / PRACTICE

- ▶ Include “triage” training in your crew medical training program
- ▶ Practice with Pilots / Ground Ops / Cabin Crew (Team)
- ▶ Have the proper equipment / onboard resources
- ▶ Activate ground base medical advise ASAP (explain the process of what begins when we receive a call)
- ▶ MedLink will begin to:
  - Take down vital information to make informed recommendations
  - Provide medical advised based on the condition of the injured (crew or passengers) - crew needs to know how to triage mass casualties



# MEDAIRE MEDLINK — SUPPORT IS JUST A PHONE CALL AWAY

## ▶ MEDAIRE

- Multiple injuries
- Additional support by Drs. And Nurses

## ▶ ON THE GROUND

- Age / Gender / Chief Complaint / Priority

# POST EVENT MANAGEMENT



## ▶ EMOTIONAL SUPPORT:

### **Critical Incident Stress**

**Debriefing** (CISD) is a specific, 7-phase, small group, supportive crisis intervention process...

A CISD is only used in the aftermath of a significant traumatic event that has generated strong reactions in the personnel from a particular homogeneous group.

# TIPS – EMOTIONAL SUPPORT

## PSYCHOLOGICAL FIRST AID IN AVIATION

- Contact & Engagement

### ▶ Goal: **ESTABLISH A PERSONAL CONNECTION**

- Conduct introductions & stabilization
- Acknowledge the difficulty
- Review the process or purpose
- Validate the individual's experiences
- Normalization of Response

### ▶ Goal: **RE-ESTABLISH A SENSE OF SAFETY**

- Use “protect” questions
- Treat fears, worries and other concerns with respect
- Provide information around normal responses
- Establishing Connections & Identifying Support

### ▶ Goal: **RE-ESTABLISH CONNECTIONS**

- Ask ‘connect’ questions
- Promoting Self-Care

### ▶ Goal: **ALLOW CREW MEMBER TO TAKE ACTIVE ROLE IN RECOVERY**

- Promote self-care strategies
- Providing Available Resources & Follow-up

### ▶ Goal: **ENSURE CREW MEMBER IS RECOVERING**

- Provide information on professional resources
- Follow-up on crew member return to work
- Observe for continued difficulties
- Be aware of secondary victimization



QUESTIONS?

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