**National Assembly**

**Question No. 17**

**Mr A M Shaik Emam (NFP) to ask the Minister of Transport:**

Whether he has found that minibus taxis and flights that are allowed to operate at full capacity and thereby exposing passengers and travellers in close proximity to many hours of coughing, sneezing, talking and eating, do not pose a serious risk to the transmission of COVID-19; if not, what evidence does he rely on to make such concessions; if so, what are the relevant details? NW18E

**Reply:**

**Public Transport**

In terms of the Public Transport Directions published on the 22 July 2020 (Gazette No: 43538) loading capacity for long distance public transport travel is restricted to 70% whereas for any trip regarded as short distance a 100% capacity is allowed. Medical experts and professionals advised that the longer you are exposed to an infectious person the more likely you are to be exposed to the virus. This implies that encounters with an infectious person for a short time have a lesser risk of spreading the virus. It is for this reason that allowing closer contact of passengers (100% capacity) on shorter trips/period, coupled with other mitigating measures such as wearing of masks and sufficient ventilation, would not necessarily pose a higher risk of infection to passengers. It should also be emphasised that the wearing of masks is currently compulsory.

**South African Civil Aviation Authority**

The Minister of Transport has permitted aircraft to be filled to capacity except the two rows in the front or back of the cabin which must be kept open in case a suspected case is identified during flight.  This decision was taken following a risk assessment exercise and the implementation of a multi-layered approach to the prevention of the spread of the virus which includes amongst others:

1. Mandatory wearing of masks throughout the flights by both crew and passengers except children under 5 years and those with documented medical exclusions.
2. Screening at domestic & international airports upon entering the terminal building that include thermal scanners, questionnaires and visual inspections.
3. Social Distancing throughout the journey.
4. Contactless check-in and boarding procedures.
5. Issuance of Directions and detailed guidelines on procedures to be followed by each operator customised to their individual operations.
6. Disinfection of the aircraft before it enters service and in between trips.
7. Training of Crew in the management of communicable diseases.
8. Universal Precaution Kits on board.
9. Mandatory PCR Testing & Antigen Testing of International Passengers.
10. Management of medical waste in the cabin.
11. Contact tracing mechanisms.
12. Airlines/Charter Operators & Airports are required to submit procedures for approval by the SA Civil Aviation Authority (SACAA) in compliance to the Minister’s Directions and guidelines. The SACAA is responsible to monitor compliance.
13. Public Education through media campaigns.
14. Embarkation & Disembarkation procedures are implemented at airports during boarding and upon arrival.

In terms of the Aircraft itself, the following is applicable to modern aircraft and this is based on IATA, Airbus, Boeing & Embraer research.

**Cabin Air Quality: The research conducted indicated the following findings:**

1. The risk of transmission in the modern cabin environment is low for a number of reasons: passengers face the same direction, seatbacks act as barriers, air flow is from the top to bottom, and the air is also very clean.
2. There is a higher rate of air renewal than in other indoor facilities.
3. The air in the aircraft cabin comprises of around 50% fresh air from outside the aircraft and 50% of HEPA filtered air. The air in the cabin is renewed 20-30 times an hour, once every 2-3 minutes and about 10 times more than most office buildings. Research has shown that the airflow in an aircraft (from ceiling to floor) is effective to prevent the droplet spread in the cabin.
4. Modern jet aircraft are equipped with High-Efficiency Particulate Air (**HEPA**) filters. These filters have similar performance to those used in hospital operating theatres and industrial clean rooms and these HEPA filters are 99.9+% effective at removing viruses, bacteria and fungi.
5. The bacteria/virus removal efficiency rate of the HEPA filters onboard includes viruses such as SARS, which is similar to COVID-19.
6. The guidelines issued by the Minister requires that airlines maintain appropriate ventilation during all phases of travel, including while the plane is on the ground.

Aircraft by their nature are confined spaces and for decades operators have relied on sophisticated air conditioning systems to filter out viruses that could be carried by passengers and these systems have proven to be effective in filtering out viruses and bacteria that could be exchanged on board an aircraft. Studies conducted by aircraft manufacturers and operators prove the effectiveness of these systems. Same have been recognised by international bodies regulating civil aviation world-wide.