

Linear regression results

P-Value & r-value for total healthcare amenities and average disease prevalence per 100: 0.8248720013214622 0.15972557760176118
P-Value & r-value for total healthcare amenities and average disease incidence per 1000: 0.6593786544964478 0.15972557760176118

- No significant difference between the total number of healthcare amenities and avg diseases prevalence and incidence
- Weak positive linear correlation in both incidence and prevalence

<u>Statistical significance</u>	<u>Linear Correlation</u>
None	Weak (+)

Comparing individual diseases to the total healthcare amenity counts:

Asthma (5-54) Per 100 P-Value: 0.7093719725099896 r-Value: 0.13530872543195088

COPD (45+) Per 100 P-Value: 0.06196113770620972 r-Value: -0.6084422562505192

Diabetes (1+) Per 100 P-Value: 0.08731146675657968 r-Value: 0.5671386887125904

Heart Failure (1+) Per 100 P-Value: 0.8804923684172504 r-Value: -0.05479629717925635

Hypertension (20+) Per 100 P-Value: 0.26754241870255785 r-Value: 0.3882641900129314

Asthma (5-54) Per 1000 P-Value: 0.7974448994218354 r-Value: 0.09340733233495863

COPD (45+) Per 1000 P-Value: 0.05299986512316705 r-Value: -0.6256924497815315

Diabetes (1+) Per 1000 P-Value: 0.2577860417767419 r-Value: 0.3956202324755935

Heart Failure (1+) Per 1000 P-Value: 0.7490095403708377 r-Value: -0.11629875916512121

Hypertension (20+) Per 1000 P-Value: 0.7046262041140602 r-Value: 0.1376040698993745

Individual diseases prevalence vs total healthcare amenity counts

<u>Disease</u>	<u>Statistical significance</u>	<u>Linear Correlation</u>
Asthma	None	Weak (+)
COPD	None	Moderate (-)
Diabetes	None	Moderate (+)
Heart Failure	None	Weak (-)
Hypertension	None	Slightly Moderate (+)

Individual diseases incidence vs total healthcare amenity counts

<u>Disease</u>	<u>Statistical significance</u>	<u>Linear Correlation</u>
Asthma	None	Weak (+)
COPD	None	Moderate (-)
Diabetes	None	Slightly Moderate (+)
Heart Failure	None	Weak (-)
Hypertension	None	Weak (+)

Comparing individual diseases to the total healthcare amenity near a parking lot:
Asthma (5-54) Per 100 P-Value: 0.904233677909004 r-Value: 0.043863184566728594
COPD (45+) Per 100 P-Value: 0.04614359894433265 r-Value: -0.6402482828983879
Diabetes (1+) Per 100 P-Value: 0.12697828279833046 r-Value: 0.515814995148973
Heart Failure (1+) Per 100 P-Value: 0.739001572620625 r-Value: -0.12107277122545934
Hypertension (20+) Per 100 P-Value: 0.37981063766717116 r-Value: 0.3122090245296758
Asthma (5-54) Per 1000 P-Value: 0.9534014523036773 r-Value: 0.02131187035737817
COPD (45+) Per 1000 P-Value: 0.04058313133565379 r-Value: -0.6531556069318261
Diabetes (1+) Per 1000 P-Value: 0.33849459202627846 r-Value: 0.3386365822809217
Heart Failure (1+) Per 1000 P-Value: 0.6264499415221917 r-Value: -0.17612852544152025
Hypertension (20+) Per 1000 P-Value: 0.8589736352518734 r-Value: 0.06473985447482333

Individual diseases prevalence vs total healthcare amenity counts near parking lot

<u>Disease</u>	<u>Statistical significance</u>	<u>Linear Correlation</u>
Asthma	None	Weak (+)
COPD	Yes	Moderate (-)
Diabetes	None	Moderate (+)
Heart Failure	None	Weak (-)
Hypertension	None	Slightly Moderate (+)

Individual diseases incidence vs total healthcare amenity counts near parking lot

<u>Disease</u>	<u>Statistical significance</u>	<u>Linear Correlation</u>
Asthma	None	Weak (+)
COPD	Yes	Moderate (-)

Diabetes	None	Slightly Moderate (+)
Heart Failure	None	Weak (-)
Hypertension	None	Weak (+)

Comparing individual diseases to the total healthcare amenity near a taxi stand:
Asthma (5-54) Per 100 P-Value: 0.09136665883252253 r-Value: -0.5612861154593851
COPD (45+) Per 100 P-Value: 0.08516758151102417 r-Value: -0.5703034436478269
Diabetes (1+) Per 100 P-Value: 0.911130154224968 r-Value: 0.040693535305557166
Heart Failure (1+) Per 100 P-Value: 0.24614147214939722 r-Value: -0.4046044325508181
Hypertension (20+) Per 100 P-Value: 0.45912670271630174 r-Value: -0.2651181839890611
Asthma (5-54) Per 1000 P-Value: 0.22069389334095735 r-Value: -0.42510573751844954
COPD (45+) Per 1000 P-Value: 0.08774020409180258 r-Value: -0.566511797638766
Diabetes (1+) Per 1000 P-Value: 0.6932095835828201 r-Value: -0.14314422772970187
Heart Failure (1+) Per 1000 P-Value: 0.21457022568892942 r-Value: -0.4302372205806803
Hypertension (20+) Per 1000 P-Value: 0.22032407397664566 r-Value: -0.425413307807244

Individual diseases prevalence vs total healthcare amenity counts near a taxi stand

<u>Disease</u>	<u>Statistical significance</u>	<u>Linear Correlation</u>
Asthma	None	Moderate (-)
COPD	None	Moderate (-)
Diabetes	None	Weak (+)
Heart Failure	None	Moderate (-)
Hypertension	None	Slightly Moderate (-)

Individual diseases incidence vs total healthcare amenity counts near a taxi stand

<u>Disease</u>	<u>Statistical significance</u>	<u>Linear Correlation</u>
Asthma	None	Moderate (-)
COPD	None	Moderate (-)
Diabetes	None	Weak (-)
Heart Failure	None	Moderate (-)
Hypertension	None	Moderate (-)

Comparing individual diseases to the total healthcare amenity near a major public transit station:

Asthma (5-54) Per 100 P-Value: 0.3906243460835669 r-Value: -0.30553080277574435

COPD (45+) Per 100 P-Value: 0.07586229297167921 r-Value: -0.5846692170898311

Diabetes (1+) Per 100 P-Value: 0.4235107537554009 r-Value: 0.28574926608405943

Heart Failure (1+) Per 100 P-Value: 0.4807897851716918 r-Value: -0.25292079677395674

Hypertension (20+) Per 100 P-Value: 0.976546579956683 r-Value: 0.010722796252844644

Asthma (5-54) Per 1000 P-Value: 0.5125529821834852 r-Value: -0.23545838891208576

COPD (45+) Per 1000 P-Value: 0.06849286454843727 r-Value: -0.5968800030130359

Diabetes (1+) Per 1000 P-Value: 0.7963732566951031 r-Value: 0.0939103477253818

Heart Failure (1+) Per 1000 P-Value: 0.3776580999608635 r-Value: -0.31354940856553126

Hypertension (20+) Per 1000 P-Value: 0.5437530429096722 r-Value: -0.21873894625767829

Individual diseases prevalence vs total healthcare amenity counts near a major public transit station

<u>Disease</u>	<u>Statistical significance</u>	<u>Linear Correlation</u>
Asthma	None	Slightly Moderate (-)
COPD	None	Moderate (-)
Diabetes	None	Slightly Moderate (+)
Heart Failure	None	Slightly Moderate (-)
Hypertension	None	Weak (+)

Individual diseases incidence vs total healthcare amenity counts near a major public transit station

<u>Disease</u>	<u>Statistical significance</u>	<u>Linear Correlation</u>
Asthma	None	Moderate (-)
COPD	None	Moderate (-)
Diabetes	None	Weak (+)
Heart Failure	None	Slightly Moderate (-)
Hypertension	None	Slightly Moderate (-)

Average disease incidence per 1000 and prevalence per 100 vs total healthcare amenity near a form of transportation

Comparing disease prevalence per 100 and incidence per 1000 to the total healthcare amenity near a form of transportation

disease_1000_taxi P-Value: 0.18674391510090935 r-Value: -0.4546927697403643

disease_1000_station P-Value: 0.5792580297152448 r-Value: -0.20016844649793505

disease_1000_parking P-Value: 0.8359615686031923 r-Value: 0.07541647754770367

disease_100_taxi P-Value: 0.07576551953260051 r-Value: -0.5848244520644555

disease_100_station P-Value: 0.2579691883871408 r-Value: -0.3954807453667564

disease_100_parking P-Value: 0.6606572487367531 r-Value: -0.15909415389777645

Average disease incidence per 1000 vs total count of healthcare amenities near a form of transportation

<u>Near</u>	<u>Statistical significance</u>	<u>Linear Correlation</u>
Taxi	None	Moderate (-)
Major Public Transit Station	None	Slightly Moderate (-)
Parking Lot	None	Weak (+)

Average disease prevalence per 1000 vs total count of healthcare amenities near a form of transportation

<u>Near</u>	<u>Statistical significance</u>	<u>Linear Correlation</u>
Taxi	None	Moderate (-)
Major Public Transit Station	None	Moderate (-)
Parking Lot	None	Weak (-)

Comparing individual healthcare facilities against avg disease incidences in each city
Hospitals Per 1000 P-Value: 0.6608229411789763 r-Value: -0.15901235659490406
Hospitals Per 100 P-Value: 0.3372561841157769 r-Value: -0.3394531917074222
Social Facilities Per 1000 P-Value: 0.11966513787370027 r-Value: 0.5244273393971361
Social Facilities Per 100 P-Value: 0.40901247122456863 r-Value: 0.29437670463436855
Clinics Per 1000 P-Value: 0.8416468722835624 r-Value: -0.07277419629266958
Clinics Per 100 P-Value: 0.43418617719747865 r-Value: -0.27948463051233957
Pharmacies Per 1000 P-Value: 0.6053221204653363 r-Value: -0.18680787813420682
Pharmacies Per 100 P-Value: 0.27622375756663287 r-Value: -0.38184134075701887
Doctors Per 1000 P-Value: 0.040901002293422715 r-Value: 0.6523868002464539
Doctors Per 100 P-Value: 0.20345471545555677 r-Value: 0.43977148491651796

Comparing Individual Healthcare facility counts vs average disease incidence

<u>Facility</u>	<u>Statistical significance</u>	<u>Linear Correlation</u>
Hospital	None	Weak (-)
Social Facilities	None	Moderate (+)
Clinics	None	Weak (-)
Pharmacies	None	Weak/Moderate (-)
Doctors	Yes	Moderate (+)

Comparing Individual Healthcare facility counts vs average disease prevalence

<u>Facility</u>	<u>Statistical significance</u>	<u>Linear Correlation</u>
Hospital	None	Slightly Moderate (-)
Social Facilities	None	Slightly Moderate(+)
Clinics	None	Slightly Moderate (-)
Pharmacies	None	Slightly Moderate (-)
Doctors	None	Moderate (+)