

# What Exactly Is a 100-Year Flood?

The phrase "100-year flood" has caused much confusion over the years. Many mistakenly believe that it is a flood that occurs every 100 years. However, the phrase really means a flood has a 1-percent chance of occurring in any given year.

Floods are classified according to their frequency and depth. For instance there are 10-year, 25-year, 50-year, 100-year, and 500-year floods. A 100-year flood, although less frequent than a 10-year flood, is deeper--- and far more destructive. For this reason, the 100-year flood is now more commonly called the "base flood".

The chart below shows the statistical chances of flooding a building located in one of these higher risk flood areas has over different periods of time.

Chances of Being Flooded				
	Flood Level			
Period of Time	10-yr Flood	25-yr Flood	50-yr Flood	100-yr Flood
1 year	10%	4%	2%	1%
10 years	65%	34%	18%	10%
20 years	88%	56%	33%	18%
30 years	96%	71%	45%	26%
50 years	99%	87%	64%	39%

Buildings located in 100-year flood areas are required to have flood insurance as a condition of receiving a federally backed mortgage loan or home equity loan. Given that many mortgages have a repayment period of 30 years, you may want to point out that buildings in areas subject to a 100-year flood have a 26 percent chance of experiencing that flood during the life of the loan. However, during that same period, there is only a 4 percent chance of a fire.

So, the next time people say that they live in a 100-year floodplain, and the last 100-year flood was three years ago, so they don't have to worry about another flood like that for the next 97 years, use this information to explain the real meaning of a 100-year flood.