

# Are My Shoes Dead?

One of the most frequently asked questions from fitness instructors and participants is...how long should my shoes last? Obviously this will vary from one person to the next, but there are some general rules of thumb that do apply.

The midsole or material between the upper and the outsole is generally composed of pre-compressed foam called Compression Molded E.V.A. It is a very lightweight material that has excellent resilience ie. the ability to absorb shock and return it to its original shape before the impact. Constant pounding compromises the resilience of the foam and its ability to attenuate shock.

The midsole also acts as a housing for high tech materials such as AIR, GEL, etc. But these sparsely placed 'not foam' products, though touted as more durable, seem to have a negligible effect on the life of the shoe's overall cushioning /support system (based on my 30 years of selling shoes)!

Therefore, long term cushioning responsibility seems to fall on the foam. This compression set E.V.A. foam has a well documented lifeline of about 500 running/walking miles (even though materials have 'evolved' over the decades ...which is curious ??) After this amount of pounding, the foam "tires" and the resilience is significantly compromised to the point where the shoes feel like it, "blew a tire". This flat tire feeling is often not obvious until you try on a new pair of shoes and realize immediately why your knees or arches may have been acting up. *\*\*\*Keep in mind that more 'minimalist' shoes with thinner midsoles and less structure will likely underachieve on this 500 mile rule....translation...they wear out faster!*

We have for years observed a consistent pattern of wear for runners. At 500 miles they complained of certain body parts beginning to ache and that 'flat tire' feeling.

## For example:

- a) A person running 5 miles / 4 times a week felt that their shoes were "dead" in 6 months. The math on that is:  
 $5 \text{ miles} \times 4 \text{ weeks} = 20 \text{ miles / week} \times 4 \text{ weeks} = 80 \text{ miles a month} \times 6 \text{ months} = \text{approx. } 500 \text{ miles!}$

But running miles, even in a traditional well cushioned supportive road shoe, provides a poor measuring cup for general gym 'mileage'.

So to try and create a 'mileage' gauge that was meaningful to fitness enthusiasts, I tracked a group of instructors who did a consistent number of high impact fitness classes per week and who also felt their shoes were "finished" when various body parts began to cry out for help.

With this group of thirty or so fitness instructors, we observed a consistent pattern of wear. Here are a few examples:

- a) A person doing 4 hours per week felt their shoes were "dead" within 6 months.  
 b) A person doing 8 hours per week felt their shoes were "dead" in 3 months.  
 c) A person doing 2 hours per week felt their shoes were "dead" in 12 months.

So..... based on 500 miles worth of running wear, the reverse math means that each hour in the gym is equivalent to about 5 running miles worth of wear and tear (maybe double that in a minimal shoe).





When comparing general gym wear and tear with running miles, we need to keep in mind two important points:

1. With fitness and aerobic exercise, there is a great deal of lateral movement, which stretches the upper more than the linear activity of running. The upper therefore may get sloppy and lose support, further limiting the life of the shoe.
2. The impact during plyometrics and court movements is concentrated on the fore-foot area of the shoe. Running, on the other hand, tends to spread the impact more evenly across the midsole and the upper does not tend to 'bag out' as fast.

Do not change your shoes based totally on this chart! Use the chart as a gauge, listen to your body and compare it with a new pair of the same shoes before you decide.

Phil Moore BA-BPHE  
 Owner LadySport and FitFirst footwear,  
 Vancouver, BC

### GYM ACTIVITY CHART

 GYM HRS/ WEEK	 X 5 MILES (=miles/wk)	 x 4 WEEKS (=miles/month)	 APPROX TIME TO 500 RUNNING MILES
2	10	40	12 MONTHS
3	15	60	8 MONTHS
4	20	80	6 MONTHS
5	25	100	5 MONTHS
6	30	120	4 MONTHS
7	35	140	3.5 MONTHS
8	40	160	3 MONTHS