ALL PERIODS TOGETHER

Number of Tweets:

```
China:  9350
USA:  19865
China&USA:  29215
```

Most frequent words (ordered):

```
China
            Word  Count
0          china   5087
1          covid   1749
2          novel   1402
3           case   1359
4    coronavirus   1264
5            say   1158
6            new   1128
7       hospital   1014
8        vaccine    960
9       outbreak    877
10        people    757
11        report    705
12       patient    685
13         fight    683
14       country    640
15        health    638
16           day    594
17          city    572
18      province    571
19          year    552
20       confirm    542
21         first    510
22         world    492
23       epidemic    460
24         death    446
25          live    443
26      national    442
27       medical    440
28     president    434
29          amid    396
```

```
USA
            Word  Count
0    coronavirus   7552
1          covid   7261
2          china   5151
3            say   3474
4        vaccine   3383
5           case   2560
6            new   2489
7       outbreak   1619
8          virus   1536
9           test   1424
10         trump   1396
11         death   1340
12        people   1305
13        report   1268
14     president   1245
```

```
15        health   1229
16        spread   1117
17         first   1035
18         state    973
19       country    915
20           day    870
21         world    862
22      pandemic    857
23       million    792
24      positive    759
25          rise    745
26          late    661
27          year    653
28     infection    648
29          city    630
```

China&USA

```
            Word   Count
0          china   10238
1          covid    9010
2    coronavirus    8816
3            say    4632
4        vaccine    4343
5           case    3919
6            new    3617
7       outbreak    2496
8         people    2062
9         report    1973
10         virus    1884
11        health    1867
12         death    1786
13          test    1752
14     president    1679
15         novel    1585
16       country    1555
17         trump    1549
18         first    1545
19      hospital    1529
20           day    1464
21         world    1354
22        spread    1313
23          year    1205
24          city    1202
25         state    1189
26       million    1187
27      pandemic    1169
28       patient    1076
29       confirm    1032
```

Most important edges (how many times two keywords appear in the same tweet):

China:

```
                          weight
(china, novel)              1025
(china, say)                 762
(new, case)                  758
(china, coronavirus)         662
(confirm, case)              653
(china, outbreak)            650
(case, report)               632
```

```
(china, case)           602
(vaccine, covid)        586
(china, new)            577
(patient, hospital)     572
(china, fight)          572
(china, covid)          547
(novel, coronavirus)    499
(china, province)       441
(report, new)           434
(case, death)           432
(china, people)         415
(epidemic, china)       401
(novel, outbreak)       394
(china, country)        393
(china, support)        385
(china, national)       356
(year, china)           352
(china, hospital)       348
(day, china)            343
(city, china)           339
(case, covid)           333
(china, vaccine)        329
(china, confirm)        324

USA:
                        weight
(china, coronavirus)     2665
(vaccine, covid)         2212
(say, covid)             1470
(coronavirus, case)      1312
(coronavirus, outbreak)  1210
(say, coronavirus)       1171
(president, trump)       1077
(covid, case)            1074
(new, covid)             1060
(new, coronavirus)       1040
(china, outbreak)         945
(new, case)               932
(vaccine, say)            921
(spread, coronavirus)     807
(test, covid)             793
(china, case)             763
(test, positive)          761
(coronavirus, death)      752
(china, virus)            748
(china, say)              734
(china, new)              718
(covid, trump)            713
(case, report)            637
(people, coronavirus)     626
(test, coronavirus)       617
(coronavirus, health)     614
(china, death)            600
(covid, president)        597
(trump, say)              586
(report, covid)           575

China&USA:
                        weight
(china, coronavirus)     3327
```

```
(vaccine, covid)            2798
(covid, say)                1740
(new, case)                 1690
(coronavirus, case)         1603
(china, outbreak)           1595
(china, say)                1496
(coronavirus, outbreak)     1451
(case, covid)               1407
(china, case)               1365
(new, covid)                1307
(china, new)                1295
(say, coronavirus)          1292
(coronavirus, new)          1272
(case, report)              1269
(president, trump)          1191
(china, novel)              1110
(say, vaccine)              1102
(confirm, case)             1090
(report, new)                989
(china, virus)               982
(covid, test)                917
(test, positive)             914
(china, covid)               908
(china, people)              892
(spread, coronavirus)        863
(coronavirus, death)         835
(case, death)                831
(china, death)               817
(report, covid)              798
```

Most important keywords according to PageRank (column 0=keyword, column1=importance):

```
China:  714 important nodes

              0           1
0           china  0.048910
1           covid  0.015820
2           novel  0.014042
3            case  0.013749
4             say  0.013300
5     coronavirus  0.011654
6             new  0.011312
7        hospital  0.009882
8        outbreak  0.008687
9          people  0.008277
10        vaccine  0.008052
11         report  0.007580
12         health  0.007339
13        country  0.007219
14        patient  0.006854
15            day  0.006802
16           city  0.006615
17       province  0.006574
18          fight  0.006523
19           year  0.006340
20        confirm  0.005904
21          world  0.005461
22          first  0.005375
```

```
23    national  0.005041
24     medical  0.004920
25    epidemic  0.004892
26       death  0.004846
27         one  0.004540
28   president  0.004418
29       hubei  0.004358


USA:  669 important nodes

              0         1
0   coronavirus  0.032653
1         covid  0.030115
2         china  0.021294
3           say  0.018383
4       vaccine  0.014874
5           new  0.011662
6          case  0.011304
7         trump  0.008763
8      outbreak  0.008149
9     president  0.007666
10       people  0.007585
11        virus  0.007455
12       health  0.007155
13         test  0.007087
14        death  0.006130
15       report  0.005771
16        first  0.005460
17        state  0.005309
18      country  0.005210
19       spread  0.005171
20     pandemic  0.004923
21        world  0.004782
22          day  0.004740
23     positive  0.003924
24         year  0.003808
25      million  0.003753
26     official  0.003690
27        house  0.003531
28         week  0.003530
29          one  0.003455

China&USA:  678 important nodes

              0         1
0         china  0.029770
1   coronavirus  0.024643
2         covid  0.024496
3           say  0.016159
4       vaccine  0.012130
5          case  0.011533
6           new  0.011078
7      outbreak  0.008029
8        people  0.007589
9        health  0.006942
10    president  0.006395
11        trump  0.006136
12       report  0.006084
13        virus  0.006066
```

```
14       country  0.005694
15          test  0.005632
16         death  0.005421
17         novel  0.005301
18           day  0.005232
19         first  0.005231
20      hospital  0.004885
21         world  0.004885
22          year  0.004558
23          city  0.004353
24      pandemic  0.004217
25         state  0.004123
26        spread  0.004014
27       million  0.003793
28           one  0.003694
29       patient  0.003546
```

Graph summary:

```
China:
Nodes:  751
Edges:  82457
Is connected:  True

USA:
Nodes:  710
Edges:  99452
Is connected:  True

China&USA:
Nodes:  766
Edges:  125167
Is connected:  True
```