

# Estimating Time of Death (ToD)

1. Livor Mortis (Lividity - death color) - purplish discoloration on a body, caused by blood settling to lower areas of the body due to gravity

A. starts: with 20min → 3 hours after death  
permanent : after 16 hours

- (1) before 16 hours, press on lividity, skin will blanch (turns white) - temporary  
(2) can be used to tell if body is moved

2. Rigor Mortis - stiffening of the muscles in the position the body died.

A.

time after death

event

appearance

∴

circumstances

2-6 hrs.

begin

start to become stiff

begins in the head (eyelids ∴ jaw), then slowly moves down the body - arms ∴ legs last

12 hrs

complete

peak rigor

entire body is rigid

15 → 36 hrs

slow loss of rigor

lose rigor 1<sup>st</sup> in the head ∴ slowly moves down the body - arms ∴ legs last

36-48 hrs

rigor completely disappears

muscles relaxed

- B. Variables that affect rigor

(1) temperature

a. hotter - speed up rigor

b. colder - slows down rigor

(2) physical activity

a. exercise/physical activity speeds up rigor in those muscles being used.

(3) amount of muscle mass

a. a lot - speed up rigor

b. a little - slows down rigor