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## **CPR Instruction from Emergency Call Handlers Increases Child Survival**

Children who suffer out-of-hospital cardiac arrest are more likely to survive and have good brain function if call handlers/ dispatchers instruct bystanders on CPR, according to a large Japanese study published in the Journal of the American Heart Association.

"Dispatcher-assisted bystander CPR increased bystander CPR delivery rate and was associated with improved one-month favourable neurological and overall outcome compared to no bystander CPR," said lead author Yoshikazu Goto, director of the section of Emergency Medicine at Kanazawa University Hospital in Kanazawa, Japan. "Survival rates increased from 8 percent to 12 percent with bystander CPR and dispatcher instruction, a significant difference."

In a prospective, population-based study conducted over three years, researchers analysed 5,009 children (infancy to 18 years) who received CPR. The children were divided into three groups: 2,019 who received bystander CPR with dispatcher instruction; 703 who received bystander CPR without dispatcher instruction; and 2,287 who didn't receive bystander CPR.

The study found one-month favorable neurological outcomes increased, compared to those who received no bystander CPR:

- 81 percent in those who received bystander CPR with dispatcher instruction;
- 68 percent in those who received bystander CPR without dispatcher instruction.

"Expectant mothers should learn how to perform bystander CPR before they give birth," said Goto, who is also associate professor of Emergency Medicine at Kanazawa University School of Medicine. "It is very important for parents, teachers and other adults who deal with children to learn how to deliver CPR to children."

The study findings also confirm that conventional CPR is preferred to chest compression-only CPR in children.

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