COVID-19 Fireside Chat

virus: SARS CoV-2; disease: COVID-19

Pam Aaltonen, PhD, RN
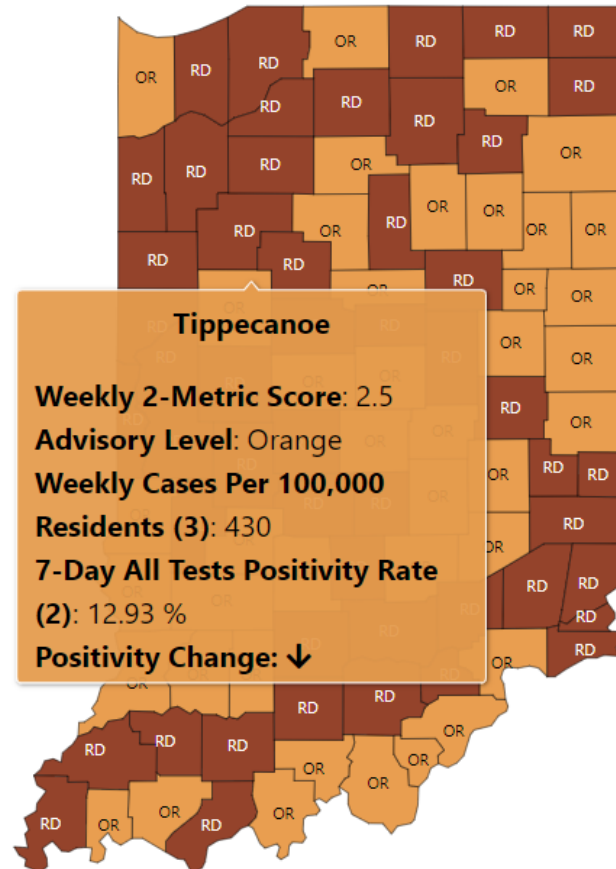
Purdue School of Nursing Professor Emerita

American Public Health Association Past President

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Current Status (reporting slowed during holidays)

- Indiana (12.28.2020)

Tippecanoe

Weekly 2-Metric Score: 2.5
Advisory Level: Orange
Weekly Cases Per 100,000 Residents (3): 430
7-Day All Tests Positivity Rate (2): 12.93 %
Positivity Change: ↓

- Johns Hopkins

Global Confirmed
84,177,874

Global Deaths
1,830,612

U.S. Confirmed
20,157,108

U.S. Deaths
348,110

New Cases
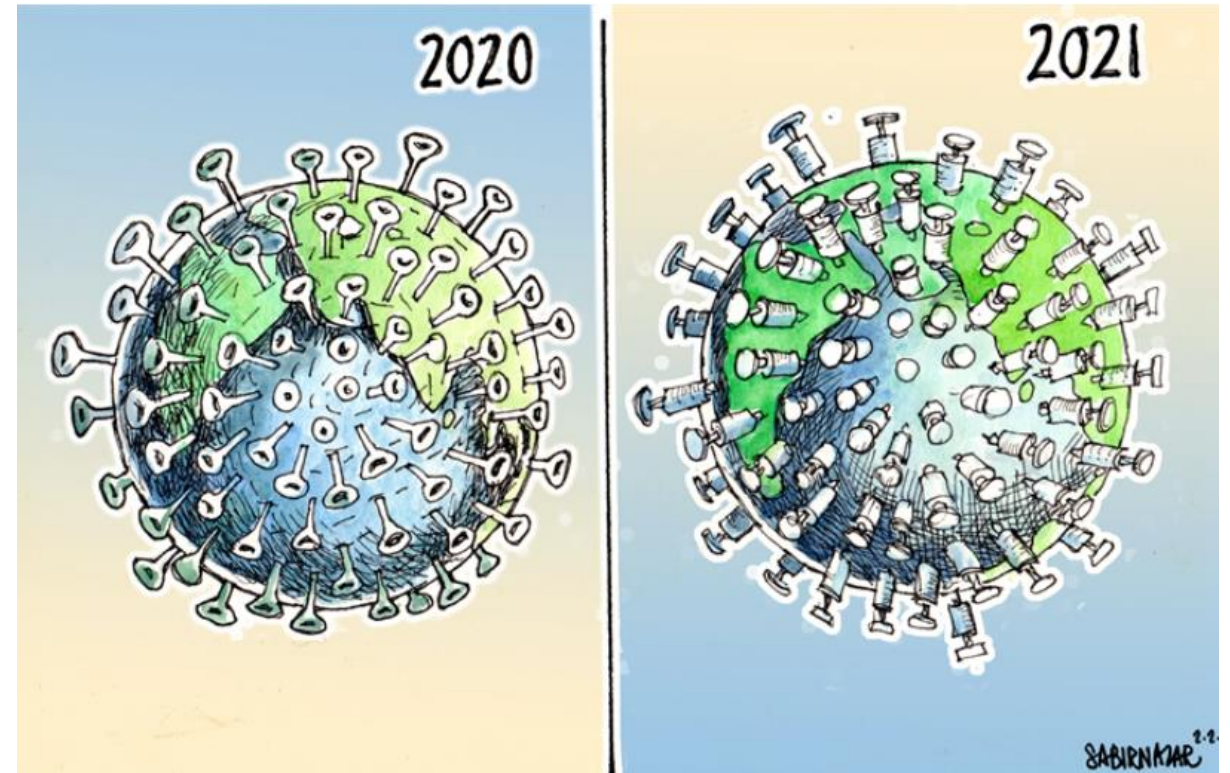as of January 02, 2021
+160,606 ↘
Total Cases 20.13M

DATA IN MOTION
COVID-19 Data in Motion: Saturday, January 2, 2021

Vaccines are Here

Now the Wait

Vaccines

Approved: mRNA vaccines

- Pfizer/BioNTech (2 doses)
- Moderna (2 doses)
- Technology under investigation pre-COVID
- How do they work? "Email" sent to immune system to take action

Others in Works … different platforms (prior technology)

Why so fast?

Parallel versus sequential steps; government investment (>$9B); shared science

A CALL TO ARMS

Challenges

- Priorities
  - National recommendations; state actions
  - Priority groupings
    - How reach
    - Who specifically in each group
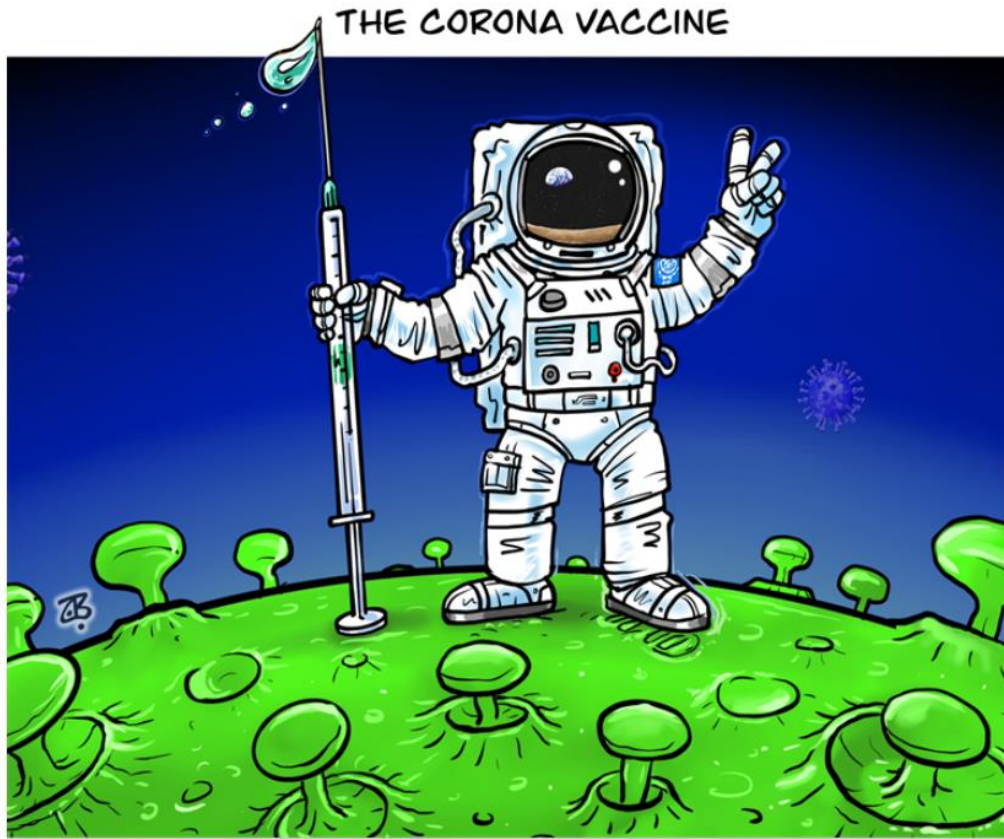
- Distribution/Handling (logistics)
  - Timetable
  - Where vaccine goes
  - Who manages

- Availability
  - Vaccine
  - Vaccinators
  - Vaccine Recipients/Vaccine Hesitators
  - Tracking System

Efficacy & Safety Data being answered;
Questions yet to be answered ...

THE CORONA VACCINE

- How long immune?

- Able to infect others?

- Children < 18/16 years of age

- Pregnant women

- Future impact of virus mutations
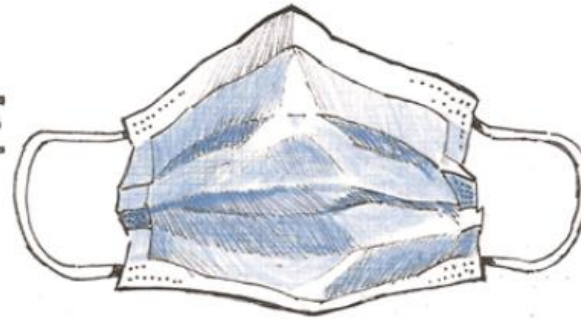
Continue Public Health Practices

Approved in USA to date: 2

Company	Type	How Works	Where in Process
Pfizer (NY) & BioNTech (Germany)	mRNA	Genetic instructions to build coronavirus protein (spike); spikes provoke immune system response 95% efficacy	FDA Emergency Use Authorization
Moderna (Boston)	mRNA	94.5% efficacy	FDA Emergency Use Authorization
AstraZeneca (Sweden) & Univ of Oxford (England)	Adenovirus	Mixed results ... dosing differences (62%-90%)	Phase III (EUA in England)
Johnson & Johnson	Adenovirus	Initially one dose; trial now to assess two doses	Phase III; results expected this month

Resources

- Johns Hopkins … COVID tracking
  - https://coronavirus.jhu.edu/

- New York Times: Coronavirus Vaccine Tracker

https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html#novavax

- Indiana:
  - https://www.coronavirus.in.gov/
  - https://www.regenstrief.org/covid-dashboard/   [hospitalization data]
    - Regenstrief Institute
    - INPC = Indiana Network for Patient Care (public/private partnership)

COVID-19 STATUS REPORT
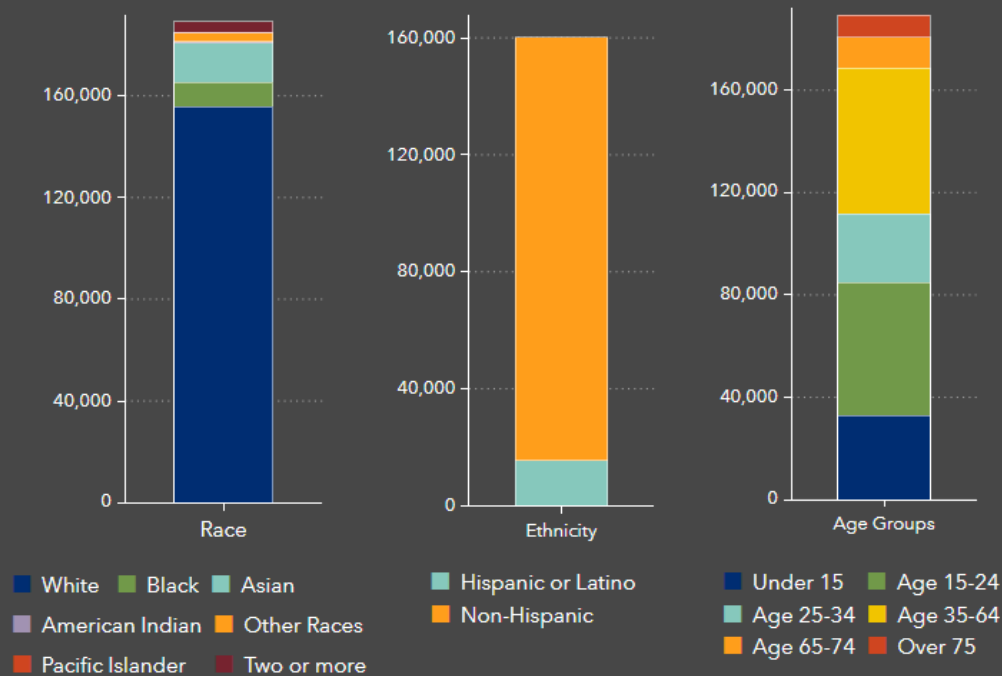
JOHNS HOPKINS UNIVERSITY
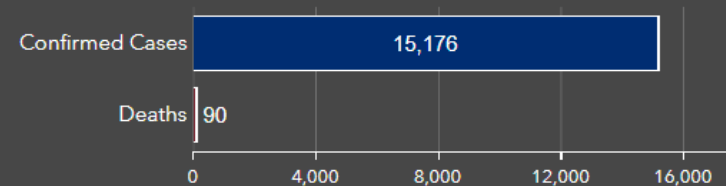
Tippecanoe, Indiana

HEALTHCARE FACTS

Healthcare facts stacked bar chart showing percentages by insurance type.

X-axis categories: Employer Ins, Direct Purchase, Medicare, Medicaid, VA Health Care, No Insurance
Y-axis: 0% to 40%+

Legend: Pop 19-34, Pop 35-64, Pop 65+
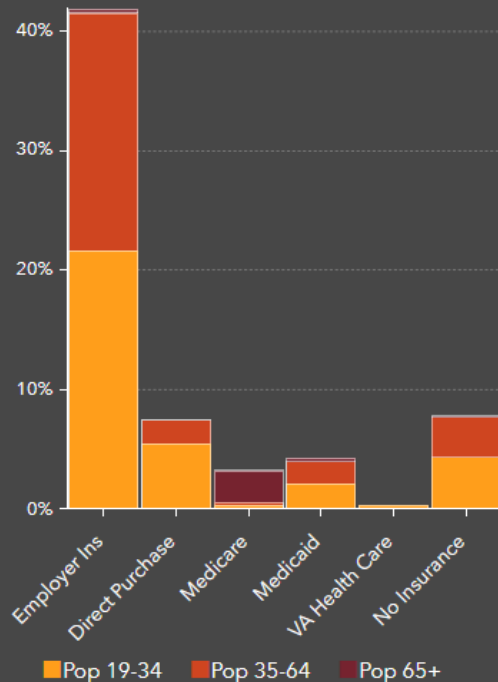
POPULATION RACE, ETHNICITY AND AGE

Race bar chart — Y-axis: 0 to 160,000+

Legend: White, Black, Asian, American Indian, Other Races, Pacific Islander, Two or more

Ethnicity bar chart — Y-axis: 0 to 160,000+

Legend: Hispanic or Latino, Non-Hispanic

Age Groups bar chart — Y-axis: 0 to 160,000+

Legend: Under 15, Age 15-24, Age 25-34, Age 35-64, Age 65-74, Over 75

COUNTY CASE DATA

Confirmed Cases	15,176
Deaths	90

X-axis: 0, 4,000, 8,000, 12,000, 16,000

Indiana State Statistics

Total Confirmed	Deaths	Fatality Rate	Tested
517,773	8,371	1.62%	2,649,964

NUMBER OF CASES IN LAST 14 DAYS

Area chart showing number of cases over last 14 days (-14 to -1). Y-axis: 0 to 200+.
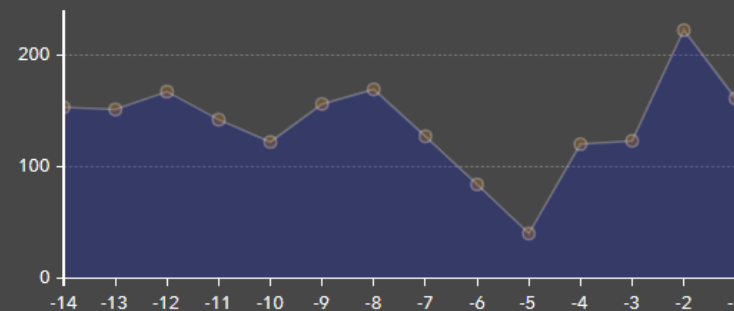
477	477	35	32,114	189,294	20,611	161	7,861	0.59
Number of Staffed Beds	Number of Licensed Beds	Number of ICU Beds	People in Poverty (ACS)	Total Population (ACS)	Population Aged 65+ (ACS)	New Cases Since Previous Day	County Case Per 100,000 Population	County Fatality Rate

Indiana Hospital Data (Regenstrief Institute)

COVID-19 Hospitalizations for Mar-01 - Jan-02

INPC Data last refreshed at:1/2/2021 12:00:06 PM

Most recent INPC lab result:1/1/2021 11:56:31 PM

Start Date: Mar-01

End Date: Jan-02

	Hospitalizations	Emergency Visits	ICU Admits	Recovery*	Hospital Mortality
Unique Patients	35,407	67,709	6,206	347,401	Deaths 5,437
% of COVID+	8.9%	17.0%	1.6%	87.4%	% of Hosp. 15.3%

Hospitalizations by County, Mar-01 - Jan-02   Individuals hospitalized: Daily Totals, Mar-01 - Jan-02