

Bottle sickness, or bottle shock, has been identified for decades. The saturation level of oxygen in wine is about 6 to 7 ml per liter. During bottling, the oxygen pickup can occur while pumping wine into the filling machine bowl, filling the bottles through the filler spouts and during corking. The largest amount of oxygen pickup occurs during the corking phase. After the bottles have been filled, the headspace above the wine surface can then be absorbed in the wine if the cork is applied and the headspace air is forced into the wine. Once the oxygen is absorbed in the wine the level of free-aldehydes content increases as the various alcohols in wine are oxidized. This increase in aldehydes gives the wine a " flat" bouquet. Generally, this bottle sickness is gone in three to four weeks.