**Andean and Latin America**

Questions

1. Using the Map function (left side of the screen), which areas of the world have the greatest

mortality burden (all causes)? How does this vary across age-groups?

* The areas of the world with the greatest mortality burden is India and China, as they have a sheer number of more people dying every year. India’s number of deaths in 2013 is between 10 and 11 million, while China’s is between 9 and 10 million
* For under the age of five, India still has the highest number of deaths (around 1 million), and Nigeria is second, with around 900,000 deaths per year. In comparison, China has quite a low amount of deaths for children under the age of 5, ranging at around 239,000 deaths. India still has the highest mortality burden for ages 5-14 and 15-49   
  (212,000 and 2 million deaths, respectively), but China’s numbers change from about 47,000 deaths for the age group of 5-14 to around 1 million for the 15-49 age group.
* For the older age groups, India has a higher mortality burden for ages 50-69, with around 3 million deaths, but China’s number radically rises to between 2.7 and 3 million deaths per year. In the oldest age group, China has the highest mortality burden, with around 5 million deaths in the year 2013 of people over the age of 70, in comparison with India’s 3.5 million.
* In summary, as India has a larger population than China, it has a higher crude mortality burden than the rest of the world, but it loses the most amount of people before the age of 70, whereas China’s population lives longer and usually dies at an older age.

2. Using the Patterns function, describe the changes in cause of death by age within your area as a whole. How does the relative importance of these vary across all ages? How does it compare between the wealthiest and poorest countries within your region?

* Part A-> Describe the changes in causes of death in area as a whole
  + Ages 0-5
    - Across all countries, Neo-Natal Disorders and “Other Non-Communicable Diseases” dominate as the causes of death. However, in Bolivia and Peru, Death by Unintentional Injury is the leading cause.
  + Ages 5-14
    - Most common cause of death across all countries:
      * Diarrhea, lower respiratory and other infectious diseases.
      * Transport Injuries
      * Self-harm and Interpersonal Violence
  + Ages 15-49
    - Self-Harm and Interpersonal Violence
      * Most Common cause of death except Peru, Costa Rica, and Bolivia
      * More males die in this age group across every country, especially of Self Harm and Interpersonal Violence
        + Ex: Colombia

148.5 average deaths of men vs. 15.63 average deaths of women

* + - * + El Salvador

232.22 deaths of men vs. 28.69 deaths of women

* + - Maternal Disorders
      * High number in Bolivia
        + 18.3 deaths
  + Ages 50-69
    - Cardiovascular and Diabetes related deaths dominate, as well as Neoplasms
    - Some infectious diseases as well
    - Nutritional Deficiencies stand out in Guatemala
  + Ages 70 plus
    - Very similar to 50-69, and nutritional deficiencies still apparent in Guatemala
* Part B-> Relative importance of these across all ages
  + The relative importance of examining the changes in causes of death across all ages reveals how different age groups throughout Andean and Central Latin America suffer from similar issues. For instance, during childhood, the leading cause of death is associated with medical issues, such as disease and neonatal disorders. However, as the residents of the countries grow older, their lives are cut short by social issues rather than biological ones, such as violence and transport injuries. After reaching the age of 50, however, across the board, the leading cause of death once again becomes disease based, such as cardiovascular disease and diabetes.
  + When looking at these numbers from a development point of view, they show the importance of focusing differing types of initiatives for different age groups. They also bring up the question of how interconnected all the countries of this region are if they suffer from such similar issues at different stages of the life cycle.
* Part C: How does it compare between the wealthiest and poorest countries in your area?
  + From the GDP analysis, Colombia is the wealthiest country in the area and Honduras is the poorest. However, the causes of death for the country are very similar across all ages, as they both lose the most amount of lives to cardiovascular diseases and violence. The only outlier is that in the 15-49 age group, Colombia loses about 150 (per 100,000) deaths to violence, in contrast to Honduras’s 89 deaths (per 100,000).

[Excellent answer, though would have been better with a graph. It’s also conventional to present the answers in prose, not lists.]

3. Using the Risks by Cause, how would you characterize the relative risks associated with behavioral risks, environmental/occupational risks, and metabolic risks? How does the relative importance of these vary across all ages? How does it compare between the wealthiest and poorest countries within your region?

Relative risk associated with (Andean Latin America):

Behavioral Risks: 12.43% (62.67 per 100,000) of Deaths are Cardiovascular related. Diarrhea, Lower respiratory & other infectious diseases makeup 3.11% (15.65 per 100,000) of total deaths. Neoplasms are responsible for 4.67% (23.53 per 100,000) of total deaths.

Environmental/Occupational Risks: 3.3% (16.63 per 100,000) of Deaths are Cardiovascular related. Diarrhea, Lower respiratory & other infectious diseases makeup 2.68% (13.53 per 100,000) of total deaths.

Metabolic Risks: 14.24% (71.77 per 100,000) of Deaths are Cardiovascular related. Diabetes, Urogenital, Blood & Endocrine Diseases are responsible for 7.29% (36.74 per 100,000) of total deaths.

Relative risk associated with (Central Latin America):

Behavioral Risks: 15.5% (81.34 per 100,000) of Deaths are Cardiovascular related. Diabetes, Urogenital, Blood & Endocrine Diseases are responsible for 4.86% (25.51 per 100,000) of total deaths. Neoplasms are responsible for 4.11% (21.53 per 100,000) of total deaths.

Environmental/Occupational Risks: 3.36% (17.62 per 100,000) of total deaths are related to Cardiovascular Disease. Diarrhea, Lower respiratory & other infectious diseases makeup 1.77% (9.3 per 100,000) of total deaths.

Metabolic Risks: 18.02% of total deaths are attributed to Cardiovascular Disease. Diabetes, Urogenital, Blood & Endocrine Diseases are responsible for 12.79% (67.08 per 100,000) of total deaths.

The relative importance of these diseases varies drastically across all ages. Under 5 years of age Diarrhea, Lower respiratory & other infectious diseases are responsible for 53/100,000 deaths per year. From ages 15-49 the relative risks associated with Behavioral risks are more varied from Cardiovascular Disease to self-harm and interpersonal disease.But what is interesting with this age bracket is that the death total out of 100,000 decreases from under 5 years of age. If one can survive their early years the chance of survival increases significantly. Between the ages of 50-69 there is a major spike in Cardiovascular and Diabetes, Urogenital, Blood & Endocrine Diseases, with about 200/100,000 deaths.

Within Andean Latin America it appears that Bolivia has the most deaths due to illness. Within Central Latin America, Honduras and El Salvador appear to have the most deaths due to illness.

4. Using the Treemap, characterize the changes in causes of death in your area during the 1990-2013 period. Focusing on the (i) under-5 age group and (ii) age 50-69 age-group, which causes have been becoming more common, and which less?

**Under-5 age group**- notable trends in causes of death

· Lower respiratory infections

- Andean Latin America: Between 1990 and 2013 there has been a decrease in deaths caused by lower respiratory diseases, going down from 22.180% in 1990 to 16.011% in 2013. The ratio of infections between females and males in this age group is low for 1990 and 2013 both, standing on 22.946% for females and 21.509% for males in 1990, and 16.428% for females and 15.671% for males in 2013.

- Central Latin America: Here as well we can see a decrease, going down from 15.561% in 1990 to 13.074% in 2013.unlike the Andean, here we see that in 1990 females are relatively more vulnerable, while males are more vulnerable in 2013. The percentage of mortality standing on 15.914% for females and 15.271% for males in 1990, and 13.243% for males compared to 12.859% for females in 2013.

· Diarrheal diseases

- Andean Latin America: Between 1990 and 2013 there has been a major decrease in deaths caused by diarrheal diseases, going down from 17.503% of total deaths in 1990 to 4.742% in 2013. In 1990 females of this age group seem to have more vulnerability to diarrheal diseases than males. In 1990 female mortality under age 5 of this cause was 18.267%, while male mortality was 16.832%. In 2013 we witness a notable decrease in ratio, standing on 4.746% for females and 4.739% for males.

- Central Latin America: Here as well we can see a major decrease, going down from 19.535% in 1990 to 5.826% in 2013. Unlike Andean Latin America, here the ratio between male and female mortality is lower both in 1990 and 2013, while females are more vulnerable in 1990, males are relatively more vulnerable in 2013. The percentage of mortality standing on 19.995% for females and 19.159% for males in 1990, and 5.866% for males compared to 5.774% for females in 2013.

· Preterm birth complications

- Andean Latin America: Between 1990 and 2013 there has been an increase in deaths caused by preterm birth complications, going up from 9.835% in 1990 to 13.380% in 2013. This cause is responsible for higher mortality in males than in females in both 1990 and 2013, standing on 10.631% for males compared to 8.931% for females in 1990, and 13.971% for males and 12.881% for females in 2013.

- Central Latin America: Here as well we can see an increase, though not as high as Andean Latin America, going up from 14.697% in 1990 to 15.850% in 2013. Similarly, males are more vulnerable to this factor, percentage standing on 15.841% for males and 13.295% in 1990, and 16.645% in males and 14.829% for females in 2013.

· Congenital anomalies

- Andean Latin America: Between 1990 and 2013 there has been a major increase in deaths caused by congenital anomalies, going up from 5.051% in 1990 to 14.132% in 2013. In both years females are more vulnerable to congenital anomalies, the percentage of deaths for females of this cause standing on 5.204% compared to 4.920% for males in 1990, and 14.651% compared to 13.711% for males in 2013.

- Central Latin America: here also we can see a major increase, going up from 9.670% in 1990 to 21.934% in 2013. Similarly, females are mortality is higher when related to this cause, standing on 10.228% for females and 9.219% for males in 1990 and 22.700% for females and 21.336% for males in 2013.

· Protein-energy malnutrition

- Andean Latin America: Between 1990 and 2013 there has been a decrease in deaths caused by protein-energy malnutrition, going down from 5.070% in 1990 to 2.357% in 2013. In both years females are more vulnerable to malnutrition than males, standing on 5.384% for females and 4.796% for males in 1990, though in 2013 we can see a decrease in ratio, standing on 2.398% for females and 2.324% for males.

· Sexually transmitted diseases excluding HIV

- Andean Latin America: Between 1990 and 2013 there has been a decrease in deaths caused by STDs, going down from 3.293% in 1990 to 1.804% in 2013. Here as well females are somewhat more vulnerable, standing on 3.536% for females and 3.080% for males in 1990, and 1.998% for females and 1.646% for males in 2013.

· Foreign body

- Andean Latin America: Between 1990 and 2013 there has been an increase in deaths caused by a foreign body, going up from 5.518% in 1990 to 7.413% in 2013. In 1990 males of this age group seem to suffer higher mortality than females of this cause, standing on 6.325% compared to 4.559% for females. In 2013 the ration is lower, standing on 7.650% for males and 7.118% for females.

- Central Latin America: though the percentage of death caused by a foreign object is much lower here, we can still see an increase, going up from 1.492% in 1990 to 2.645% in 2013. Unlike Latin America, the ratio increased over the years, starting with a relatively higher male mortality in 1990, and higher female mortality in 2013, standing on 1.551% for males and 1.418% for females in 1990, and 3.033% for females compared to 2.343 for males in 2013.

· Neonatal encephalopathy due to birth asphyxia and trauma

- Andean Latin America: Between 1990 and 2013 there has been an increase in deaths caused by neonatal encephalopathy, going up from 6.532% in 1990 to 9.139% in 2013. This cause is responsible for higher mortality in males than in females in both 1990 and 2013, standing on 7.021% for males compared to 5.973% for females in 1990, and 9.450% for males compared to 8.753% for females in 2013.

- Central Latin America: here also we can see an increase, though not as drastic, going up from 8.066% in 1990 to 7.019% in 2013. Similarly, male vulnerability is higher, death percentage standing on 8.501% for males and 7.532% for females in 1990, and 7.1885 for males and 6.802% for females in 2013.

· Neonatal sepsis and other neonatal infections

- Andean Latin America: Between 1990 and 2013 there has been a major increase in deaths caused by neonatal sepsis, going up from 3.172% in 1990 to 7.728% in 2013. Here as well male mortality is higher than female, standing on 3.488% for males and 2.814% for females in 1990. In 2013 the ratio is higher, standing on 8.411% for males compared to 6.892% for females.

- Central Latin America: here also we can see an increase, though not as drastic, going up from 3.303% in 1990 to 6.748% in 2013. Male mortality is higher here as well, standing on 3.538% compared to 3.014% for females in 1990, and 7.041% for males compared to 6.372% for females in 2013.

· Other neonatal disorders

- Andean Latin America: Between 1990 and 2013 there has been an increase in deaths caused by neonatal sepsis, going up from 1.751% in 1990 to 2.380% in 2013. Here as well male mortality is somewhat higher than female, standing on 1.867% for males and 1.619% for females in 1990, and 2.566% for males and 2.151% for females in 2013.

- Central Latin America: here as well we can see a similar increase, going up from 2.873% in 1990 to 3.635% in 2013. Similarly, males are somewhat more vulnerable to this factor, standing on 2.967% for males and 2.758% for females in 1990, and 3.743% for males and 3.497% for females in 2013.

· Chronic obstructive pulmonary disease

- Andean Latin America: Between 1990 and 2013 there has been a decrease in deaths related to this cause, going down from 1.913% in 1990 to 0.911% in 2013. In both years females are more vulnerable, though the ratio is lower in 2013, standing on 2.090% for females and 1.758% for males in 1990, and 0.931% for females and 0.895% for males in 2013.

· Interpersonal violence

- Central Latin America: Between 1990 and 2013 there has been an increase in deaths related to this cause, going up from 0.567% in 1990 to 1.071% in 2013. During 1990 males were more vulnerable, while females are more vulnerable in 2013, though the ratio is rather low. Death percentage standing on 0.586% for males and 0.543% for females in 1990, and 1.076% for females compared to 1.068% for males in 2013.

· Measles

- Andean Latin America: Between 1990 and 2013 there has been an elimination of measles as a cause of death, going down from 0.243% in 1990 to 0% in 2013.

- Central Latin America: here as well we witness an elimination of measles as a case of death, going down from 2.645% in 1990 to 0% in 2013.

· Collective violence and legal intervention

- Andean Latin America: Between 1990 and 2013 there has been an elimination of this factor as a cause of death, going down from 0.162% in 1990 to 0% in 2013.

- Central Latin America: similarly, we can see an elimination of this factor as a cause of death, going down from 0.132% in 1990 to 0% in 2013.

**50-69 age group**- notable trends in causes of death

· Tuberculosis

- Andean Latin America: Between 1990 and 2013 there has been a major decrease in deaths caused by this factor, going down from 5.953% of total deaths in 1990 to 1.817% in 2013. This cause is responsible for higher mortality in males than in females in both 1990 and 2013, standing on 6.454% for males compared to 5.314% for females in 1990, and 2.151% for males and 1.399% for females in 2013.

- Central Latin America: here also we can see a decrease, though not as drastic, going down from 1.976% in 1990 to 0.643% in 2013. Similarly, here as well this cause is responsible for higher mortality in males, standing on 2.257% compared to 1.592% for females in 1990, and 0.811% for males and 0.412 for females in 2013.

· Stomach cancer

- Andean Latin America: Between 1990 and 2013 there has been a decrease in deaths caused by stomach cancer, going down from 5.558% in 1990 to 4.740% in 2013. This cause is responsible for somewhat higher mortality in males than in females, standing on 5.760% for males and 5.300% for females in 1990, and 4.823% for males and 4.632% for females in 2013.

· Cirrhosis due to alcohol use

- Andean Latin America: Between 1990 and 2013 there has been a decrease in deaths caused by this factor, going down from 3.486% in 1990 to 2.683% in 2013. This cause is responsible for higher mortality in males, standing on 4.927% for males compared to 1.643% for females in 1990, and 3.861% for males and 1.163% for females in 2013.

· Diabetes mellitus

- Andean Latin America: Between 1990 and 2013 there has been an increase in deaths caused by this factor, going up from 3.857% in 1990 to 4.687% in 2013. Females being more vulnerable, the percentage of deaths standing on 4.605% for females compared to 3.273% for males in 1990, and 5.219% compared to 4.276% for males in 2013.

- Central Latin America: here as well we can see an increase, going up from 9.143% in 1990 to 9.836% in 2013. Similarly, females are highly more vulnerable, the percentage of death standing on 11.852% for females compared to 7.165% for males in 1990, and 11.531% for females compared to 8.607% for males in 2013.

· Chronic kidney disease

- Andean Latin America: Between 1990 and 2013 there has been an increase in deaths caused by this factor, going up from 3.857% in 1990 to 4.687% in 2013. Females being more vulnerable in both years, we witness an increase in ratio in 2013, the percentage of deaths standing on 3.991% for females compared to 3.427% for males in 1990, and 6.209% compared to 5.344% for males in 2013.

- Central Latin America: Here we can see a major increase in deaths cause by chronic kidney diseases, going up from 3.127% in 1990 to 9.869% in 2013. Similarly, females are more vulnerable and we witness an increase in ration, death percentage standing on 3.468% for females and 2.878% for males in 1990, and 11.264% for females compared to 8.859% for males in 2013.

· Road Injuries

- Andean Latin America: Between 1990 and 2013 there has been an increase in deaths caused by road injuries, going up from 3.099% in 1990 to 3.892% in 2013. This cause is responsible for higher mortality in males than in females in both 1990 and 2013, standing on 3.932% for males compared to 2.034% for females in 1990, and 4.964% for males and 2.509% for females in 2013.

· Diarrheal diseases

- Andean Latin America: Between 1990 and 2013 there has been a decrease in deaths caused by diarrheal diseases, going down from 1.631% in 1990 to 0.283% in 2013. The ratio of mortality for males and females by this cause is low, standing on 1.650% for females and 1.617% for males in 1990, and 0.284% for males and 0.283% for females in 2013.

- Central Latin America: here as well there has been a decrease, going down from 2.272% in 1990 to 0.538% in 2013. Similarly, the ratio of death between males and females in low, females being somewhat more vulnerable, standing on 2.445% for females and 2.146% for males in 1990, and 0.608% for females and 0.487% for males in 2013.

· Inguinal, femoral, and abdominal hernia

- Andean Latin America: Between 1990 and 2013 there has been a decrease in deaths caused by this factor, going down from 1.518% in 1990 to 0.220% in 2013. This cause is responsible for somewhat higher mortality in males than in females, standing on 1.776% for males and 1.189% for females in 1990, and 0.233% for males and 0.203% for females in 2013.

· Cirrhosis due to hepatitis C

- Andean Latin America: Between 1990 and 2013 there has been an increase in deaths caused by road injuries, going up from 1.388% in 1990 to 2.874% in 2013. This cause is responsible for somewhat higher mortality in males than in females, standing on 1.412% for males compared to 1.356% for females in 1990, and 3.238% for males and 2.407% for females in 2013.

· Liver cancer

- Andean Latin America: Between 1990 and 2013 there has been an increase in deaths caused by liver cancer, going up from 0.909% in 1990 to 1.778% in 2013. Females being more vulnerable, the percentage of deaths standing on 1.196% for females compared to 0.684% for males in 1990, and 2.219% compared to 1.436% for males in 2013.

· Alcohol use disorders

- Andean Latin America: Between 1990 and 2013 there has been an increase in deaths caused by alcohol use disorder, going up from 0.794% in 1990 to 1.623% in 2013. This cause is responsible for higher mortality in males than in females, standing on 1.194% for males compared to 0.283% for females in 1990, and 2.604% for males and 0.358% for females in 2013.

- Central Latin America: Unlike Andean Latin America, here we see a decrease in deaths caused by this factor, going down from 1.336% in 1990 to 0.876% in 2013. Much like Andean Latin America, this cause affects more males than females, percentage of death standing on 2.155% for males compared to 0.215% for females in 1990, and 1.403% for males compared to 0.151% for females in 2013.

· Pancreatic cancer

- Andean Latin America: Between 1990 and 2013 there has been an increase in deaths caused by pancreatic cancer, going up from 0.420% in 1990 to 1.200% in 2013. Females being somewhat more vulnerable, the percentage of deaths standing on 0.502% for females compared to 0.355% for males in 1990, and 1.395% compared to 1.049% for males in 2013.

· HIV/AIDS

- Andean Latin America: Between 1990 and 2013 there has been an increase in deaths caused by HIV/AIDS, going up from 0.092% in 1990 to 0.615% in 2013. This cause is responsible for higher mortality in males than in females, standing on 0.134% for males compared to 0.037% for females in 1990, and 0.896% for males and 0.257% for females in 2013.

· Exposure to forces of nature, disaster

- Andean Latin America: This factor is not a major one, but there has been a notable increase between 1990 and 2013, going up from 0% in 1990 to 0.116% in 2013. This cause tends to encounter more females, standing on 0.186% compared to 0.062% for males in 2013.

· Collective violence and legal intervention

- Andean Latin America: Between 1990 and 2013 there has been an elimination of this factor as a cause of death, going down from 0.795% in 1990 to 0% in 2013.

· Lower respiratory infections

- Central Latin America: Between 1990 and 2013 there has been a decrease in deaths caused by this factor, going down from 3.256% in 1990 to 2.489% in 2013. This cause is responsible for somewhat higher mortality in females than in males, standing on 3.366% for females and 3.176% for males in 1990, and 2.509% for females and 2.475% for males in 2013.

· Protein-energy malnutrition

- Central Latin America: Between 1990 and 2013 there has been a decrease in deaths caused by malnutrition, going down from 1.401% in 1990 to 0.642% in 2013. This cause is responsible for somewhat higher mortality in females than in males, standing on 1.511% for females and 1.321% for males in 1990, and 0.650% for females and 0.636% for males in 2013.

· Ischemic heart disease

- Central Latin America: Between 1990 and 2013 there has been a decrease in deaths caused by this factor, going down from 16.294% in 1990 to 15.127% in 2013. This cause is responsible for higher mortality in males than in females, standing on 17.590% for males and 14.519% for females in 1990, and 16.996% for males and 12.550% for females in 2013.

· Cerebrovascular disease

- Central Latin America: Between 1990 and 2013 there has been a decrease in deaths caused by this factor, going down from 7.861% in 1990 to 6.653% in 2013. Females being more vulnerable, the percentage of deaths standing on 9.116% for females and 6.944% for males in 1990, and 7.209% for females and 6.248% for males in 2013.

[this is a very detailed answer but tells me nothing about general trends]

5. Using the Pyramid, look at variation within your region. What causes of death are responsible for most of the differences in deaths in the (i) under-5 age group and (ii) age 50-69 age-group?

**Under-5 age group**- differences in death 2013

Andean Latin America

· 1st cause of death:

*Neonatal disorders* are responsible for most deaths in **Bolivia** (F: 30.36%, 245.62/100k; M: 35.66%, 337.62/100k) and **Peru** (F: 35.67%, 143.99/100k; M: 38.03%, 185.62/100k), while *Diarrhea, lower respiratory, and other common infectious diseases*, are responsible for most deaths in **Ecuador** (F: 31.12%, 170.09/100k; M: 30.29%, 189.49/100k).

· 2nd cause of death

*Diarrhea, lower respiratory, and other common infectious diseases* come second in **Bolivia** (F: 22.57%, 182.69/100k; M: 20.02%, 190.04 /100k), as well as in **Peru** (F: 22.57%, 90.97/100k; M: 21.85%, 106.82/100k), while *neonatal disorders* are second in **Ecuador** (F: 24.86%, 135.83/100k; M: 27.97%, 174.48/100k).

· 3rd cause of death

*Unintentional injuries* are third in **Bolivia** (F: 19.05%, 154.08/100k; M: 17.37%, 165.03/100k), while *other non-communicable diseases* are third in **Peru** (F: 14.92%, 60.2/100k; M: 14.09%, 68.84/100k) and **Ecuador** (F: 21.45%, 117.28/100k; M: 19.68%, 123/100k).

· 4th cause of death

*Other non-communicable diseases* come forth in **Bolivia** (F: 10.31%, 83.49/100k; M: 9.65%, 91.56/100k), while *unintentional injuries* are forth in **Peru** (F: 10.75%, 43.35/100k; M: 10.23%, 50.07/100k) and **Ecuador** (F: 6.81%, 37.14/100k; M: 6.31%, 39.53/100k).

· 5th cause of death

*Transport injuries* are in fifth place in **Bolivia** (F: 3.64, 29.45/100k. M: 3.92%, 37.29/100k) and for males in **Peru** (2.56%, 12.55/100k), while *other communicable, maternal, neonatal, and nutritional diseases* are fifth for females in **Peru** (2.74%, 11.06/100k), and Nutritional deficiencies come fifth in **Ecuador** (F: 4.35%, 23.78/100k, M: 4.40%, 27.55/100k).

Central Latin America

· 1st cause of death

*Neonatal disorders* are first in **Colombia** (F: 30.13%, 98.62/100k; M: 32.34%, 128.24/100k), males in **El Salvador** (32.84%, 100.57/100k), **Honduras** (F: 30.60%, 133.80/100k; M: 35.06, 180.91/100k), **Mexico** (F: 33.51%, 100.54/100k; M: 37.46%, 139.46/100k), **Nicaragua** (F: 33.54%, 144.93/100k; M: 35.45%, 194.74/100k), males in **Panama** (29.42%, 121.32/100k) and **Venezuela** (F: 35.33%, 85.43/100k; M: 37.73%, 111.36/100k); *Other non-communicable diseases* are first in **Costa** **Rica** (F: 39.62%, 74.86/100k; M: 37.62%, 86.86/100k), females in **El** **Salvador** (35.24%, 83.61/100k) and females in **Panama** (27.95%, 95.91/100k); *Diarrhea, lower respiratory, and other common infectious diseases* are first in **Guatemala** (F: 41.63%, 222.15/100k; M: 40.75%, 259.73/100k).

· 2nd cause of death

*Other non-communicable diseases* are second in **Colombia** (F: 23.77%, 77.76/100k; M: 22.21%, 88.14/100k), males in **El** **Salvador** (32.80%, 100.46/100k), females in **Honduras** (22.12%, 96.69/100k), **Mexico** (F: 28.03%, 94.06/100k; M: 24.14%, 97.66/100k), females in **Nicaragua** (24.14%, 104.34/100k), males in **Panama** (25.92%, 106.99/100k) and **Venezuela** (F: 21.65%, 52.26/100k; M: 21.06%, 62.16/100k); *Neonatal disorders* are second in **Costa** **Rica** (F: 31.60%, 59.81/100k; M: 34.13%, 78.79/100k), females in **El** **Salvador** (30.31%, 71.99/100k), **Guatemala** (F: 26.74%, 142.68/100k; M: 29.39%, 186.72/100k) and females in **Panama** (26.83%, 92.19/100k); *Diarrhea, lower respiratory, and other common infectious diseases* are second in males in **Honduras** (20.79%, 107.44/100k) and males in **Nicaragua** (25.83%, 142.20/100k).

· 3rd cause of death

*Diarrhea, lower respiratory, and other common infectious diseases* are third in **Colombia** (F: 19.02%, 62.16/100k; M: 18.95%, 75.23/100k), **Costa** **Rica** (F: 11.20%, 21.13/100k; M: 11.01%, 25.44/100k), **El** **Salvador** (F: 19.15%, 45.42/100k; M: 19.87%, 60.80/100k), females in **Honduras** (19.20%, 83.72/100k), **Mexico** (F: 17.50%, 52.42/100k; M: 17.79%, 66.27/100k), females in **Nicaragua** (22.93%, 99.14/100k), **Panama** (F: 20.08%, 68.78/100k; M: 20.05%, 82.82/100k) and **Venezuela** (F: 18.77%, 45.27/100k; M: 18.90%, 55.81/100k); *Other non-communicable diseases* are third in **Guatemala** (F: 10.20%, 54.45/100k; M: 9.52%, 60.62/100k), males in **Honduras** (19.20%, 99.13/100k), and males in **Nicaragua** (21.95%, 120.74/100k).

· 4th cause of death

*Unintentional injuries* are forth in **Colombia** (F: 7.55%, 24.63/100k; M: 7.97%, 31.65/100k), **Costa** **Rica** (F: 3.72%, 7/100k; M: 4.17%, 9.65/100k), males in **El** **Salvador** (2.24%, 6.85/100k), **Mexico** (F: 6.31%, 18.87/100k; M: 4.54%, 16.94/100k), males in **Panama** (7.20%, 29.75/100k) and **Venezuela** (F: 6.47%, 15.61/100k; M: 6.41%, 18.93/100k); *Nutritional deficiencies* are forth in females in **El** **Salvador** (2.46%, 5.82/100), **Guatemala** (F: 6.95%, 37.05/100k; M: 5.97%, 38.07/100k), **Nicaragua** (F: 5.22%, 22.55/100k; M: 4.29%, 23.63/100k) and females in **Panama** (6.33%, 21.64/100k); *Chronic respiratory diseases* are forth in **Honduras** (F: 7.79%, 33.99/100k; M: 7.04%, 36.37/100k).

· 5th cause of death

*Nutritional deficiencies* are fifth in **Colombia** (F: 4.57%, 14.93/100k; M: 4.04%, 16.03/100k), males in **El** **Salvador** (1.93%, 5.92/100k), **Mexico** (F: 2.62%, 7.84/100k; M: 2.41%, 8.97/100k), males in **Panama** (5.36%, 22.17/100k); *Neoplasms* are fifth in **Costa** **Rica** (F: 2.56%, 4.82/100k; M: 2.28%, 5.29/100k); *Unintentional injuries* are fifth in females in **El** **Salvador** (2.27%, 5.38/100k), **Guatemala** (F: 3.33%, 17.81/100k; M: 3.27%, 20.82/100k), **Nicaragua** (F: 4.39%, 18.95/100k; M: 4.03%, 22.22/100k) and females in **Panama** (6.18%, 21.16/100k); *Cardiovascular diseases* are fifth in **Honduras** (F: 3.31%, 14.47/100k; M: 3.11%, 16.10/100k); *Other communicable, maternal, neonatal, and nutritional diseases* are fifth in **Venezuela** (F: 5.43%, 13.12/100k; M: 4.26%, 12.56/100k).

**50-69 age group**- differences in death 2013

Andean Latin America

· 1st cause of death

*Cardiovascular diseases* are first in **Bolivia** (F: 26.63%, 281.03/100k; M: 22.90%, 288.23/100k) and males in **Ecuador** (25.45%, 287.75/100k); *Neoplasms* are first in females in **Ecuador** (31.04%, 218.41/100k) and **Peru** (F: 35.09%, 247.25/100k; M: 21.85%, 201.19/100k).

· 2nd cause of death

*Neoplasms* are seconds in **Bolivia** (F: 26.24%, 277.09/100k; M: 18.43%, 232.21/100k) and males in **Ecuador** (18.06%, 204.3/100k); *Cardiovascular diseases* are second in females in **Ecuador** (24.54%, 172.68/100k) and **Peru** (F: 19.02%, 134.06/100k; M: 21.05%, 193.81/100k).

· 3rd cause of death

*Diabetes, urogenital, blood, and endocrine diseases* are third in females in **Bolivia** (11.02%, 116.21/100k), **Ecuador** (F: 18.77%, 132.02/100k; M: 13.98%, 158.07/100k) and females in **Peru** (10.79%, 75.99/100k); *Cirrhosis* are third in males in **Bolivia** (12.24%, 154.11/100k); *Diarrhea, lower respiratory, and other common infectious diseases* are third in males in **Peru** (10.8%, 99.48/100k).

· 4th cause of death

*Cirrhosis* are forth in females in **Bolivia** (9.15%, 96.59/100k), **Ecuador** (F: 5.01%, 35.25/100k; M: 7.84%, 88.66/100k) and males in **Peru** (9.65%, 88.9/100k); *Diabetes, urogenital, blood, and endocrine diseases* are forth in males in **Bolivia** (9.74%, 122.63/100k); *Diarrhea, lower respiratory, and other common infectious diseases* are forth in females in **Peru** (9.94%, 70.01/100k).

· 5th cause of death

*Diarrhea, lower respiratory, and other common infectious diseases* are fifth in **Bolivia** (F: 5.64%, 59.6/100k; M: 5.94%, 74.9/100k) and females in **Ecuador** (4.44%, 31.24/100k); *Transport injuries* are fifth in males in **Ecuador** (6.62%, 74.9/100k); *Cirrhosis* are fifth in females in **Peru** (5.51%, 38.83/100k); *Diabetes, urogenital, blood, and endocrine diseases* are fifth in males in **Peru** (8.93%, 82.18/100k).

Central Latin America

· 1st cause of death

*Neoplasms* are first in females in **Colombia** (34.37%, 223.93/100k), females in **El** **Salvador** (25.55%, 208.8/100k), females in **Costa** **Rica** (37.96%, 195.61/100k), females in **Guatemala** (22.91%, 225.41/100k), females in **Panama** (33.7%, 175.8/100k) and females in **Venezuela** (32.82%, 230.7./100k); *Cardiovascular diseases* are first in males in **Colombia** (33.16%, 342.1/100k), males in **Costa** **Rica** (29.45%, 233.11/100k), males in **El** **Salvador** (21.1%, 298.06/100k), males in **Guatemala** (16.62%, 209.52/100k), **Honduras** (F: 35.15%, 385.77/100k; M: 36.29%, 541.77/100k), females in **Nicaragua** (26.84%, 168.26/100k), males in **Panama** (30.15%, 269.45/100k) and males in **Venezuela** (36.1%, 441.66/100k); *Diabetes, urogenital, blood, and endocrine diseases* are first in **Mexico** (F: 32.52%, 272.59/100k; M: 24.94%, 333.15/100k) and males in **Nicaragua** (25.64%, 260.64/100k)

· 2nd cause of death

*Cardiovascular diseases* are second in females in **Colombia** (32.08%, 208.92/100k), females in **Costa** **Rica** (25.68%, 132.33/100k), females in **El** **Salvador** (25.13%, 205.41/100k), males in **Mexico** (21.71%, 289.97/100k), males in **Nicaragua** (23.11%, 234.92/100k), females in **Panama** (25.68%, 133.94/100k) and females in **Venezuela** (31.53%, 221.66/100k); *Neoplasms* are second in males in **Colombia** (24.05%, 248.08/100k), males in **Costa** **Rica** (27.63%, 218.71/100k), **Honduras** (F: 21.39%, 234.56/100k; M: 13.55%, 202.35/100k), females in **Mexico** (22.38%, 187.6/100k), females in **Nicaragua** (25.86%, 162.1/100k), males in **Panama** (22.85%, 204.18/100k) and males in **Venezuela** (21.17%, 259.03/100k); *Diabetes, urogenital, blood, and endocrine diseases* are second in males in **El** **Salvador** (20.6%, 291.28/100k), **Guatemala** (F: 20.39%, 200.63/100k; M: 14.49%, 182.68/100k)

· 3rd cause of death

*Diabetes, urogenital, blood, and endocrine diseases* are third in **Colombia** (F: 11.18%, 72.81/100k; M: 8.38%, 86.43/100k), **Costa** **Rica** (12.22%, 62.96/100k; M: 9.32%, 73.81/100k), females in **El** **Salvador** (20.91%, 170.86/100k), females in **Nicaragua** (25.53%, 160.03/100k), **Panama** (F: 17.22%, 89.79/100k; M: 12.41%, 110.91/100k) and **Venezuela** (F: 16.52%, 116.14/100k; M: 12.6%, 154.09/100k); *Neoplasms* are third in males in **El** **Salvador** (12.35%, 174.54/100k), males in **Guatemala** (13.55%, 170.78/100k), males in **Mexico** (14.45%, 192.99/100k) and males in **Nicaragua** (14.62%, 148.56/100k); *Cardiovascular diseases* are third in females in **Guatemala** (18.55%, 182.54/100k) and females in **Mexico** (19.52%, 163.55/100k); *Chronic respiratory diseases* are third in **Honduras** (F: 9.16%, 100.46/100k; M: 6.82%, 101.88/100k)

· 4th cause of death

*Chronic respiratory diseases* are forth in **Colombia** (F: 5.5%, 35.84/100k; M: 6.34%, 65.4/100k), females in **Panama** (3.96%, 20.64/100k) and females in **Venezuela** (3.63%, 25.48/100k); *Self-harm and interpersonal violence* are forth in males in **Colombia** (6.34%, 65.53/100k, sharing 4th place with respiratory diseases), males in **El** **Salvador** (7.88%, 111.29/100k); *Cirrhosis* are forth in **Costa** **Rica** (F: 5.64%, 29.04/100k; M: 7.89%, 62.46/100k), **Mexico** (F: 6.87%, 57.56/100k; M: 13.02%, 173.98/100k), **Nicaragua** (F: 5.22%, 32.69/100k; M: 10.17%, 103.38/100k) and males in **Venezuela** (5.87%, 71.75/100k); *Diarrhea, lower respiratory, and other common infectious diseases* are forth in females in **El** **Salvador** (5.68%, 46.44/100k) and **Guatemala** (F: 11.67%, 114.9/100k; M: 10.82%, 136.34/100k); *Diabetes, urogenital, blood, and endocrine diseases* are forth in **Honduras** (F: 9.12%, 100.12/100k; M: 6.8%, 101.62/100k); *HIV/AIDS and tuberculosis* are forth in males in **Panama** (5.17%, 45.73/100k)

· 5th cause of death

*Digestive diseases* are fifth in females in **Colombia** (3.04%, 19.78/100k); *Chronic respiratory diseases* are fifth in females in **Costa** **Rica** (4.14%, 21.35/100k), **Mexico** (F: 3.97%, 33.24/100k; M: 3.91%, 52.28/100k) and females in **Nicaragua** (3.89%, 24.36/100k); *Transport injuries* are fifth in males in **Costa** **Rica** (4.61%, 36.5/100k); *Cirrhosis* are fifth in females in El Salvador (4.94%, 40.36/100k), **Guatemala** (F: 6.28%, 61.78/100k; M: 9.98%, 125.84/100k), males in **Honduras** (5.98%, 89.42/100k) and **Panama** (F: 3.61%, 18.81/100k; M: 4.59%, 40.99/100k); *Mental and substance use disorders* are fifth in males in **El** **Salvador** (7.09%, 100.28/100k) and males in **Nicaragua** (3.77%, 38.35/100k); *Diarrhea, lower respiratory, and other common infectious diseases* are fifth in females in **Honduras** (5.28%, 58.01/100k) and females in **Venezuela** (2.56%, 18.02/100k); *Self-harm and interpersonal violence* are fifth in males in **Venezuela** (4.34%, 53.09/100k).