Episode 56VX, July 14, 2024, Jeopardy. Clued In on the PM2.5 emitted by Indoor Residential Wood burning. RAWSEP Clued In, with A)Doctor Duke in the Clinic, B)Educator Edgar in the Classroom, C)Nurse Nina in the Living Room, D)Ordinary Otto in the Kitchen, E)Scientist Stacey in the Laboratory, and F)Statistician Stan in the Conservatory, with Solutions: individual actions plus Industry change.

Jeopardy.

Category 1) Doctor Duke in the Clinic, near neighbor of an indoor residential wood burning stove.

Category 2) Educator Edgar in the Classroom, near neighbor of an indoor residential wood burning stove.

Category 3) Nurse Nina in the Living Room, near neighbor of an indoor residential wood burning stove.

Category 4)Ordinary Otto in the Kitchen, owner of an indoor residential wood burning stove.

Category 5) Scientist Stacey in the Laboratory, near neighbor of an indoor residential wood burning stove.

Category 6) Statistician Stan in the Conservatory, near neighbor of an indoor residential wood burning stove.

Category 1, $200 Answer, 1) Doctor Duke in the Clinic. near neighbor of an indoor residential wood burning stove.

Doctor Duke's medical studies are evidence that wood burning emissions can cause early deaths.

Category 1, $200 Question, 1) Doctor Duke in the Clinic, near neighbor of an indoor residential wood burning stove.

What medical studies has Doctor Duke conducted as evidence that PM2.5, particulate matter from wood burning causes a preventable disease, part 1 of 5?

Category 1, $400 Answer, 1) Doctor Duke in the Clinic, near neighbor of an indoor residential wood burning stove.

Doctor Duke's medical studies are evidence that wood burning emissions can cause heart attacks.

Category 1, $400 Question, 1) Doctor Duke in the Clinic, near neighbor of an indoor residential wood burning stove.

What medical studies has Doctor Duke conducted as evidence that PM2.5, particulate matter from wood burning causes a preventable disease, part 2 of 5?

Category 1, $600 Answer, 1) Doctor Duke in the Clinic, near neighbor of an indoor residential wood burning stove.

Doctor Duke's medical studies are evidence that wood burning emissions can cause lung cancer.

Category 1, $600 Question, 1) Doctor Duke in the Clinic, near neighbor of an indoor residential wood burning stove.

What medical studies has Doctor Duke conducted as evidence that PM2.5, particulate matter from wood burning causes a preventable disease, part 3 of 5?

Category 1, $800 Answer, 1) Doctor Duke in the Clinic, near neighbor of an indoor residential wood burning stove.

Doctor Duke's medical studies are evidence that wood burning emissions can cause cataracts.

Category 1, $800 Question, 1) Doctor Duke in the Clinic , near neighbor of an indoor residential wood burning stove.

What medical studies has Doctor Duke conducted as evidence that PM2.5, particulate matter from wood burning causes a preventable disease, part 4 of 5?

Category 1, $1,000 Answer, 1) Doctor Duke in the Clinic, near neighbor of an indoor residential wood burning stove.

Doctor Duke's medical studies are evidence that wood burning emissions can cause asthma.

Category 1, $1,000 Question, 1) Doctor Duke in the Clinic, near neighbor of an indoor residential wood burning stove.

What medical studies has Doctor Duke conducted as evidence that PM2.5, particulate matter from wood burning causes a preventable disease, part 5 of 5?

Category 2, $200 Answer, 2) Educator Edgar in the Classroom, near neighbor of an indoor residential wood burning stove.

Wood burning PM2.5 can directly enter brain tissue via the olfactory nerve.

Category 2, $200 Question, 2) Educator Edgar in the Classroom, near neighbor of an indoor residential wood burning stove.

What has Educator Edgar observed in the classroom as evidence that PM2.5, particulate matter from wood burning causes a preventable disease, part 1 of 5?

Category 2, $400 Answer, 2) Educator Edgar in the Classroom, near neighbor of an indoor residential wood burning stove.

Wood burning PM2.5 can directly enter brain tissue eventually damaging the cerebral blood vessels and brain nerves.

Category 2, $400 Question, 2) Educator Edgar in the Classroom, near neighbor of an indoor residential wood burning stove.

What has Educator Edgar observed in the classroom as evidence that PM2.5, particulate matter from wood burning causes a preventable disease, part 2 of 5?

Category 2, $600 Answer, 2) Educator Edgar in the Classroom , near neighbor of an indoor residential wood burning stove.

Wood burning PM2.5 may be neurotoxic to the brain and cause central nervous system damage, contributing to neurodevelopment disorders.

Category 2, $600 Question, 2) Educator Edgar in the Classroom, near neighbor of an indoor residential wood burning stove.

What has Educator Edgar observed in the classroom as evidence that PM2.5, particulate matter from wood burning causes a preventable disease, part 3 of 5?

Category 2, $800 Answer, 2) Educator Edgar in the Classroom, near neighbor of an indoor residential wood burning stove.

Wood Smoke PM2.5, may be neurotoxic to the brain and cause central nervous system damage, contributing to mental disorders, such as autism spectrum disorders.

Category 2, $800 Question, 2) Educator Edgar in the Classroom, near neighbor of an indoor residential wood burning stove.

What has Educator Edgar observed in the classroom as evidence that PM2.5, particulate matter from wood burning causes a preventable disease, part 4 of 5?

Category 2, $1,000 Answer, 2) Educator Edgar in the Classroom, near neighbor of an indoor residential wood burning stove.

Wood Smoke PM2.5 may be neurotoxic to the brain and cause central nervous system damage, contributing to neurodegenerative diseases, such as Alzheimer's disease and Parkinson's disease.

Category 2, $1,000 Question, 2) Educator Edgar in the Classroom, near neighbor of an indoor residential wood burning stove.

What has Educator Edgar observed in the classroom as evidence that PM2.5, particulate matter from wood burning causes a preventable disease, part 5 of 5?

Category 3, $200 Answer, Category 3) Nurse Nina in the Living Room, near neighbor of an indoor residential wood burning stove.

The symptoms of a near neighbor's illness, caused by PM2.5 emissions from a hyper-localized indoor residential wood burner include eye irritation.

Category 3, $200 Question, Category 3) Nurse Nina in the Living Room, near neighbor of an indoor residential wood burning stove.

What has Nurse Nina observed on home visits to near neighbors of indoor residential wood burners as evidence that PM2.5, particulate matter from wood burning may be causing a preventable disease, part 1 of 5?

Category 3, $400 Answer, Category 3) Nurse Nina in the Living Room, near neighbor of an indoor residential wood burning stove.

The symptoms of a near neighbor's illness, caused by PM2.5 emissions from a hyper-localized indoor residential wood burner include labored breathing.

Category 3, $400 Question, Category 3) Nurse Nina in the Living Room, near neighbor of an indoor residential wood burning stove.

What has Nurse Nina observed on home visits to near neighbors of indoor residential wood burners as evidence that PM2.5, particulate matter from wood burning may be causing a preventable disease, part 2 of 5?

Category 3, $600 Answer, Category 3) Nurse Nina in the Living Room, near neighbor of an indoor residential wood burning stove.

The symptoms of a near neighbor's illness, caused by PM2.5 emissions from a hyper-localized indoor residential wood burner include sore throat.

Category 3, $600 Question, Category 3) Nurse Nina in the Living Room, near neighbor of an indoor residential wood burning stove.

What has Nurse Nina observed on home visits to near neighbors of indoor residential wood burners as evidence that PM2.5, particulate matter from wood burning may be causing a preventable disease, part 3 of 5?

Category 3, $800 Answer, Category 3) Nurse Nina in the Living Room, near neighbor of an indoor residential wood burning stove.

The symptoms of a near neighbor's illness, caused by PM2.5 emissions from a hyper-localized indoor residential wood burner include headaches.

Category 3, $800 Question, Category 3) Nurse Nina in the Living Room, near neighbor of an indoor residential wood burning stove.

What has Nurse Nina observed on home visits to near neighbors of indoor residential wood burners as evidence that PM2.5, particulate matter from wood burning may be causing a preventable disease, part 4 of 5?

Category 3, $1,000 Answer, Category 3) Nurse Nina in the Living Room, near neighbor of an indoor residential wood burning stove.

The symptoms of a near neighbor's illness, caused by PM2.5 emissions from a hyper-localized indoor residential wood burner include allergies.

Category 3, $1,000 Question, Category 3) Nurse Nina in the Living Room, near neighbor of an indoor residential wood burning stove.

What has Nurse Nina observed on home visits to near neighbors of indoor residential wood burners as evidence that PM2.5, particulate matter from wood burning may be causing a preventable disease, part 5 of 5?

Category 4, $200 Answer, Category 4)Ordinary Otto in the Kitchen, owner of an indoor residential wood burning stove.

Ordinary Otto gives as reason number 1 that he burns wood in his suburban home which already has a natural gas furnace with a connection to natural gas line running down his street, that he is indigent, and too poor to heat with any other fuel, despite having the most expensive house on the block.

Category 4, $200 Question, Category 4)Ordinary Otto in the Kitchen, owner of an indoor residential wood burning stove.

What does Ordinary Otto give as reason number 1 that he burns wood in his suburban home which already has a natural gas furnace with a connection to natural gas line running down his street?

Category 4, $400 Answer, Category 4)Ordinary Otto in the Kitchen, owner of an indoor residential wood burning stove.

Ordinary Otto gives as reason number 2 that he burns wood in his suburban home which already has a natural gas furnace with a connection to natural gas line running down his street, that he is indigent after losing his job and he is now too poor to heat with any other fuel, despite the fact that he is now eligible for monthly government help from the Low Income Home Energy Assistance Program (LIHEAP).

Category 4, $400 Question, Category 4)Ordinary Otto in the Kitchen, owner of an indoor residential wood burning stove.

What does Ordinary Otto give as reason number 2 that he burns wood in his suburban home which already has a natural gas furnace with a connection to natural gas line running down his street?

Category 4, $600 Answer, Category 4)Ordinary Otto in the Kitchen, owner of an indoor residential wood burning stove.

Ordinary Otto gives as reason number 3 that he burns wood in his suburban home which already has a natural gas furnace with a connection to natural gas line running down his street, that he is indigent after losing his job and he is now too poor to heat with any other fuel, despite the fact that he is now eligible for an up to $8,000 Heat Pump rebate based on a sliding income scale to replace even his relatively clean bridge natural gas furnace.

Category 4, $600 Question, Category 4)Ordinary Otto in the Kitchen, owner of an indoor residential wood burning stove.

What does Ordinary Otto give as reason number 3 that he burns wood in his suburban home which already has a natural gas furnace with a connection to natural gas line running down his street?

Category 4, $800 Answer, Category 4)Ordinary Otto in the Kitchen, owner of an indoor residential wood burning stove.

Ordinary Otto gives as reason number 4 that he burns wood in his suburban home which already has a natural gas furnace with a connection to natural gas line running down his street, that he is indigent after losing his job and he is now too poor to heat with any other fuel, despite the fact he is now eligible for an up to $8,000 Heat Pump rebate based on a sliding income scale to replace even his relatively clean bridge natural gas furnace. He says that Heat Pumps do not work in cold climates, even though Heat

Pumps in 2024 work down to 40 degrees below zero (Fahrenheit and Centigrade temperature scales briefly converge at 40 degrees below zero).

Category 4, $800 Question, Category 4)Ordinary Otto in the Kitchen, owner of an indoor residential wood burning stove.

What does Ordinary Otto give as reason number 4 that he burns wood in his suburban home which already has a natural gas furnace with a connection to natural gas line running down his street?

Category 4, $1,000 Answer, Category 4)Ordinary Otto in the Kitchen, owner of an indoor residential wood burning stove.

Ordinary Otto gives as reason number 4 that he burns wood in his suburban home which already has a natural gas furnace with a connection to natural gas line running down his street, that he is indigent after losing his job and he is now too poor to heat with any other fuel, despite the fact that he is now eligible for an up to $8,000 Heat Pump rebate based on a sliding income scale to replace even his relatively clean bridge natural gas furnace. He says that he cannot afford both heating and cooling bills for his home. He is informed that Heat Pumps now work as home heating and home cooling to replace conventional air conditioners, and that running a Heat Pump on an electric grid brings down conventional monthly heating bills immediately.

Category 4, $1,000 Question, Category 4)Ordinary Otto in the Kitchen, owner of an indoor residential wood burning stove.

What does Ordinary Otto give as reason number 5 that he burns wood in his suburban home which already has a natural gas furnace with a connection to natural gas line running down his street?

Category 5, $200 Answer, 5) Scientist Stacey in the Laboratory, near neighbor of an indoor residential wood burning stove.

Scientist Stacy's downloaded PurpleAir PM2.5 monitor data showed levels of PM2.5 above NAAQS due to Stacey being the near neighbor of an indoor residential wood burner.

Category 5, $200 Question, 5) Scientist Stacey in the Laboratory, near neighbor of an indoor residential wood burning stove.

What scientific research studies has Scientist Stacey conducted by downloading PM2.5 levels above National Ambient Air Quality Standards (NAAQS) from PurpleAir PM2.5 monitors in the yards of near neighbors of indoor residential wood burners, part 1 of 5?

Category 5, $400 Answer, 5) Scientist Stacey in the Laboratory, near neighbor of an indoor residential wood burning stove.

Scientist Stacy's downloaded PurpleAir PM2.5 monitor data, from the yards of near neighbors, showing levels of PM2.5 above NAAQS were reliable evidence of air pollution from wood burning, unlike the unreliability of the debunked program of testing indoor residential wood burner PM2.5 emissions named New Source Performance Standards (NSPS) since 1987 conducted by the Environmental Protection Agency (EPA), a program called a "failed program" by the Office of the Inspector General, watchdog of the

EPA, in a February 2023 report, because of lack of compliance by wood burning manufacturers to even the lax standards of the EPA.

Category 5, $400 Question, 5) Scientist Stacey in the Laboratory, near neighbor of an indoor residential wood burning stove.

What scientific research studies has Scientist Stacey conducted by downloading PM2.5 levels above National Ambient Air Quality Standards from PurpleAir PM2.5 monitors in the yards of near neighbors of indoor residential wood burners, part 2 of 5?

Category 5, $600 Answer, 5) Scientist Stacey in the Laboratory, near neighbor of an indoor residential wood burning stove.

Scientist Stacy's downloaded PurpleAir PM2.5 monitor data, from the yards of near neighbors, showing levels of PM2.5 above NAAQS were reliable evidence of air pollution from wood burning, used as evidence to shut down indoor residential wood burning one municipality at a time through local ordinances against air pollution.

Category 5, $600 Question, 5) Scientist Stacey in the Laboratory, near neighbor of an indoor residential wood burning stove.

What scientific research studies has Scientist Stacey conducted by downloading PM2.5 levels above National Ambient Air Quality Standards from PurpleAir PM2.5 monitors in the yards of near neighbors of indoor residential wood burners, part 1 of 5?

Category 5, $800 Answer, 5) Scientist Stacey in the Laboratory, near neighbor of an indoor residential wood burning stove.

Scientist Stacy's downloaded PurpleAir PM2.5 monitor data, from the yards of near neighbors, showing levels of PM2.5 above NAAQS were reliable evidence of air pollution from wood burning, used as evidence to shut down indoor residential wood burning statewide through a state law against air pollution.

Category 5, $800 Question, 5) Scientist Stacey in the Laboratory, near neighbor of an indoor residential wood burning stove.

What scientific research studies has Scientist Stacey conducted by downloading PM2.5 levels above National Ambient Air Quality Standards from PurpleAir PM2.5 monitors in the yards of near neighbors of indoor residential wood burners, part 4 of 5?

Category 5, $1,000 Answer, 5) Scientist Stacey in the Laboratory, near neighbor of an indoor residential wood burning stove.

Scientist Stacy's downloaded PurpleAir PM2.5 monitor data, from the yards of near neighbors, showing levels of PM2.5 above NAAQS were reliable evidence of air pollution from wood burning, used as evidence to shut down indoor residential wood burning nationwide through a federal law against air pollution.

Category 5, $1,000 Question, 5) Scientist Stacey in the Laboratory, near neighbor of an indoor residential wood burning stove.

What scientific research studies has Scientist Stacey conducted by downloading PM2.5 levels above National Ambient Air Quality Standards from PurpleAir PM2.5 monitors in the yards of near neighbors of indoor residential wood burners, part 5 of 5?

Category 6 $200 Answer, 6) Statistician Stan in the Conservatory, near neighbor of an indoor residential wood burning stove.

A statistical study can show that one person can do two things at the same time: 1)stop burning wood at home and 2)ask industries to stop burning wood, and instead use the cleaner energy sources of wind, solar and geothermal.

Category 6 $200 Question, 6) Statistician Stan in the Conservatory, near neighbor of an indoor residential wood burning stove.

What statistical research studies has Statistician Stan conducted as evidence that PM2.5, particulate matter from wood burning can be reduced if one person stops burning wood at home, although one person's actions as part of the aggregate pollution are not enough in itself to help slow Climate Change?

Category 6, $400 Answer, 6) Statistician Stan in the Conservatory, near neighbor of an indoor residential wood burning stove.

A statistical study can show that one person stopping wood burning residentially does not just stop sickening the family within the home, but also stops sickening the near neighbors of indoor residential wood burners.

Category 6, $400 Question, 6) Statistician Stan in the Conservatory, near neighbor of an indoor residential wood burning stove.

What statistical research studies has Statistician Stan conducted as evidence that PM2.5, particulate matter from wood burning can be reduced if one person stops burning wood at home, because stopping wood burning residentially lessens the risk of sickening your own family, although one person's actions as part of the aggregate pollution are not enough in itself to help slow Climate Change?

Category 6, $600 Answer, 6) Statistician Stan in the Conservatory, near neighbor of an indoor residential wood burning stove.

A statistical study can show that stopping wood burning residentially also lessen the risk of sickening all the people in your neighborhood.

Category 6, $600 Question, 6) Statistician Stan in the Conservatory, near neighbor of an indoor residential wood burning stove.

What statistical research studies has Statistician Stan conducted as evidence that PM2.5, particulate matter from wood burning can be reduced if one person stops burning wood at home, because stopping wood burning residentially lessens the risk of sickening your neighbors, near and far although one person's actions as part of the aggregate pollution are not enough in itself to help slow Climate Change?

Category 6, $800 Answer, 6) Statistician Stan in the Conservatory, near neighbor of an indoor residential wood burning stove.

A statistical study can show that If you stop burning wood, you can serve as an example for other people to stop burning wood.

Category 6, $800 Question, 6) Statistician Stan in the Conservatory, near neighbor of an indoor residential wood burning stove.

What statistical research studies has Statistician Stan conducted as evidence that PM2.5, particulate matter from wood burning can be reduced if you decide to be a role model by stopping burning wood yourself although one person's actions as part of the aggregate pollution are not enough in itself to help slow Climate Change?

Category 6, $1,000 Answer, 6) Statistician Stan in the Conservatory, near neighbor of an indoor residential wood burning stove.

Statistics tell us that if you tell other people that in addition to asking industries to stopping burning fossil fuels and stopping burning wood (biomass), individuals can contribute to clean air, increase Public Health and slow Climate Change by stopping burning wood indoors residentially.

Category 6, $1,000 Question, 6) Statistician Stan in the Conservatory, near neighbor of an indoor residential wood burning stove.

Statistical Stand touches on this question while doing his studies. What can you tell other people to do, now that you know that wood burning emits 2.8 times the PM2.5 as the fossil fuel coal burning, and that wood burning emits 450 times the PM2.5 as the fossil fuel natural gas burning? Wood burning emits 90% PM2.5, particulate matter of 2.5 micrometer size, the perfect size to infiltrate the human lung, setting off a cascade of human health problems and early deaths.

Double Jeopardy if no action is taken.