

Question 1a

		MI	No MI
OC use	Yes	29	135
	No	205	1607
	Total	234	1742

$$\text{OR} = (29 \times 1607) / (205 \times 135) = 1.68$$

The odds of having MI among OC users is 1.68 times higher than the odds of having MI among non-OC users.

Question 1b

- Age 25-29: $OR = (4 \times 224) / (2 \times 62) = 7.2$
 - Age 30-34: $OR = (9 \times 390) / (12 \times 33) = 8.8$
 - Age 35-39: $OR = (4 \times 330) / (33 \times 26) = 1.5$
 - Age 40-44: $OR = (6 \times 362) / (65 \times 9) = 3.7$
 - Age 45-49: $OR = (6 \times 301) / (93 \times 5) = 3.9$
-

Question 1c & 1d

Part c:

The odds of using OC = $4/2 = 2$

Part d:

The odds of having MI = $9/33 = 0.27$

Question 2a

		BC	No BC
Verbamate	Yes	60	40
	No	20	40
	Total	80	80

Odds of exposure among cases = $a/c = 60/20 = 3$

Question 2b

		BC	No BC
Verbamate	Yes	60	40
	No	20	40
	Total	80	80

Odds of exposure among controls = $b/d = 40/40 = 1$

Question 2c

		BC	No BC
Yerbamate	Yes	60	40
	No	20	40
	Total	80	80

$$\text{Odds ratio} = ad/bc = (60 \times 40) / (20 \times 40) = 3/1 = 3$$

The odds of having bladder cancer among Yerbamate drinkers is three times higher than the odds of bladder cancer among non-drinkers.

Question 2d

		BC	No BC
Yerbamate	Yes	60	40
	No	20	40
	Total	80	80

Odds of BC among drinkers = $a/b = 60/40 = 1.5$

Odds of BC among non-drinkers = $c/d = 20/40 = 0.5$

Odds ratio = $1.5/0.5 = 3$

Question 2e

		BC	No BC
Yerbamate	Yes	60	200
	No	20	200
	Total	80	400

Odds of exposure among cases = $a/c = 60/20 = 3$

Odds of exposure among controls = $b/d = 200/200 = 1$

Odds ratio = $3/1 = 3$

Odds of BC among drinkers = $a/b = 60/200 = 0.3$

Odds of BC among non-drinkers = $c/d = 20/200 = 0.1$

Odds ratio = $0.3/0.1 = 3$

Question 3

Abstract 1

- a) **Study design:** Case control study
- b) **Dependent variable:** Oral cancer
Independent variable: human papillomavirus (HPV) infection
- c) Two by Two table:

		OC	No OC
HPV	Yes	14	6
	No	58	123
	Total	72	129

d) $OR = (14 \times 123) / (58 \times 6) = 4.95$

Question 3

Abstract 2

- a) **Study design:** Case control study

 - b) **Dependent variable:** Hepatitis A virus (HAV) infection
Independent variable: Attending child care, food exposure, waterborne exposure, **cross border travel**, other international travel and travel related activities.
-

Question 3

Abstract 2

c) Two by Two table:

		HAV	No HAV
USA Travel outside	Yes	88	89
	No	44	265
	Total	132	354

d) $OR = (88 \times 265) / (89 \times 44) = 5.96$
