In this talk we aim to prove the rigidity of Hamiltonian actions in the canonical and Poisson-Lie setting. Rigidity problems can always be viewed as problems about openness of orbits in appropriate settings. In particular, we will show that infinitesimal rigidity implies rigidity. The first part of this talk will concern rigidity results for the canonical momentum map and then we try to generalize these results to the Poisson-Lie setting.