

SKYDIVERS HEALTH AND MEDICAL REQUIREMENTS

Skydiving is not that crazy sport that it is usually considered. Of course there are risks involved just like in any other extreme sport, but skydiving is much safer than it is usually considered.

Usually problems are caused by errors made by the jumper. Most typical injury is sprained ankle caused by a bad landing.

Skydiving is a sport. It requires good physical and mental condition and normal health. Mental problems that are a problem while skydiving is all conditions and illnesses that causes even a temporary unconsciousness or incapacity.

Doctors note is not required by all skydivers. Usually health statement given by the jumper is enough. Jumper is redirected to a doctor if:

- He/she applies for the first time to be a coach or static-line instructor (instructor group I).
- He/she applies for the first time to be an AFF or tandem instructor (instructor group II).
- Jumper is 65 or older.
- Health statement gives a reason to redirect the jumper to a doctor. (possibly illness, condition, injury or finding that might prohibit jumping).
- Organization or an instructor requires.

Skydiving

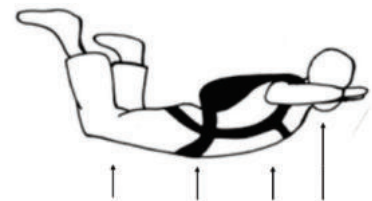
You will be using a harness that is specially designed for skydiving. The weight of the harness is about 15kg. While on the ground the weight is on your shoulder just like a backpack. Harness is tightened around the groin and from the chest in a way that it is not able to move around and straps are staying where they should stay. There is some adjustments that can be made, but for safety for example chest strap should be tight always. Vertical straps goes practically always over the collarbone. Leg straps are tighten around the legs and after the parachute is deployed, the weight of the jumper is on the leg straps and most of the weight is on back, but there is also some weight on the groin.



Skydive is performed from 1000–4000 m altitude. Free fall time depends on the altitude from couple of seconds all the way to 50 seconds but the flight to the altitude takes around 15–30 minutes. In these altitudes changes in air pressure usually does not cause problems. While moving around above the sea level it brings physiological changes on how the human body functions that are caused by for example changes in air pressure and oxygen level. Tension also adds sympathetic nervous system load by raising the blood pressure and heart rate. For people who have tendency for hypoxia (lung problems, heart defects, cardiovascular illnesses etc.) should not skydive at all. Also pay an extra attention to all illnesses caused by changing air pressure (nose, ears).

During freefall skydivers velocity might go as high as 300 km/h. The basic body position is so called X-position where the air flow is affecting on arms and legs. Eyes should be kept on the horizon, chin up and neck slightly extended. In basic body position shoulders are slightly rotated outwards and air flow is pressing upper limbs relatively strongly to posterior direction.

Parachute is deployed at around 1000 meters. In deployment body position jumpers right arm should be able to move against the airflow on top of the lower back. This means that there is significant risk for dislocate the shoulder. During deployment the velocity decreases from 50 m/s to 5 m/s within couple of seconds. During the deployment most of the pressure affects back and neck.



After the deployment jumper should be able to observe surroundings in three dimensional space (landing area, other skydivers). During landing parachute is braked by both arms, so the landing is usually soft (compare jumping down a chair), but sometimes there might be stress on back, knees, ankles or arms, if braking is not done or timed correctly. Braking requires simultaneous pull from both arms from almost completely extended up to completely extended down.

In possible emergencies jumper should be able to make independent and quick decisions (for example to use reserve parachute, landing away from the landing area). Jumper is not allowed to use any medication that effects on his/her ability to react or make decisions.

Skydiver should not have a disability or illness that prevents safe actions in the air, under the canopy or while landing. For example loss of consciousness or major limitations of movement.

During pregnancy it is not advice to skydive (the risk of miscarriage is higher, potential lack of oxygen, noise exposure for fetus).

Finnish medical association has a form for a basic statement made by the doctor (*Lomake T*). This form with a guidelines for the doctor (in Finnish) will guide doctor through the examination.

Skydivers health requirements are checked and stated for the time of examination. Doctors note is valid for 5 years.

For further questions please contact Finnish Aeronautical Association. Phone (09) 3509 340, Email sil@ilmailuliitto.fi.