This thesis mentions the basic physiological and physical principles of diving, it deals with diseases and injuries that occur in the connection with diving. The diseases are divided according to the phase of the diving as follows: The diseases originating from the change of surrounding pressure, diseases connected with staying in the depth and diseases stemmed after emersing above the surface of the water. Deeply elaborated chapter about Decompression disease includes a scale of predispositioning factors to this disablement. Next it mentions diseases that are not connected with the change of surrounding pressure. This part of my thesis describes the different forms of poisoning by enhaled gases, infectious diseases, drowning, hypothermia, hypoxia and it also includes an extended chapter that deals with sea animals and their potentional danger for human organism. The work also references to some preventive processes which can minimalize the risks of occurence of these diseases and injuries.