## 98: That's how many humans it would take to start over on another planet

Are we too vulnerable to asteroid strikes and other cataclysms to stick with our single planet?

Frédéric Marin is among those who are doing the hard thinking. The University of Strasbourg astrophysicist has been focusing not on the engineering issues of interstellar travel (which lie beyond current technology) but on the biology side of the question: How many crew members would be needed for an interstellar voyage that might last dozens of generations? In other words, what is the minimum number of people required to deliver and successfully plant a self-sustaining population of Homo sapiens on another Earth?

Marin created a computer program that mimics the progress of a breeding population. Then he used the program, dubbed Heritage, to simulate the risks a spacefaring population would face, including the effects of inbreeding as well as of catastrophic events like a deadly pandemic or being hit by some celestial object.

The number Marin came up with is 98 . Just 98 healthy people would be needed to operate the ship over many generations and to set up a healthy (non-inbred) population on another world, he estimates.

So even if billions of humans were wiped out by some catastrophe, as long as a suitable group of 98 survived and were able to mate, Marin says, they could carry enough genetic diversity to propagate the species and rebuild the population.

Read full, original post: How many humans would it take to keep our species alive? One scientist's surprising answer

