A worker slips when there is inadequate traction, either because the force of stepping off is too high, or the coefficient of friction is too low. The force of stepping off can be higher than average if the worker is walking quickly or running, making a sudden change in direction, or if he or she has an awkward gait, from injury or old age, for example. The coefficient of friction is a function of the traction provided by the shoes the worker is wearing and the 'slipperiness' of the walking surface. The coefficient of friction is too low if the traction of the worker's shoes is inadequate and if the floor is slippery, because the surface is wet, icy and/or oily and does not have a non-skid coating. Of course, for this to be an issue at all, the worker has to step into the slippery area.

A worker can become off-balance by encountering an unexpected height difference (known as the "step and fall"). This occurs in one of two ways. Either the front foot lands on a surface lower than expected, or the ankle turns due to one side of the foot ending up higher than the other side, with footwear that inadequately supports the ankle. These are both due to an unexpected height difference.