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## Community CPR and AED training for the residents and elementary and junior high school students in Toyonaka City in Osaka Prefecture, Japan

### BACKGROUND

Since 2002, National Curriculum Standards recommend Junior high school (13-15 years old) and high school (16-18 years old) to train students in BLS as a mandatory class across Japan. Unfortunately, they did not include elementary schools. The national curriculum standards were revised in 2017 for junior high school and in 2018 for high school, and hands-on training of BLS was reinforced.



### INTERVENTION

In Japan, municipal fire departments are the largest parties to train CPR to the general public. Toyonaka City in Osaka Prefecture has 403,260 residents and the Toyonaka City Fire Department provided a CPR training (45-minute chest compression-only CPR plus AED use training using a personal training kid called "Mr. PUSH" or the conventional CPR training) from September 2010 through December 2015, targeting 16% of residents. Especially for school students, the Toyonaka City Fire Department introduced systematic chest compression-only CPR training, collaborating with the municipal board of education.

### RESULTS

During the study period, 57,173 residents of Toyonaka City (14.7% of the population) completed the 45-minute chest compression-only CPR training and 32,423 (8.3% of the population) completed the conventional CPR training. A total of 89,596 residents (23.0% of the population) completed either CPR training. The most frequent participants of CPR training were elementary school students (26.6%), followed by junior high school students (23.2%) and school teachers/parents (17.1%).

The proportion of bystander CPR in the actual emergency setting performed did not change (from 43.3% in 2010 to 42.0% in 2015;  $P$  for trend=0.915), but the proportion of high-quality bystander CPR delivery increased from 11.7% in 2010 to 20.7% in 2015 ( $P$  for trend=0.015).

### OUTLOOK

Resuscitation guidelines and policies recommend BLS training in schools to further spread CPR in communities. Since schoolchildren would be potential bystanders, we continue this project and evaluate the impact of CPR training for the community.

(Nishiyama C et al, Community-Wide Dissemination of Bystander CPR and AED Use using a 45-Minute Chest Compression-Only CPR Training. *J Am Heart Assoc.* 2019; 8:e009436)