

In the diagram above, the unregulated equilibrium is where the wage is \$7.00/hour and the quantity of labor employed is 900. Assume no employers are offering health insurance initially, and no worker is buying it on his own. What happens if the state starts requiring employers to offer their employees free health insurance that costs the firms \$1.00/hour?

(1) The demand curve for labor will shift down by \$1.00. Before, employers demanded 900 workers if the wage was \$7.00. Now, when they must pay \$1.00 in insurance, they are willing to pay only \$6.00 in cash wages for 900 workers.

(2) The supply curve for labor will also shift down. Before, for 900 workers to be willing to work, the wage had to be \$7.00/hour. Now, they get health insurance on top of the cash wage, so 900 workers will work for a cash wage less than \$7.00/hour. Thus, the supply curve shifts down.

(3) When the demand and supply curve both shift down, we know that the equilibrium cash wage will fall. What about the equilibrium quantity of workers? In general, it could either rise or fall, depending on how much each curve shifts.

(4) Here, though, the supply curve does not shift down as much as the demand curve, for the following reason. If \$1.00 worth of spending on health insurance was worth more than\$1.00 in cash to the workers, they would have been buying health insurance even before the regulation-- but they didn't. Hence, they must value it at less-- maybe at \$.60. With the regulation, to get 900 workers to show up, the firm would have to pay \$6.40 in cash wage plus spending \$1.00 on insurance, because the workers don't value insurance as much as cash. So the supply curve shifts down from (900, 7.00) to the new supply curve at (900, 6.40).

(5) Because the supply curve shifts down less, the new equilibrium is at a lower quantity--850. The new equilibrium wage is at something between \$6.00 and \$6.40--- it is \$6.20 here. The value to the workers is the same as a cash wage of 6.20+.60 = 6.80. That's less than 7.00, which is why the quantity supplied of labor has fallen. The cost to the employers is the same as a cash wage of 6.20+1.00 = 7.20. That's more than 7.00, which is why the quantity demanded of labor has fallen.