

Again, a man is known to breathe out about 400 c.c. of air at each breath, so that a single breath of air must contain about 10^{22} molecules. The whole atmosphere of the earth consists of about 10^{44} molecules. Thus one molecule bears the same relation to a breath of air as the latter does to the whole atmosphere of the earth. **If we assume that the last breath of, say, Julius Caesar** has by now become thoroughly scattered through the atmosphere, then the chances are that each of us inhales one molecule of it with every breath we take. A man's lungs hold about 2000 c.c. of air, so that the chances are that in the lungs of each of us there are about five molecules from the last breath of Julius Caesar.