library(ggplot2)

library(tidyverse)

library(InformationValue)

# Read in the safety data

safety <- read.csv('https://raw.githubusercontent.com/IAA-Faculty/statistical\_foundations/master/safety.csv')

# Build the initial logistic regression model

safe\_logit <- glm(Unsafe ~ Region + Weight + factor(Size), data = safety,

family = binomial(link = "logit"))

summary(safe\_logit)

Concordance(safety$Unsafe, predict(safe\_logit, type = "response"))

# Build the reduced model

safe\_logit2 <- glm(Unsafe ~ factor(Size), data = safety,

family = binomial(link = "logit"))

summary(safe\_logit2)

Concordance(safety$Unsafe, predict(safe\_logit2, type = "response"))