It is well-known that a single magnetic impurity induces bound states inside the energy gap of conventional s- wave superconductors. On the other hand, in d-wave superconductors only virtual bound states with finite lifetime can be induced by potential or/and magnetic impurity. However, in small islands of $YBa_2Cu_3O_{7-\delta}$ a fully gapped spectrum has recently been discovered [1, 2] and this fact paves the way to induce real bound states in d-wave superconductors. In this work, we investigate the intra-gap bound states due to potential and magnetic impurities in the two candidate fully gapped states for this system: the topologically trivial d + is-wave state and the topologically non-trivial chiral d-wave state. Using both the analytic T-matrix formalism and self-consistent numerical tight-binding lattice calculations, we show that potential and magnetic impurities create entirely different intra-gap bound states in d + is-wave and chiral d-wave superconductors, despite both being fully gapped with a parent $d_{x^2-y^2}$ gap. Therefore, our result suggests that the bound states are mainly dependant on the subdominant order parameter. Considering that recent experiments have demonstrated an access to adjustable coupling J [3], magnetic impurities thus offer an intriguing way to clearly distinguish between the chiral d-wave state and the likewisetime-reversal symmetry breaking but topologically trivial $d_{x^2-y^2}$ +is-wave state[4].