INTRODUCTION

Background
Inhibitory control is one of the characteristic functions of prefrontal cortex by which inappropriate responses to extrinsic stimuli are avoided (Konishi et al. 1999, Morita et al. 2004). On the other hand, poor inhibitory control is a common symptom among drug users. Fillmore and Rush (2002) reported that cocaine users displayed significantly poorer ability to inhibit their behavioral responses than non-cocaine users. Specifically, cocaine users required more time to inhibit responses to stop-signals and displayed a lower probability of inhibiting their responses. Another symptom is the perseveration. Fillmore and Rush (2006) reported that polydrug users displayed the tendency of being perseverative to the action of drug abuse.

A little known study related to the inhibitory control among former drug users in Indonesia. Thus, this research conducted to give more contribution to the study of inhibitory control among former drug users.

Objective
The objective of this research is to measure the inhibitory control, including the perseveration of former drug users.

MATERIALS AND METHODS

Time and Places
The research was held on March until June 2009 in Drug Recovery Installation of Marzoeki Mahdi Hospital and Yayasan Harapan Permata Hati Kita (YAKITA) Rehabilitation Centre, Bogor. Data analysis was held in Section of Biosystematic and Ecology of Animals, Department of Biology, Bogor Agricultural University.

Subjects and Tool
Subjects were seventeen former drug users (age between 22-35 year, mean = 28.18 year) and seventeen volunteers with no history in drug abuse as controls (age between 21-33 year, mean = 24.29 year). A questionnaire was given to the subjects before the test was begun. It consists of questions about curriculum vitae containing sex, ages, length of study, marital status; handedness (Rife 1940); drug experiences (including what kind of drug that was used); and the length of rehabilitation period. These performance of inhibitory response.

Methods
The Go/NoGo task was used to investigate the inhibitory control due to its simple paradigm (Konishi et al. 1999, Menon et al. 2001). The brief schema of Go/NoGo task is described in Figure 1. In the first trial, a subject was asked to hold the right-button of the computer mouse. After 1000ms, a small square appears to fixate the subject’s concentration. In 2000ms after, a cue appears; this cue was one of paired pictures (symbolizing Go or NoGo cue). In the first trial, the subjects did not know whether the picture is a Go or a

Figure 1 Brief schema of Go/NoGo task.