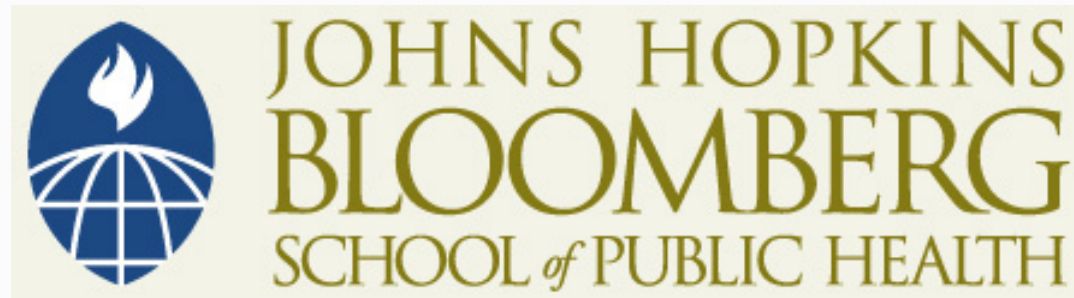


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JOHNS HOPKINS
BLOOMBERG
SCHOOL *of* PUBLIC HEALTH

Lecture 7d: Practice Problems

John McGready
Johns Hopkins University

Example: Breast Feeding Status and Age

1. Let's again consider the sample of 236 Nepali children less than three years old
 - Here is the output from the *logit* command relating breast feeding status to age (months)

```
. logit bf age_chld
```

```
Iteration 0:  log likelihood = -131.60114
Iteration 1:  log likelihood = -90.738276
Iteration 2:  log likelihood = -82.703292
Iteration 3:  log likelihood = -81.26411
Iteration 4:  log likelihood = -81.190302
Iteration 5:  log likelihood = -81.190047
```

```
Logistic regression                Number of obs   =       236
                                   LR chi2(1)          =       100.82
                                   Prob > chi2         =        0.0000
Log likelihood = -81.190047        Pseudo R2      =        0.3831
```

```
-----+-----
            bf |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----+-----
    age_chld |  -.2450237   .035756   -6.85   0.000   - .3151041   - .1749433
      _cons |   7.431951   1.038099    7.16   0.000    5.397314    9.466588
-----+-----
```

Example: Breast Feeding Status and Age

1. Let's again consider the sample of 236 Nepali children less than three years old
 - Here is the output from the *logistic* command relating breast feeding status to age (months)

```
. logistic bf age_chld
```

```
Logistic regression               Number of obs   =       236
                                LR chi2(1)         =       100.82
                                Prob > chi2          =        0.0000
Log likelihood = -81.190047       Pseudo R2       =        0.3831
```

```
-----+-----
            bf | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----+-----
    age_chld |    .782686   .0279857   -6.85   0.000   .7297129   .8395047
-----+-----
```

Death in the ICU: Patients with Sepsis

- a) What do these results estimate for a comparison of the odds of being breast fed for two groups of children who differ by one year (12 months) in age, older to younger?

- b) What is the 95% CI for the odds ratio estimated in Question A?