

Symptom-Disease Association Mapping summary

I worked on a dataset with 43778 rows & 7 columns, below is a sample (first 10 rows).

Animal	Age	Temperature	Symptom 1	Symptom 2	Symptom 3	Disease
Cow	3	103.1	Depression	Painless lumps	Loss of appetite	Pneumonia
Buffalo	13	104.5	Painless lumps	Loss of appetite	Depression	Lumpy virus
Sheep	1	100.5	Depression	Painless lumps	Loss of appetite	Lumpy virus
Cow	14	100.3	Loss of appetite	Swelling in limb	Crackling sound	Blackleg
Sheep	2	103.6	Painless lumps	Loss of appetite	Depression	Pneumonia
Goat	10	101.2	Loss of appetite	Blisters on gums	Difficulty walking	Foot and mouth
Sheep	6	103.3	Loss of appetite	Depression	Painless lumps	Lumpy virus
Goat	6	101.7	Difficulty walking	Blisters on tongue	Loss of appetite	Foot and mouth
Buffalo	9	102.5	Depression	Painless lumps	Loss of appetite	Lumpy virus
Goat	3	102.7	Lameness	Blisters on mouth	Loss of appetite	Foot and mouth

Four distinct Animal types

Total number of cows: 11254

Total number of buffalo: 11238

Total number of sheep: 10658

Total number of goat: 10628

Cows Dataset Information:

Total number of cow entries: 11254

Types of Diseases in the Dataset:

1. Pneumonia
2. blackleg
3. lumpy virus
4. anthrax
5. foot and mouth Disease

Total number of different symptoms in the dataset: **24**

Total Frequency of Top 5 Symptoms

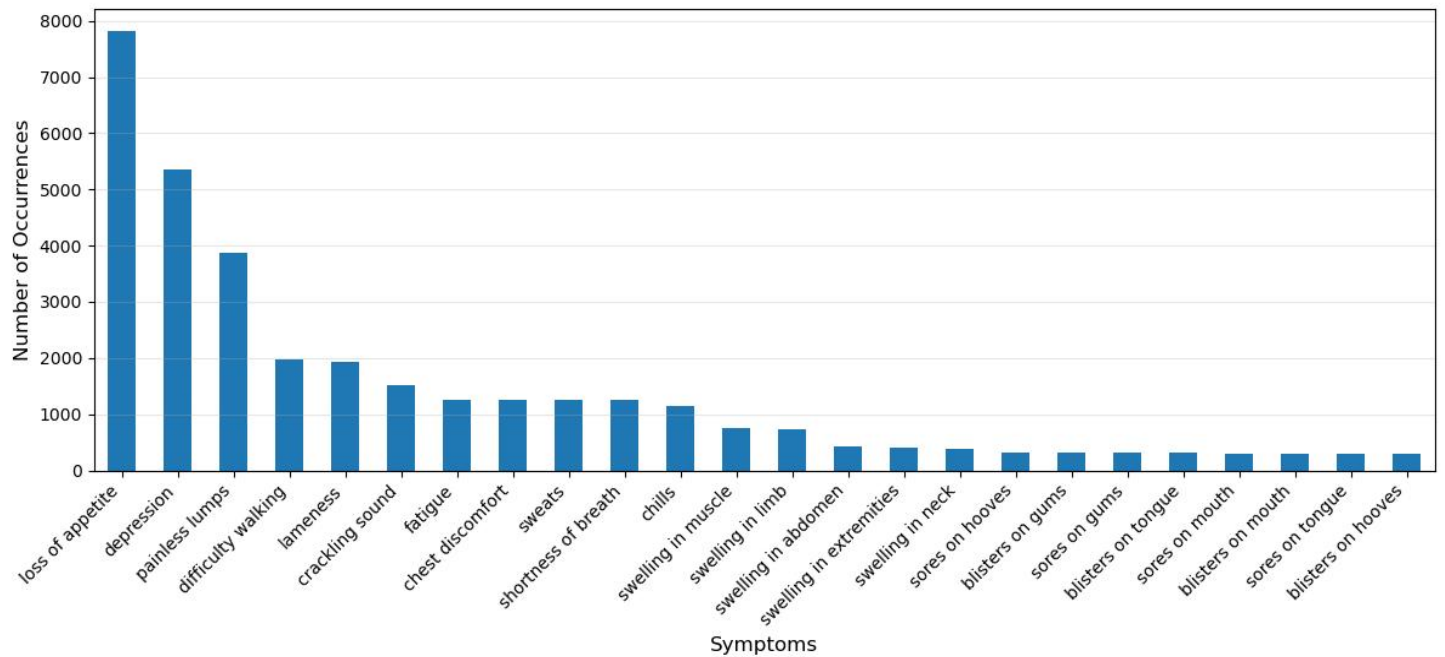
- ✓ loss of appetite: 7825 occurrences
- ✓ depression: 5357 occurrences
- ✓ painless lumps: 3869 occurrences
- ✓ difficulty walking: 1968 occurrences
- ✓ lameness: 1929 occurrences

Primary Symptom (Symptom 1) Distribution:

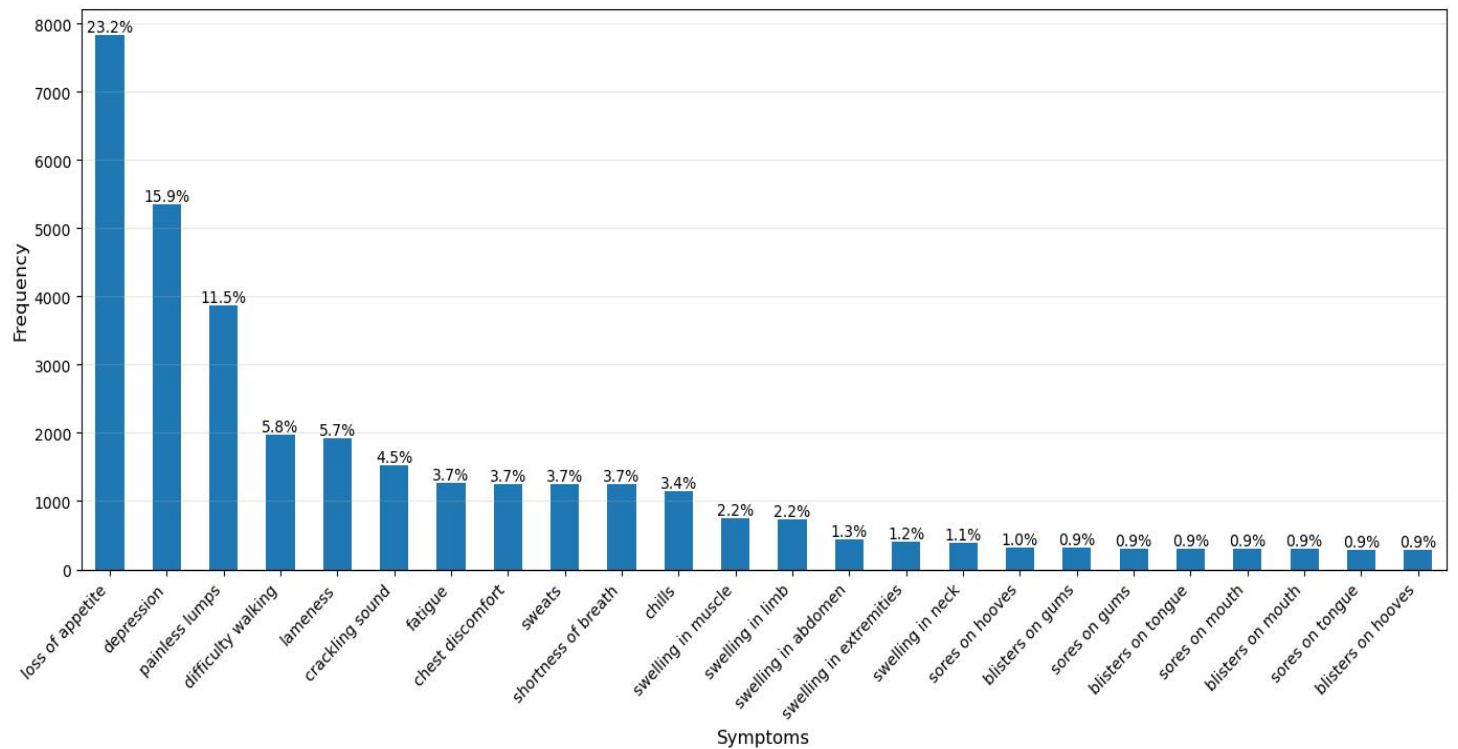
1. loss of appetite: 2608 cases
2. depression: 1801 cases

3. painless lumps: 1258 cases
4. difficulty walking: 680 cases
5. lameness: 646 cases

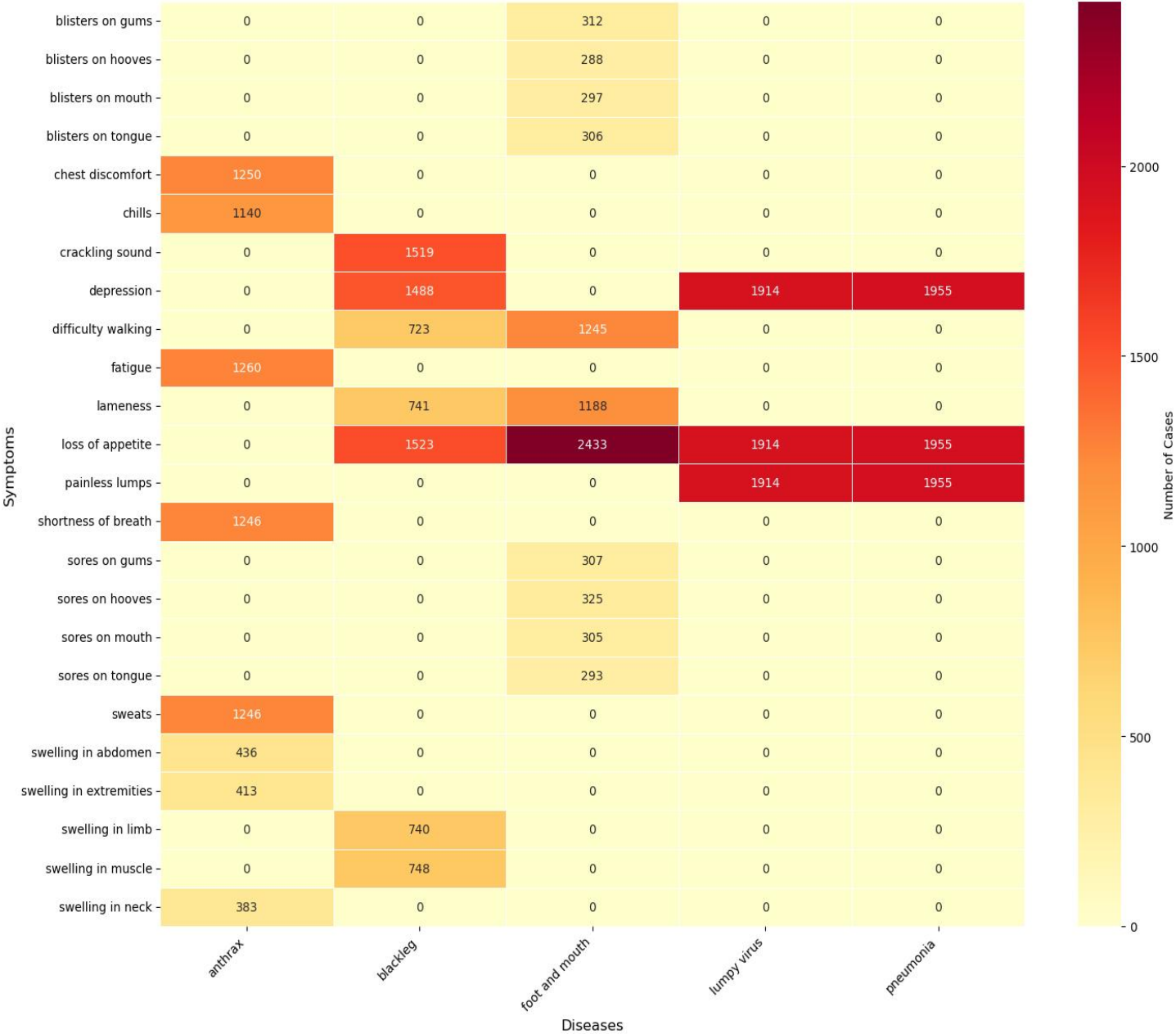
Frequency of Symptoms in Cows



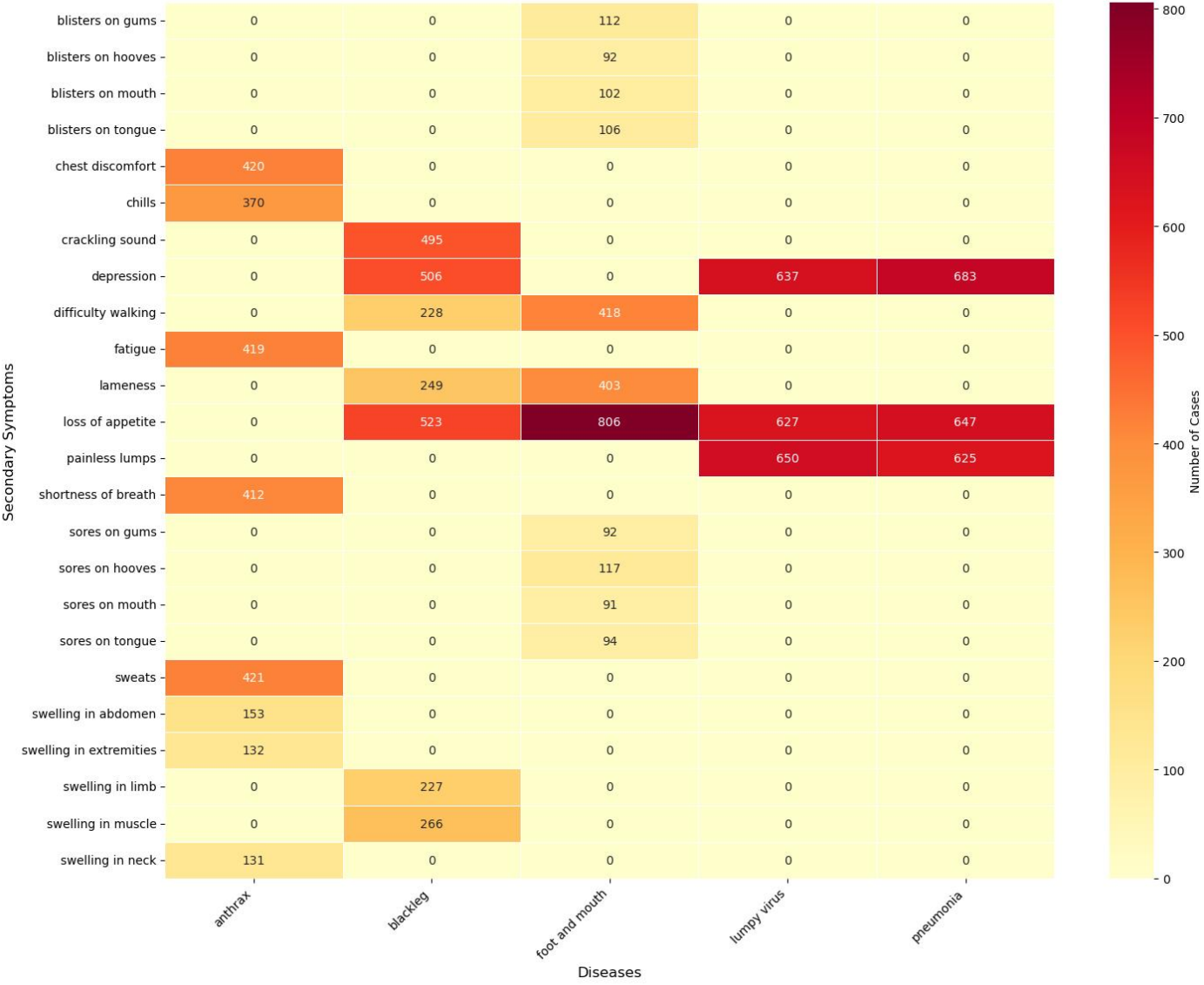
Symptom Distribution in Cow Population



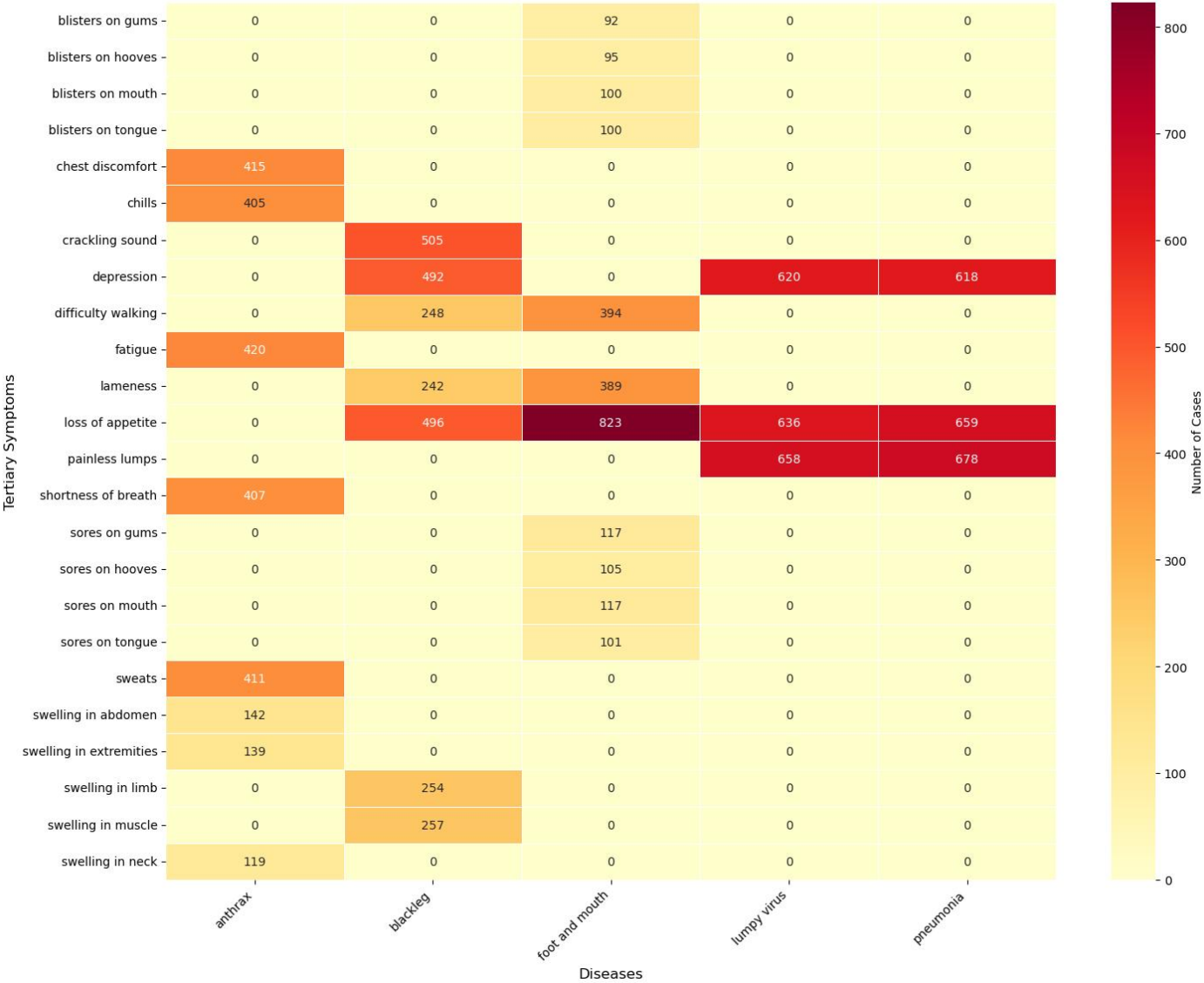
Symptom 1-Disease Relationship Heatmap



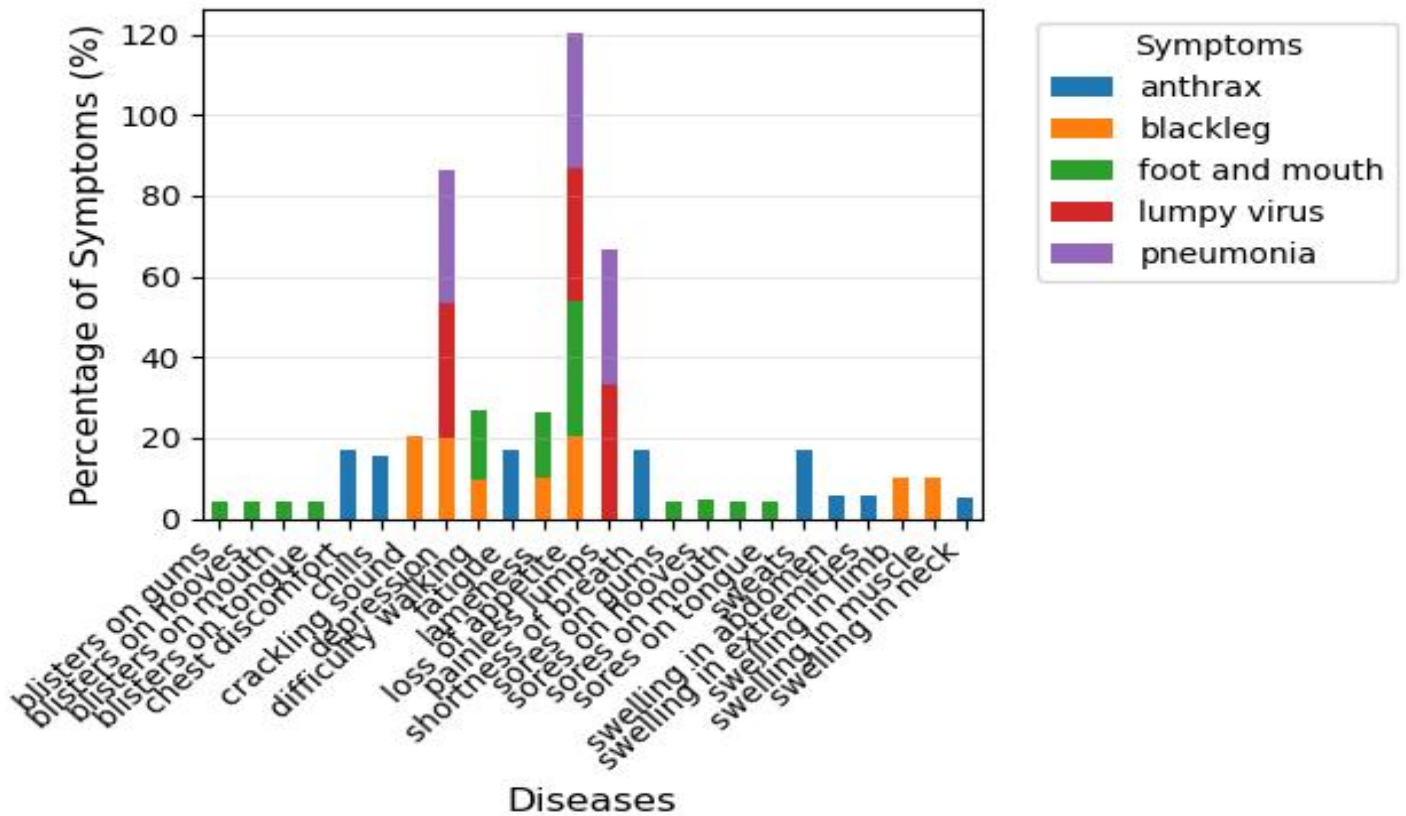
Symptom 2 - Disease Relationship Heatmap



Symptom 3 - Disease Relationship Heatmap



Proportion of Symptoms for Each Disease



Distribution of Symptoms Across Diseases (Absolute Numbers)

