The simplified method of tsunami risk estimation for the coast (the calculation of possible tsunami heights for return period 50 and 100 years) is developed. The method is based on the easily available seismological data and calculation of magnitudes for the specified return periods. Gumbel method with double exponential distribution for estimation of magnitudes for small probability events was used. It is possible to use the average earthquake coordinates in the study area for tsunami numerical modeling. The method testing was carried out on the example of North, Middle and South Kuril Islands – the most tsunami-risk areas of the Far East of Russia. The regional Kuril-Kamchatka catalogue of earthquakes for the period 1900-2008 years (which included earthquakes with a magnitude of at least 6) was used.

For the area adjacent to North Kuril Islands the linear function was in a good agreement with the empirical distribution of extreme magnitude. The magnitude for return period 100 years equals 8.2. The calculated maximal tsunami heights 9 -11 m were obtained on the coast of the Second Kuril Strait. This is the most tsunami dangerous (and most populated) stretch of the coast in this area. For the area adjacent to South Kuril Islands the nonlinear function corresponds to empirical distribution of extreme magnitude, the magnitude for return period 100 years equals 8.3, the calculated maximal tsunami heights 15 -18 m were obtained for oceanic coast of Iturup and Shikotan Islands. The calculations showed that the reasonable estimates can be obtained under the proposed approach.