



```

    ifelse(ech$mes==8, 1.003190547,
          ifelse(ech$mes==9, 1.010930576,
                ifelse(ech$mes==10, 1.016366322,
                      ifelse(ech$mes==11, 1.021033973,
                            ifelse(ech$mes==12, 1.024460857,
                                  NA)))))))))

```

```

ech$ingreso_percap<-ifelse(ech$h11!=0, (ech$h11/ech$h19)*ech$ipc, 0)

```

```

tiles<-function(Y,ntil,peso)

```

```

{
  largo=c(1:length(Y))
  largo=rep(largo,peso)
  Y=rep(Y,peso)
  cor=c(1:length(Y))
  freq=cor/length(Y)
  til=c(1:ntil)
  aux=rep(0,length(Y))
  aux<-ifelse(freq<=(1/ntil),1,aux)
  for(i in 2:length(til))
  {
    aux<- ifelse((til[i-1]/ntil)<freq&freq<=(til[i]/ntil),i,aux)
  }
  cortes=by(sort(Y),aux,FUN=max)
  aux1=rep(0,length(Y))
  aux1<- ifelse(Y<=cortes[[1]],1,aux1)
  for(i in 2:length(til))
  {
    aux1<- ifelse(Y>cortes[[i-1]]&Y<=cortes[[i]],i,aux1)
  }
}

```

```

}

aux1=by(aux1,largo,FUN=max)

aux1=as.vector(aux1)

return(aux1)

}

ech$quintil=tiles(ech$ingreso_percap,5,ech$pesoano)

#***** VIVIENDA
#*****

#Carencia: Hacinamiento

ech$hacinamiento_ley<-ifelse((ech$ht19/ech$d10)>2,1,0)

#Carencia: Ba?o (M?nimo un ba?o)

ech$ba?o_ley<- ifelse (ech$d13!=1,1,0)

#Carencia: Ambientes adecuados(cocina, comedor, estar diario)

ech$ambientes_ley<-ifelse ((ech$d19==3 |(ech$d9-ech$d10)<1 & ech$ht19>1),1,0)

#Carencia: Techo adecuado

ech$techo_ley<-ifelse (ech$c3==4 |ech$c3==6 |(ech$quintil<5 & ech$c3==5),1,0)

#Carencia: Paredes adecuadas

ech$paredes_ley<-ifelse ((ech$c2==4 | ech$c2==6 | (ech$quintil<5 & ech$c2==5)),1,0)

#Carencia: Pisos adecuados

ech$pisos_ley<- ifelse ((ech$c4>3),1,0)

#Carencia: Agua

ech$agua_ley<-ifelse ((ech$d12>1),1,0)

#Carencia: Red general para el agua o pozo

ech$red_general_agua_ley<-ifelse ((ech$region_4<4 & ech$d11>1) | (ech$region_4==4 &
(ech$d11==2 | ech$d11==5 | ech$d11==6)),1,0)

#Carencia: Desague

```

```
ech$desag?e_ley<- ifelse ((ech$d14==0) | (ech$d16>2),1,0)
```

```
#Carencia: Red el?ctrica
```

```
ech$electricidad_ley<- ifelse ((ech$region_4<4 & ech$d18>1) | (ech$region_4==4 &  
ech$d18>2),1,0)
```

```
#Cantidad de carencias de vivienda
```

```
ech$cantidad_de_carencias_vivienda=ech$hacinamiento_ley + ech$ba?o_ley +  
ech$ambientes_ley + ech$techo_ley + ech$paredes_ley +
```

```
ech$pisos_ley + ech$agua_ley + ech$red_general_agua_ley + ech$desag?e_ley +  
ech$electricidad_ley
```

```
ech$carencia_vivienda<-ifelse((ech$cantidad_de_carencias_vivienda>0),1,0)
```

```
***** SALUD *****
```

```
ech$carencia_salud<-ifelse((ech$e45_1==2 & ech$e45_2==2 & ech$e45_3==2 &  
ech$e45_4==2 & ech$e45_5==2 & ech$e45_6==2 & ech$e45_7==2),1,0)
```

```
***** EDUCACION *****
```

```
**
```

```
#Asistencia
```

```
ech$asiste=NULL
```

```
ech$asiste<-ifelse ((ech$e193==1 | ech$ e197==1 | ech$ e201==1 | ech$e212==1 | ech$e215==1  
| ech$e218==1 | ech$e221==1 | ech$e224==1),1,0)
```

```
#Variables nuevas que en lugar de 9 tenga 0 cuando no se sabe, para no sumar a?os  
adicionales m?s adelante en la sintaxis
```

```
#ech$e51_2<-ifelse (ech$e51_2==9,0,1)
```

```
for (i in 63:68) {
```

```
ech[,i]<-ifelse (ech[,i]==9,0,ech[,i]) }
```

```
#Variable que indique exigencia de ense?anza t?cnica a la variable e57_1_a?os de educaci?n  
t?cnica
```

```
ech$e51_71<-ifelse(ech$e51_7_1==1,ech$e51_7,0)
```

```
ech$e51_72<-ifelse(ech$e51_7_1==2,ech$e51_7,0)
```

```
ech$e51_73<-ifelse(ech$e51_7_1==3,ech$e51_7,0)
```

```
ech$e51_74<-ifelse(ech$e51_7_1==4,ech$e51_7,0)
```

```
#A?os de educaci?n
```

```
ech$aniosed=NULL
```

```
attach(ech)
```

```
ech$aniosed = ifelse(e49==2,0,
```

```
    ifelse(e51_11 %in% 1:6, pmax(12+e51_9+e51_11, 12+e51_8+e51_11,
12+e51_10+e51_11),
```

```
        ifelse(e51_9 %in% 1:8 | e51_10 %in% 1:8 | e51_8 %in% 1:8 | e51_7_1==1 |
(e51_7_1==2 & e51_72>3), pmax(12+e51_9, 12+e51_10, 12+e51_8, 12+e51_71, 9+e51_72),
```

```
            ifelse(e51_7_1==2 | e51_6 %in% 1:3 | e51_5 %in% 1:3, pmax(9+e51_72,
9+e51_6, 9+e51_5, 6+e51_73),
```

```
                ifelse(e51_4 %in% 1:3 | e51_7_1==3, pmax(6+e51_4, 6+e51_73),
```

```
                    ifelse(e51_2 %in% 1:6 | e51_7_1==4 | e51_3 %in% 1:4 ,
pmax(e51_2, e51_74, e51_3),
```

```
                        ifelse(e193 %in% 1:2,0,0
```

```
                            )))))))
```

```
detach(ech)
```

```
#trunco a?os ed en 22
```

```
ech$aniosed<-ifelse(ech$aniosed<12 & (ech$e51_9==9 | ech$e51_8==9 | ech$e51_10==9
|(ech$e51_7==9 & ech$e51_7_1==1)),12,ech$aniosed)
```

```
#trunco a?os ed en 22
```

```
ech$aniosed<-ifelse(ech$aniosed>22,22,ech$aniosed)
```

#Carencias

#paso variable anio de caracter a num?rica

ech\$anio<-as.numeric(ech\$anio)

ech\$carencia\_educacion<-ifelse(

( (ech\$e27>3 & (ech\$e27<(ech\$anio-1994)) & (ech\$asiste==0) & (ech\$aniosed<12) )

| ( (ech\$e27>=(ech\$anio-1994)) & (ech\$e27<(ech\$anio-1961)) & ech\$aniosed<9 & ech\$asiste==0)

| ( (ech\$e27>=(ech\$anio-1961)) & ech\$aniosed<6 & ech\$asiste==0) ),1,

ifelse( ( (ech\$e27>3 & (ech\$e27<(ech\$anio-1994)) & ech\$asiste==1 ) | (ech\$aniosed>11) |

(ech\$e27<4) | ( (ech\$e27>=(ech\$anio-1994)) & (ech\$e27<(ech\$anio-1961)) & ech\$aniosed>8) |

( (ech\$e27>=(ech\$anio-1961)) & ((ech\$aniosed>5) ) ) | (ech\$asiste==1) ),

0,NA))

\*\*\*\*\*SEGURIDAD

SOCIAL\*\*\*\*\*

#Ocupados formales

ech\$ocup\_form\_SS<-ifelse((ech\$pobpcoac==2 & (ech\$f82==1 | ech\$f96==1)),1,0)

#Jubilados y Pensionistas

ech\$jub\_pen\_SS<-ifelse((((ech\$g148\_1\_1 + ech\$g148\_1\_2 + ech\$g148\_1\_3 + ech\$g148\_1\_4 + ech\$g148\_1\_5 + ech\$g148\_1\_6 + ech\$g148\_1\_7 + ech\$g148\_1\_8 + ech\$g148\_1\_9 + ech\$g148\_1\_10 + ech\$g148\_1\_11 + ech\$g148\_1\_12 + ech\$g148\_2\_1 + ech\$g148\_2\_2 + ech\$g148\_2\_3 + ech\$g148\_2\_4 + ech\$g148\_2\_5 + ech\$g148\_2\_6 + ech\$g148\_2\_7 + ech\$g148\_2\_8 + ech\$g148\_2\_9 + ech\$g148\_2\_10 + ech\$g148\_2\_11 + ech\$g148\_2\_12)>0 | (ech\$pobpcoac==9 & (ech\$f125==1 | ech\$f125==2) ) | ech\$pobpcoac==10),1,0)

#Seguro desempleo

ech\$seg\_des<-ifelse(ech\$g148\_3>0|ech\$pobpcoac==5,1,0)

#Compensaciones por accidente, maternidad o enfermedad

ech\$otras\_compen<-ifelse(ech\$g148\_4>0,1,0)

# AFAM

ech\$AFAM\_SS=ech\$cobra\_afam

#Inactivos

ech\$inactivoymenores<-ifelse(ech\$pobpcoac==1 | ech\$pobpcoac>5,1,0)

ech\$ss\_porotro<-ifelse((ech\$hijo\_formal==1 | ech\$cony\_formal==1 | ech\$hijo\_jub==1 |  
ech\$cony\_jub==1) & ech\$inactivoymenores==1,1,0)

ech\$acceso\_ss\_1<- ifelse(ech\$ocup\_form\_SS==1,1,  
    ifelse(ech\$seg\_des==1,1,  
        ifelse(ech\$otras\_compen==1,1,  
            ifelse (ech\$jub\_pen\_SS==1,1,  
                ifelse((ech\$AFAM\_SS==1 & ech\$pobpcoac!=2),1,  
                    ifelse (ech\$ss\_porotro==1,1,0  
                        ))))))

ech\$carencia\_ss<-ifelse(ech\$acceso\_ss\_1==0,1,0)

\*\*\*\*\* ?NDICES CONEVAL  
\*\*\*\*\*

ech\$indice\_privacion\_coneval= ech\$carencia\_salud + ech\$carencia\_ss +  
ech\$carencia\_educacion + ech\$carencia\_vivienda

ech\$pobreza\_multi\_coneval<-ifelse((ech\$pobre06==1 & ech\$indice\_privacion>0),1,  
    ifelse((ech\$pobre06==0 & ech\$indice\_privacion>0),2,  
        ifelse((ech\$pobre06==1 & ech\$indice\_privacion==0),3,  
            ifelse((ech\$pobre06==0 & ech\$indice\_privacion==0),4,0  
                ))))

ech\$pobreza\_multi\_coneval <- as.character(ech\$pobreza\_multi\_coneval)

```
ech$pobreza_multi_coneval<- factor(ech$pobreza_multi_coneval,labels=c("Pobres  
multidimensionales","Vulnerables seg?n derechos sociales","Vulnerables por ingresos","No  
pobres"))
```

```
dise?o = svydesign(id=~numero, strata=ech$region_4, data=ech, weights=ech$pesoano)
```

```
(pobreza_multi_coneval_pon = svytable(~pobreza_multi_coneval, dise?o))
```

```
##### FIN-POBREZA MULTIDIMENSIONAL-DAES-DINEM
```