Description of Alcohol Effect Over Time:

Initial Increase:

At t = 0 hours, BAC starts at 0 mg/mL. By 0.2 hours, it rises sharply to 0.25 mg/mL, indicating that alcohol begins to enter the bloodstream quickly after consumption.

Peak BAC:

The BAC continues to rise, peaking at 0.41 mg/mL at 0.5 hours. This suggests that the effects of alcohol are most pronounced shortly after consumption.

Gradual Decline:

After reaching its peak, BAC begins to decrease gradually. By 0.75 hours, it drops to 0.40 mg/mL, and continues to decline over time, reflecting the body metabolizing the alcohol.

Steady Decrease:

BAC decreases further, reaching 0.33 mg/mL at 1 hour, and gradually declines to 0.12 mg/mL by 2.5 hours.

Near Elimination:

After 3 hours, BAC drops significantly to 0.07 mg/mL, and further declines to 0.01 mg/mL by 4 hours. This indicates that the alcohol's effects diminish considerably, nearing elimination from the bloodstream.