A shuffle of words is an interleaving of the letters of the words such that the letters of each original word remain in order. A 3-shuffle is a shuffle of three words, as in, for example, 124573896, which is a 3-shuffle of 123, 456, and 789. In a previous paper, we enumerated distinct 2-shuffles of permutations. In this talk, we will present recent results on enumeration of 3-shuffles of permutations. (Received September 16, 2011)