

Earthquake Early Warning (EEW) is limited:  
Bosai is crucial for saving our lives.

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Richard M. Allen et al., wrote an article entitled "Quake warnings, seismic culture," published in Science (1). Japanese government believes that after the 2011 Tōhoku earthquake and tsunami, the early warning system, along with Japan's tsunami warning system, was considered to be effective although the tsunami killed over 10,000 people. From the disaster lessons in 2011, we have learn the important fact of "Bosai" (2). "Bosai" is a Japanese word meaning disaster prevention and mitigation. Almost all of the nearly 3,000 elementary and junior high school pupils in Kamaishi successfully evacuated and stayed safe where children sought refuge all the way to higher ground, and **did not stay in the evacuation center that the hazard map said would be safe** (2). In Kamaishi schools, three principles of evacuation in Bosai have been taught: do not get fixated on assumptions, do whatever you can do in the given situation, and take the initiative in evacuating (2).

Besides, with Bosai, another important point is how quake warnings should be delivered to anyone staying in the expected disaster areas as quickly as possible for evacuation.

References:

1. Richard M. Allen et al., "Quake warnings, seismic culture," Science 01 Dec 2017: Vol. 358, Issue 6367, pp. 1111a
2. Lessons from disasters.  
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