**Covid and Systemic Racism**

**A very close friend and I were conversing the other day, of shoes and ships and sealing wax, of cabbages and kings, as is our usual custom. Naturally, the subject of covid vaccinations and ethnic groups came up. An internet search for facts led me to the Kaiser Family Foundation, and their recent report (https://www.kff.org/coronavirus-covid-19/issue-brief/latest-data-on-covid-19-vaccinations-race-ethnicity/). This report is an invaluable public service.**

**The Kaiser Family Foundation presented a table breaking out Blacks, Hispanics, Asians, and Whites. One limitation in their data was that not every state reported. In addition, I felt that a key measure of vaccination fairness could be useful.**

**Case 1. Crudely speaking, "fairness" could mean that the percentage immunized is the same proportion as the group population in the state. For example, if 10% of the state immunizations went to a group with 10% of the state's population, this would be "fair", and a ratio of 100%.**

**Case 2. On the other hand, we know (Center for Disease Control - https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html) that while Black and Hispanic people are about as likely as Whites to be infected, they are about three times more likely to be hospitalized, and twice as likely to die. So a "fair" immunization rate could mean that a higher percentage of these groups should be immunized first, compared to their state population percentage. Again, for example, if 15% of the state immunizations went to a Black or Hispanic group with 10% of the state's population, this would be an immunization rate of 150%, perhaps more fair than before.**

**What one defines as fair is a personal matter, but I have chosen to use case 1 in this analysis. Using the Kaiser Family Foundation tables as a base, I have added the "fairness ratio" to the table. A ratio smaller than 100% shows fewer members of the group immunized, compared with their share of the state population. A ratio greater then 100% shows a greater number of the group immunized, compared with their share of the state population.**

**The results are given in the tables below. Remember, only the last column matters: it is the "fairness" ratio. As we learned throughout 2020, the Black and Brown communities have suffered more than the Asian and White communities. A reasonable vaccination strategy could have prioritized these groups, along with nursing home residents, health care workers, and people over 65. As the tables will show, this has not been the case.**

**The following four tables show the data for each group separately, Black, Hispanic, Asian, and White. Table 5 is the most important table I think, pulling together all the fairness ratios into one place, making group comparison obvious.**

**While the tables are a snapshot in time, the under-immunization of the Black and Brown communities has been consistent since the beginning. At best, this under-immunization is unconscious systemic racism. At worst, well, I do not want to go there... You decide...**

**Table 1.**

| Black People as a Share of COVID-19 Vaccinations and Total Population, March 15, 2021 | | | |
|---|---|---|---|
| State | Percent of Vaccinations | Percent of Population | % Vaccinations/ % Population ("Fairness") |
| Alabama | 21 | 27 | 78% |
| Alaska | 1 | 2 | 50% |
| Arizona | 3 | 4 | 75% |
| California | 3 | 5 | 60% |
| Colorado | 3 | 4 | 75% |
| Connecticut | 5 | 10 | 50% |
| Delaware | 11 | 22 | 50% |
| DC | 31 | 46 | 67% |
| Florida | 7 | 16 | 44% |
| Georgia | 22 | 32 | 69% |
| Idaho | 0 | 1 | 0% |
| Illinois | 9 | 14 | 64% |
| Indiana | 5 | 9 | 56% |
| Iowa | 1 | 4 | 25% |
| Kansas | 3 | 6 | 50% |
| Kentucky | 5 | 8 | 63% |
| Louisiana | 26 | 32 | 81% |
| Maine | 1 | 1 | 100% |
| Maryland | 21 | 30 | 70% |
| Massachusetts | 6 | 7 | 86% |
| Michigan | 8 | 14 | 57% |
| Minnesota | 3 | 6 | 50% |
| Mississippi | 30 | 38 | 79% |
| Missouri | 6 | 11 | 55% |
| Nebraska | 3 | 5 | 60% |
| Nevada | 5 | 9 | 56% |
| New Jersey | 5 | 12 | 42% |
| New Mexico | 1 | 1 | 100% |
| New York | 10 | 16 | 63% |
| North Carolina | 17 | 21 | 81% |
| Ohio | 7 | 12 | 58% |
| Oklahoma | 4 | 7 | 57% |
| Oregon | 2 | 2 | 100% |
| Pennsylvania | 3 | 11 | 27% |
| Rhode Island | 3 | 6 | 50% |
| South Carolina | 16 | 26 | 62% |
| Tennessee | 10 | 16 | 63% |
| Texas | 8 | 12 | 67% |
| Utah | 1 | 1 | 100% |

| | | | |
|---|---|---|---|
| Vermont | 1 | 2 | 50% |
| State | Percent of Vaccinations | Percent of Population | % Vaccinations/ % Population ("Fairness") |
| Virginia | 14 | 19 | 74% |
| Washington | 2 | 4 | 50% |
| West Virginia | 2 | 3 | 67% |
| Wisconsin | 3 | 6 | 50% |

**With the exceptions of Maine, New Mexico, Oregon and Utah (all states with small black populations), every other reporting state is immunizing Blacks at a rate lower than 100%. Definitely unfair.**

**Table 2.**

| Hispanic People as a Share of COVID-19 Vaccinations and Total Population, March 15, 2021 | | | |
|---|---|---|---|
| State | Percent of Vaccinations | Percent of Population | % Vaccinations/ % Population ("Fairness") |
| Alaska | 4 | 7 | 57% |
| Arizona | 13 | 32 | 41% |
| California | 21 | 40 | 53% |
| Colorado | 6 | 22 | 27% |
| Connecticut | 6 | 17 | 35% |
| Delaware | 4 | 10 | 40% |
| DC | 8 | 11 | 73% |
| Florida | 19 | 27 | 70% |
| Georgia | 3 | 10 | 30% |
| Idaho | 5 | 13 | 38% |
| Illinois | 10 | 18 | 56% |
| Indiana | 2 | 7 | 29% |
| Iowa | 2 | 6 | 33% |
| Kansas | 7 | 12 | 58% |
| Maine | 1 | 2 | 50% |
| Maryland | 4 | 11 | 36% |
| Massachusetts | 5 | 12 | 42% |
| Minnesota | 2 | 6 | 33% |
| Mississippi | 1 | 3 | 33% |
| Missouri | 4 | 4 | 100% |
| Nebraska | 4 | 11 | 36% |
| Nevada | 13 | 29 | 45% |
| New Jersey | 7 | 21 | 33% |
| New Mexico | 37 | 49 | 76% |
| New York | 11 | 19 | 58% |
| North Carolina | 3 | 10 | 30% |
| Ohio | 2 | 4 | 50% |
| Oklahoma | 5 | 11 | 45% |

| | | | |
|---|---|---|---|
| Oregon | 5 | 13 | 38% |
| State | Percent of | Percent of | % Vaccinations/ |
| | Vaccinations | Population | % Population |
| | | | (“Fairness”) |
| Pennsylvania | 2 | 8 | 25% |
| Rhode Island | 9 | 17 | 53% |
| South Carolina | 2 | 6 | 33% |
| Tennessee | 3 | 6 | 50% |
| Texas | 25 | 40 | 63% |
| Utah | 6 | 14 | 43% |
| Vermont | 1 | 2 | 50% |
| Virginia | 6 | 10 | 60% |
| Washington | 5 | 13 | 38% |
| Wisconsin | 3 | 7 | 43% |

**With the exception of Missouri, every other reporting state is immunizing Hispanics at a rate lower than 100%. Again, definitely unfair.**

**Table 3.**

| Asian People as a Share of COVID-19 Vaccinations and Total Population, March 15, 2021 | | | |
|---|---|---|---|
| | | | |
| State | Percent of | Percent of Total | % Vaccinations/ |
| | Vaccinations | Population | % Population |
| | | | (“Fairness”) |
| Alabama | 1.8 | 1.4 | 129% |
| Alaska | 4 | 6 | 67% |
| Arizona | 4 | 3 | 133% |
| California | 14 | 15 | 93% |
| Colorado | 2 | 3 | 67% |
| Connecticut | 3 | 5 | 60% |
| Delaware | 3 | 4 | 75% |
| Georgia | 5 | 4 | 125% |
| Idaho | 1 | 1 | 100% |
| Illinois | 5 | 6 | 83% |
| Indiana | 2 | 2 | 100% |
| Iowa | 1 | 2 | 50% |
| Kansas | 1 | 3 | 33% |
| Kentucky | 1 | 2 | 50% |
| Louisiana | 1.9 | 1.7 | 112% |
| Maine | 1 | 1 | 100% |
| Maryland | 6 | 6 | 100% |
| Massachusetts | 5 | 7 | 71% |
| Michigan | 2 | 2 | 100% |
| Minnesota | 3 | 5 | 60% |
| Mississippi | 1 | 1 | 100% |
| Missouri | 2 | 2 | 100% |

| | | | |
|---|---|---|---|
| Nebraska | 1.6 | 2.4 | 67% |
| State | Percent of Vaccinations | Percent of Population | % Vaccinations/ % Population ("Fairness") |
| Nevada | 11 | 8 | 138% |
| New Jersey | 8 | 10 | 80% |
| New Mexico | 2 | 2 | 100% |
| New York | 11 | 9 | 122% |
| North Carolina | 3 | 3 | 100% |
| Ohio | 2 | 2 | 100% |
| Oklahoma | 3 | 2 | 150% |
| Oregon | 4 | 5 | 80% |
| Pennsylvania | 0 | 4 | 0% |
| Rhode Island | 2 | 3 | 67% |
| Tennessee | 1 | 2 | 50% |
| Texas | 7 | 5 | 140% |
| Utah | 2 | 2 | 100% |
| Vermont | 1 | 2 | 50% |
| Virginia | 4 | 7 | 57% |
| Washington | 9 | 9 | 100% |
| Wisconsin | 2 | 3 | 67% |

**The table shows that Asian people are doing much better than Blacks or Hispanics. In about half the states reporting, they are at the "fair" level of 100%, or better.**

**Table 4.**

| White People as a Share of COVID-19 Vaccinations and Total Population, March 15, 2021 | | | |
|---|---|---|---|
| State | Percent of Vaccinations | Percent of Population | % Vaccinations/ % Population ("Fairness") |
| Alabama | 76 | 68 | 112% |
| Alaska | 34 | 65 | 52% |
| Arizona | 76 | 54 | 141% |
| California | 35 | 36 | 97% |
| Colorado | 86 | 68 | 126% |
| Connecticut | 75 | 66 | 114% |
| Delaware | 75 | 61 | 123% |
| District of Columbia | 37 | 41 | 90% |
| Florida | 80 | 75 | 107% |
| Georgia | 66 | 58 | 114% |
| Idaho | 82 | 89 | 92% |
| Illinois | 74 | 61 | 121% |
| Indiana | 90 | 83 | 108% |
| Iowa | 95 | 90 | 106% |
| Kansas | 77 | 84 | 92% |
| Kentucky | 86 | 87 | 99% |

| Louisiana | 64 | 62 | 103% |
|---|---|---|---|
| State | Percent of Vaccinations | Percent of Population | % Vaccinations/ % Population (“Fairness”) |
| Maine | 97 | 93 | 104% |
| Maryland | 66 | 55 | 120% |
| Massachusetts | 82 | 70 | 117% |
| Michigan | 79 | 79 | 100% |
| Minnesota | 91 | 79 | 115% |
| Mississippi | 62 | 58 | 107% |
| Missouri | 84 | 82 | 102% |
| Nebraska | 91 | 86 | 106% |
| Nevada | 54 | 48 | 113% |
| New Jersey | 66 | 54 | 122% |
| New Mexico | 46 | 37 | 124% |
| New York | 78 | 63 | 124% |
| North Carolina | 76 | 68 | 112% |
| Ohio | 85 | 81 | 105% |
| Oklahoma | 84 | 72 | 117% |
| Oregon | 80 | 75 | 107% |
| Pennsylvania | 84 | 80 | 105% |
| Rhode Island | 81 | 71 | 114% |
| South Carolina | 69 | 64 | 108% |
| Tennessee | 77 | 77 | 100% |
| Texas | 50 | 41 | 122% |
| Utah | 86 | 78 | 110% |
| Vermont | 97 | 94 | 103% |
| Virginia | 70 | 61 | 115% |
| Washington | 67 | 68 | 99% |
| West Virginia | 96 | 96 | 100% |
| Wisconsin | 94 | 86 | 109% |

**The table shows, with the exception of Alaska, Whites are being immunized close to or above the “fairness” level.**

**Now, to bring all of this together, the next table compares just the “Fairness Ratio” among all four groups. The table makes the disparities in fairness quite clear. Remember, I chose to use 100% as fair, comparing immunization ratio to population ratio. The disparities would be even greater if a health risk-based ratio of 150% or higher were used to define “fairness” for Blacks and Hispanics.**

**Table 5.**

| Comparing All Groups on "Fairness", March 15, 2021 | | | | |
|---|---|---|---|---|
| | | | | |
| State | Black | Hispanic | Asian | White |
| | Fairness | Fairness | Fairness | Fairness |
| | Ratio | Ratio | Ratio | Ratio |
| | | | | |
| Alabama | 78% | No data | 129% | 112% |
| Alaska | 50% | 57% | 67% | 52% |
| Arizona | 75% | 41% | 133% | 141% |
| California | 60% | 53% | 93% | 97% |
| Colorado | 75% | 27% | 67% | 126% |
| Connecticut | 50% | 35% | 60% | 114% |
| Delaware | 50% | 40% | 75% | 123% |
| DC | 67% | 73% | No data | 90% |
| Florida | 44% | 70% | No data | 107% |
| Georgia | 69% | 30% | 125% | 114% |
| Idaho | 0% | 38% | 100% | 92% |
| Illinois | 64% | 56% | 83% | 121% |
| Indiana | 56% | 29% | 100% | 108% |
| Iowa | 25% | 33% | 50% | 106% |
| Kansas | 50% | 58% | 33% | 92% |
| Kentucky | 63% | No data | 50% | 99% |
| Louisiana | 81% | No data | 112% | 103% |
| Maine | 100% | 50% | 100% | 104% |
| Maryland | 70% | 36% | 100% | 120% |
| Massachusetts | 86% | 42% | 71% | 117% |
| Michigan | 57% | No data | 100% | 100% |
| Minnesota | 50% | 33% | 60% | 115% |
| Mississippi | 79% | 33% | 100% | 107% |
| Missouri | 55% | 100% | 100% | 102% |
| Nebraska | 60% | 36% | 67% | 106% |
| Nevada | 56% | 45% | 138% | 113% |
| New Jersey | 42% | 33% | 80% | 122% |
| New Mexico | 100% | 76% | 100% | 124% |
| New York | 63% | 58% | 122% | 124% |
| North Carolina | 81% | 30% | 100% | 112% |
| Ohio | 58% | 50% | 100% | 105% |
| Oklahoma | 57% | 45% | 150% | 117% |
| Oregon | 100% | 38% | 80% | 107% |
| Pennsylvania | 27% | 25% | 0% | 105% |
| Rhode Island | 50% | 53% | 67% | 114% |
| South Carolina | 62% | 33% | No data | 108% |
| Tennessee | 63% | 50% | 50% | 100% |
| Texas | 67% | 63% | 140% | 122% |
| Utah | 100% | 43% | 100% | 110% |

| | | | | |
|---|---|---|---|---|
| **Vermont** | **50%** | **50%** | **50%** | **103%** |
| **Virginia** | **74%** | **60%** | **57%** | **115%** |
| **Washington** | **50%** | **38%** | **100%** | **99%** |
| **West Virginia** | **67%** | **No data** | **No data** | **100%** |
| **Wisconsin** | **50%** | **43%** | **67%** | **109%** |

**As the data make painfully clear, Blacks and Hispanics have been immunized at rates well below a ‘fair” level. Even though the gap between them and Whites will narrow in the next months, as more and more people are immunized, the damage has been done. Proper planning could have prevented many infections and deaths in these communities.**

**Monday, 22 Mar 2021**