"It is adaptive to start fearing stimuli that signal imminent danger and to stop fearing these signals when they are no longer followed by danger. The topic of extinction research is to investigate the mechanisms of fear reduction when passively observing such change in contingency. However, we can also actively intervene and change contingencies by executing actions that prevent the signaled danger. Such avoidance behavior is an active form of fear regulation that is adaptive when it serves to protect against imminent danger, but becomes maladaptive when it is not appropriate to the actual level of threat. I will review different theories of the learning and maintenance of avoidance behaviors and present evidence that suggests that similar fear regulation mechanisms are at play in avoidance as in extinction. I will further show how this similarity can provide new hypotheses regarding the mechanism that pushes adaptive avoidance into maladaptive avoidance. Finally, I will discuss strategies to extinguish avoidance behaviors."