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# © Elevated Plus Maze

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1 Works for me This protocol is published without a DOI.

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#### **ABSTRACT**

The elevated plus maze is used to measure anxiety-like behavior in rodents, and to assess the anxiolytic effects of pharmacological compounds. Time in the open arms of the maze reflects anti-anxiety-related behavior.

### PROTOCOL CITATION

Lauren Smith, Lani Tieu, Olivier George 2020. Elevated Plus Maze. **protocols.io** https://protocols.io/view/elevated-plus-maze-bh3ej8je

**KEYWORDS** 

elevated plus maze, anxiety, behavior, rats

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**GUIDELINES** 

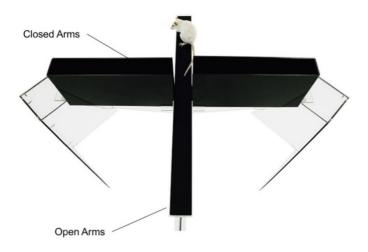
Perform this experiment in a dimmed and quiet room with at least 2 people.

### MATERIALS TEXT

- Elevated plus maze
- Timer
- Stopwatch
- Quatricide

**BEFORE STARTING** 

Set up the elevated plus maze.



Elevated plus maze.

## Procedure 5m

- 1 Place rat in center of elevated plus maze and set the timer to 5 minutes.
- 2 1. Use stopwatch to record the amount of time spent in open arms.
  - 2. In addition, tally the number of entries into each arm (open or closed).
  - At least 3/4 of the rat's body must enter the arm to count as time spent in that arm.
- 3 After 5 minutes is up, calculate and write down the total amount of time spent in open arms and the total amount of time spent in closed arms.
- 4 Place the rat back in its home cage.
- 5 Clean the maze with quatricide before testing the next rat.
  - Make sure to clean the maze in between each rat.