breathing fifteen respirations a minute, then this is four seconds from here to here. The average duration of stay of this air in the lungs will approach four seconds. The average duration of stay of this air in the lungs will be one second or less. Now, the amount that's deposited out of that air is going to be in proportion to the duration of stay in this actively ventilated space so that in certain portions of the lung, favorably receiving this air, then they're going to get more dust.

UNIDENTIFIED SPEAKER:

Gentlemen, I suggest that you're talking about two different things; he is talking about retention in respiration and you're talking about ultimate retention in the tissues after the elimination process.

BY DOCTOR HATCH:

Maybe I'm a little confused.

UNIDENTIFIED SPEAKER:

You can get particles of this order, magnitude, something of the order or magnitude of two to three microns; you can get upwards of thirty-five or more percentage retention in the lung during the respiratory cycle. How much you'll find there six months later is a totally different story.

BY DOCTOR HATCH:

But with respect to that, that average figure is