

# Post-Polio Osteoporosis

## A Second Follow-up Q&A

By [Dr. Marny Eulberg, MD](#)



**Question:** I enjoyed your article(s) and diagram on bone health and have found them to be very well balanced and informative.\*

(See Below for earlier articles/diagram).

I have a question about the risk versus benefits of taking bisphosphonates. It seems that many studies only seem to measure risk markers like BMD ([Bone Mineral Density](#)) and the treatment duration tends to very short. Can you explain the benefits of these drugs? I'm also concerned about that age old/complex issue of exercise for polio survivors. In your experience is there any form of exercise that can be adapted for polio survivors that will improve bone health?

**Dr. Eulberg's Response:** Most studies about any of the drugs approved for osteoporosis have looked at the effect on BMD (because that allows a much shorter follow-up period and thus a higher rate of participant participation). We have learned that improvement in BMD does not always correlate with a decrease in fractures. Unfortunately, the long term use of [bisphosphonates](#) appear to not have much/any benefit over that of a shorter term use. In the U.S. the current recommendation is to limit the duration of bisphosphonate use to no more than 5 years. Since the majority of the polio survivors in the United States, Canada and the UK are now over age 65, the reality is that most of us don't have many years left to make a difference in our bone density. The kind of research that will answer the questions about long term effects of medications, side effects and exercise will take at least a decade to provide the answers to your questions. This isn't likely to be very helpful to you, me, and most of our polio survivor colleagues (but it could be helpful to the "younger" polio survivors).



I am not a researcher—just a polio survivor who also happens to be a physician treating fellow polio survivors. The bulk of research seems to indicate that only weight bearing exercise through a particular bone(s) promotes increased bone density. Of interest is that exercise in pools/water has not demonstrated improvement in bone density. If a person has muscle weakness around a particular bone(s) it is very difficult to do weight bearing through that bone, and could possibly cause more muscle weakness.

It has been suggested that jolting/vibratory stimulation might increase bone density more than weight bearing that does not have a jolting/vibratory component. That being said, I have not seen much or even any published research that has demonstrated a proven effect on either bone density or a decrease in fractures.

I totally understand the significant obstacles to getting the answers we polio survivors would like to have. There is a significant cost of doing any research at all and especially research that needs to be done over decades. There is the challenge of finding a cohort of polio survivor research subjects that are reasonably similar in their physical characteristics and going to live through the long follow-up period needed. I doubt that there are any drug companies or other sponsors likely to financially benefit from this research (and hence be willing to fund or partially fund the research).

All that being said, the issues about osteoporosis and fractures in persons with weakness of their limbs, especially their lower extremities, not only apply to polio survivors but also to people with spinal cord injuries, muscular dystrophies, multiple sclerosis, etc. So, from my perspective, there may be a sufficient audience for that kind of information.

\* Previous articles re: Post-Polio Osteoporosis by Dr. Marny Eulberg, MD

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[Post-Polio Osteoporosis Q&A Response](#)

[Osteoporosis Graphic – Healthy vs Osteoporathic Bone](#)