

# Applied Stats II - Problem Set 4

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Due: April 16, 2023

Code in PS4\_ImeldaFinn.R

## Question 1

We're interested in modeling the historical causes of infant mortality. We have data from 5641 first-born in seven Swedish parishes 1820-1895. Using the "infants" dataset in the `eha` library, fit a Cox Proportional Hazard model using mother's age and infant's gender as covariates. Present and interpret the output.

```
1 data(infants)

1 cox <- coxph(child_surv ~ m.age + sex, data = child)
```

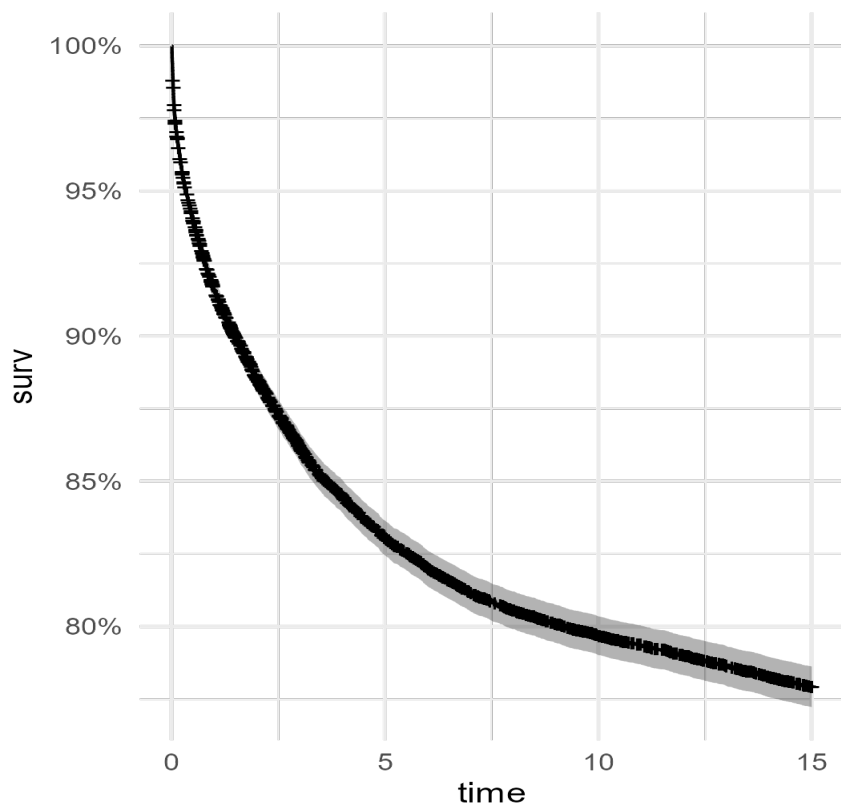


Figure 1: Cox Proportional-Hazard

Table 1:

	<i>Dependent variable:</i>
	child_surv
m.age	0.008*** (0.002)
sexfemale	-0.082*** (0.027)
Observations	26,574
R <sup>2</sup>	0.001
Max. Possible R <sup>2</sup>	0.986
Log Likelihood	-56,503.480
Wald Test	22.520*** (df = 2)
LR Test	22.518*** (df = 2)
Score (Logrank) Test	22.530*** (df = 2)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01