insurint <- aov(cbind(cases, deaths)~ no\_health\_insur\*white\_pop + no\_health\_insur\* hispanic\_pop + no\_health\_insur\*black\_pop + no\_health\_insur\*asian\_pop + no\_health\_insur\*pacific\_islander\_pop +no\_health\_insur\* no\_health\_insur\*native\_pop + no\_health\_insur\*other\_race\_pop + no\_health\_insur\* bi\_tri\_racial\_pop, data = covid\_df)

> summary(insurint)

Response cases :

Df Sum Sq Mean Sq F value

no\_health\_insur 1 3.1643e+13 3.1643e+13 2.5479e+05

white\_pop 1 3.0275e+12 3.0275e+12 2.4378e+04

hispanic\_pop 1 2.6445e+12 2.6445e+12 2.1294e+04

black\_pop 1 5.6125e+11 5.6125e+11 4.5193e+03

asian\_pop 1 1.9135e+10 1.9135e+10 1.5408e+02

pacific\_islander\_pop 1 4.2223e+09 4.2223e+09 3.3999e+01

native\_pop 1 1.2109e+10 1.2109e+10 9.7503e+01

other\_race\_pop 1 1.1112e+11 1.1112e+11 8.9472e+02

bi\_tri\_racial\_pop 1 1.7664e+10 1.7664e+10 1.4223e+02

no\_health\_insur:white\_pop 1 7.0747e+08 7.0747e+08 5.6966e+00

no\_health\_insur:hispanic\_pop 1 6.0636e+10 6.0636e+10 4.8825e+02

no\_health\_insur:black\_pop 1 3.5852e+10 3.5852e+10 2.8869e+02

no\_health\_insur:asian\_pop 1 3.4654e+10 3.4654e+10 2.7904e+02

no\_health\_insur:pacific\_islander\_pop 1 1.2603e+10 1.2603e+10 1.0148e+02

no\_health\_insur:native\_pop 1 2.4150e+08 2.4150e+08 1.9446e+00

no\_health\_insur:other\_race\_pop 1 1.1590e+11 1.1590e+11 9.3324e+02

no\_health\_insur:bi\_tri\_racial\_pop 1 9.2960e+09 9.2960e+09 7.4853e+01

Residuals 3124 3.8797e+11 1.2419e+08

Pr(>F)

no\_health\_insur < 2.2e-16 \*\*\*

white\_pop < 2.2e-16 \*\*\*

hispanic\_pop < 2.2e-16 \*\*\*

black\_pop < 2.2e-16 \*\*\*

asian\_pop < 2.2e-16 \*\*\*

pacific\_islander\_pop 6.078e-09 \*\*\*

native\_pop < 2.2e-16 \*\*\*

other\_race\_pop < 2.2e-16 \*\*\*

bi\_tri\_racial\_pop < 2.2e-16 \*\*\*

no\_health\_insur:white\_pop 0.01706 \*

no\_health\_insur:hispanic\_pop < 2.2e-16 \*\*\*

no\_health\_insur:black\_pop < 2.2e-16 \*\*\*

no\_health\_insur:asian\_pop < 2.2e-16 \*\*\*

no\_health\_insur:pacific\_islander\_pop < 2.2e-16 \*\*\*

no\_health\_insur:native\_pop 0.16327

no\_health\_insur:other\_race\_pop < 2.2e-16 \*\*\*

no\_health\_insur:bi\_tri\_racial\_pop < 2.2e-16 \*\*\*

Residuals

---

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ‘ ’ 1

Response deaths :

Df Sum Sq Mean Sq F value

no\_health\_insur 1 3053985146 3053985146 61209.8052

white\_pop 1 308427871 308427871 6181.6967

hispanic\_pop 1 195195162 195195162 3912.2187

black\_pop 1 113925587 113925587 2283.3651

asian\_pop 1 645913 645913 12.9458

pacific\_islander\_pop 1 1318147 1318147 26.4191

native\_pop 1 10306764 10306764 206.5744

other\_race\_pop 1 54784526 54784526 1098.0244

bi\_tri\_racial\_pop 1 12569217 12569217 251.9198

no\_health\_insur:white\_pop 1 4309690 4309690 86.3774

no\_health\_insur:hispanic\_pop 1 296382 296382 5.9403

no\_health\_insur:black\_pop 1 18609325 18609325 372.9793

no\_health\_insur:asian\_pop 1 29524 29524 0.5917

no\_health\_insur:pacific\_islander\_pop 1 1499887 1499887 30.0616

no\_health\_insur:native\_pop 1 28681353 28681353 574.8489

no\_health\_insur:other\_race\_pop 1 11351931 11351931 227.5222

no\_health\_insur:bi\_tri\_racial\_pop 1 59525 59525 1.1930

Residuals 3124 155867995 49894

Pr(>F)

no\_health\_insur < 2.2e-16 \*\*\*

white\_pop < 2.2e-16 \*\*\*

hispanic\_pop < 2.2e-16 \*\*\*

black\_pop < 2.2e-16 \*\*\*

asian\_pop 0.0003256 \*\*\*

pacific\_islander\_pop 2.917e-07 \*\*\*

native\_pop < 2.2e-16 \*\*\*

other\_race\_pop < 2.2e-16 \*\*\*

bi\_tri\_racial\_pop < 2.2e-16 \*\*\*

no\_health\_insur:white\_pop < 2.2e-16 \*\*\*

no\_health\_insur:hispanic\_pop 0.0148542 \*

no\_health\_insur:black\_pop < 2.2e-16 \*\*\*

no\_health\_insur:asian\_pop 0.4418029

no\_health\_insur:pacific\_islander\_pop 4.518e-08 \*\*\*

no\_health\_insur:native\_pop < 2.2e-16 \*\*\*

no\_health\_insur:other\_race\_pop < 2.2e-16 \*\*\*

no\_health\_insur:bi\_tri\_racial\_pop 0.2748016

Residuals

---

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ‘ ’ 1

> disability <- aov(cbind(cases, deaths)~ disability\_pop\*white\_pop + disability\_pop\* hispanic\_pop + disability\_pop\*black\_pop + disability\_pop\*asian\_pop + disability\_pop\*pacific\_islander\_pop +disability\_pop\* disability\_pop\*native\_pop + disability\_pop\*other\_race\_pop + disability\_pop\* bi\_tri\_racial\_pop, data = covid\_df)

> summary(disability)

Response cases :

Df Sum Sq Mean Sq F value

disability\_pop 1 3.6269e+13 3.6269e+13 1.8955e+05

white\_pop 1 8.6176e+10 8.6176e+10 4.5039e+02

hispanic\_pop 1 1.1884e+12 1.1884e+12 6.2112e+03

black\_pop 1 1.6563e+11 1.6563e+11 8.6563e+02

asian\_pop 1 6.5404e+10 6.5404e+10 3.4182e+02

pacific\_islander\_pop 1 3.4294e+05 3.4294e+05 1.8000e-03

native\_pop 1 4.1429e+09 4.1429e+09 2.1652e+01

other\_race\_pop 1 1.1128e+11 1.1128e+11 5.8157e+02

bi\_tri\_racial\_pop 1 1.1398e+10 1.1398e+10 5.9571e+01

disability\_pop:white\_pop 1 2.3693e+10 2.3693e+10 1.2383e+02

disability\_pop:hispanic\_pop 1 6.6362e+10 6.6362e+10 3.4683e+02

disability\_pop:black\_pop 1 2.0946e+10 2.0946e+10 1.0947e+02

disability\_pop:asian\_pop 1 2.2031e+09 2.2031e+09 1.1514e+01

disability\_pop:pacific\_islander\_pop 1 5.5015e+09 5.5015e+09 2.8753e+01

disability\_pop:native\_pop 1 8.5462e+07 8.5462e+07 4.4670e-01

disability\_pop:other\_race\_pop 1 6.8763e+10 6.8763e+10 3.5938e+02

disability\_pop:bi\_tri\_racial\_pop 1 1.1567e+10 1.1567e+10 6.0455e+01

Residuals 3124 5.9774e+11 1.9134e+08

Pr(>F)

disability\_pop < 2.2e-16 \*\*\*

white\_pop < 2.2e-16 \*\*\*

hispanic\_pop < 2.2e-16 \*\*\*

black\_pop < 2.2e-16 \*\*\*

asian\_pop < 2.2e-16 \*\*\*

pacific\_islander\_pop 0.9662336

native\_pop 3.404e-06 \*\*\*

other\_race\_pop < 2.2e-16 \*\*\*

bi\_tri\_racial\_pop 1.576e-14 \*\*\*

disability\_pop:white\_pop < 2.2e-16 \*\*\*

disability\_pop:hispanic\_pop < 2.2e-16 \*\*\*

disability\_pop:black\_pop < 2.2e-16 \*\*\*

disability\_pop:asian\_pop 0.0006992 \*\*\*

disability\_pop:pacific\_islander\_pop 8.823e-08 \*\*\*

disability\_pop:native\_pop 0.5039765

disability\_pop:other\_race\_pop < 2.2e-16 \*\*\*

disability\_pop:bi\_tri\_racial\_pop 1.015e-14 \*\*\*

Residuals

---

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ‘ ’ 1

Response deaths :

Df Sum Sq Mean Sq F value

disability\_pop 1 3657297141 3657297141 90107.0943

white\_pop 1 27100177 27100177 667.6838

hispanic\_pop 1 14553778 14553778 358.5704

black\_pop 1 6322000 6322000 155.7590

asian\_pop 1 37113 37113 0.9144

pacific\_islander\_pop 1 15202667 15202667 374.5575

native\_pop 1 2085110 2085110 51.3721

other\_race\_pop 1 45829041 45829041 1129.1185

bi\_tri\_racial\_pop 1 24915570 24915570 613.8603

disability\_pop:white\_pop 1 18425280 18425280 453.9550

disability\_pop:hispanic\_pop 1 53 53 0.0013

disability\_pop:black\_pop 1 2872912 2872912 70.7817

disability\_pop:asian\_pop 1 305989 305989 7.5389

disability\_pop:pacific\_islander\_pop 1 68258 68258 1.6817

disability\_pop:native\_pop 1 18032194 18032194 444.2703

disability\_pop:other\_race\_pop 1 11674366 11674366 287.6286

disability\_pop:bi\_tri\_racial\_pop 1 344333 344333 8.4835

Residuals 3124 126797966 40588

Pr(>F)

disability\_pop < 2.2e-16 \*\*\*

white\_pop < 2.2e-16 \*\*\*

hispanic\_pop < 2.2e-16 \*\*\*

black\_pop < 2.2e-16 \*\*\*

asian\_pop 0.339031

pacific\_islander\_pop < 2.2e-16 \*\*\*

native\_pop 9.493e-13 \*\*\*

other\_race\_pop < 2.2e-16 \*\*\*

bi\_tri\_racial\_pop < 2.2e-16 \*\*\*

disability\_pop:white\_pop < 2.2e-16 \*\*\*

disability\_pop:hispanic\_pop 0.971294

disability\_pop:black\_pop < 2.2e-16 \*\*\*

disability\_pop:asian\_pop 0.006073 \*\*

disability\_pop:pacific\_islander\_pop 0.194794

disability\_pop:native\_pop < 2.2e-16 \*\*\*

disability\_pop:other\_race\_pop < 2.2e-16 \*\*\*

disability\_pop:bi\_tri\_racial\_pop 0.003609 \*\*

Residuals

---Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ‘ ’ 1