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## HOW TO EVACUATE STUDENTS FROM SCHOOL BUILDINGS IN DAMAGING EARTHQUAKES

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## SUMMARY

A questionnaire survey on earthquake evacuation was made in Tokyo, Japan, to investigate present state of school earthquake preparedness and teachers' awareness. Results of the survey strongly suggested that it was urgently necessary to develop and disseminate guidelines of appropriate procedures for evacuating students from the school buildings. On this basis, through elaborate discussions with experts on shool emergency managements, the authors have developed trial guidelines for evacuating buildings. The guidelines describe practical procedures for protecting students from direct and indirect earthquake hazards, by comparing indoors and ourdoors safeties. Special emphasis is placed on the importance of counseling and reassurance for terrified students.

## 1. INTRODUCTION

In most of primary schools and high schools in Japan, evacuation drills have been held for years in order to protect students from damaging earthquakes. However, experts are aware that willingness to participate in the drills is discouragingly low on both teachers' and students' sides. To remove a piece of stumbling block in human nature like this, one of the important subjects in recent earthquake preparedness planning for Japanese schools has been on how to enhance earthquake awareness of teachers, staffs and students [1]. On the other hand, it is well known that mere awareness alone will not be effective for them to take appropriate response actions in the event of a damaging earthquake. Practical procedures for evacuating the school buildings need to be established and be widely disseminated among all school members.

In the present study, current state of evacuation plannings in Japanese schools is first investigated by a questionnaire survey. Next, some issues are picked up from the survey, and trial solutions for them are presented in a visible form. Finally, appropriate response actions in school emergencies following damaging earthquakes, behavioral principles and essential components for conducting effective evacuation are to be discussed.