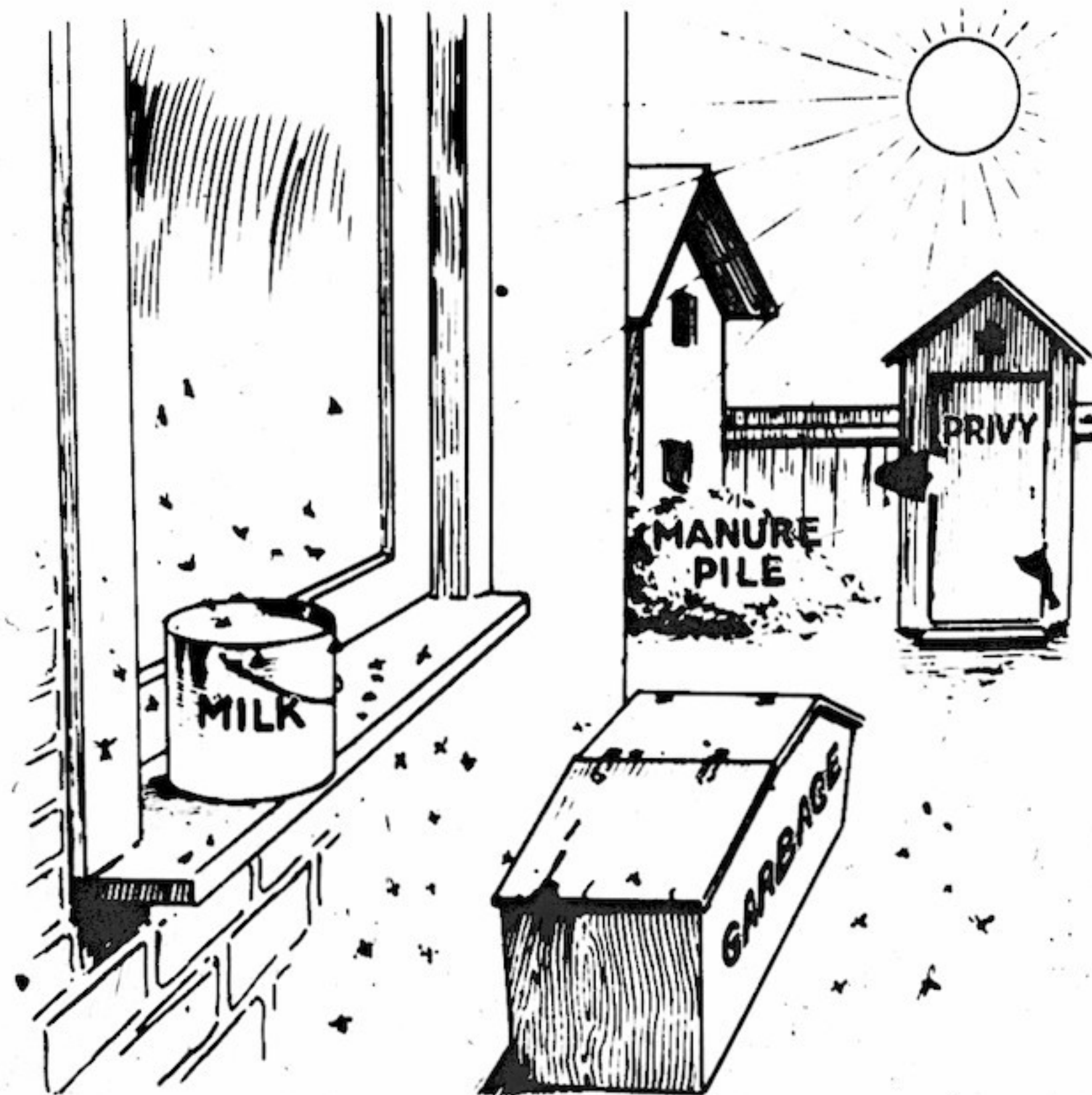


THE WRONG WAY TO KEEP BABY'S MILK



The background of the slide features a large, faint, circular seal of the State of Oregon. The seal contains an eagle at the top, a plow and sheaf of wheat in the center, and the words "THE UNION" and "1859" at the bottom. The outer ring of the seal contains the text "OFFICE OF THE GOVERNOR" and "STATE OF OREGON".

Raw Milk: Personal Choice from a Public Health Perspective

Bill Keene
Oregon Public Health Division



LOWFAT APR 29 1992

THOMAS JERSEY DAIRY

Drink Milk  for Health

**GRADE A
RAW MILK**

**THIS PRODUCT
HAS NOT BEEN
PASTEURIZED**

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TIGARD, OREGON 97223

raw milk is...

dangerous

spiritual

deadly

bullshit

silly

dirty

indulgent

expensive

natural

healthy

delicious

illegal

for kooks

irrelevant



raw milk

Search

[Advanced Search](#)
[Preferences](#)Web [Show options...](#)Results 1 - 10 of about 5,920,000 for [raw milk](#). (0.16 seconds)

[Raw Milk Facts...The Raw Milk Information Guide You Can Trust!](#)

Curious about organic **raw milk** and its health benefits? This site will answer all questions you're likely to have about unpasteurized **milk** and then some!

[www.raw-milk-facts.com/](#) - [Cached](#) - [Similar](#)

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[Want Raw Milk? Find it. Demand it!](#)

Don't Know Where To Turn To Find **Raw Milk**? The Answers Are Here!

[www.raw-milk-facts.com/Want_Raw_Milk.html](#) - [Cached](#) - [Similar](#)

[A CAMPAIGN FOR REAL \(RAW\) MILK!](#)

A CAMPAIGN FOR REAL **MILK**: Consumption of clean, unpasteurized, whole **milk**, and additive-free organic dairy products from old fashioned pasture-fed cows ...

[www.realmilk.com/](#) - [Cached](#) - [Similar](#)

[Where Can I Find Real \(Raw\) Milk?](#)

RAW MILK CONSUMERS PLEASE NOTE: This list of **raw milk** sources probably represents only a portion of the **raw milk** producers in your state. ...

[www.realmilk.com/where2.html](#) - [Cached](#) - [Similar](#)

[More results from www.realmilk.com »](#)

raw-milk-facts.com

Raw Milk FAQ

Answers to some frequently asked questions about raw milk:

Q: Is all raw milk the same?

A: *No!* There is a lot of variation due to the many factors that go into its formation. What the cow is fed, how and where it's raised, how the milk is collected all play important roles in its safety and quality. Cows pastured on organic green grass produce milk with amazing health benefits.

Q: Won't raw milk make me sick?

A: Not if it is properly collected from cows fed organic grass (and a minimum of grain). Heavy grain diets change the composition of the milk and hinder its ability to protect itself. Grass-fed milk has natural antibiotic properties that help protect it (and those lucky enough to drink it) from pathogenic bacteria. If you've been using pasteurized dairy products, you might want to eat small amounts of yogurt or kefir for a week or so, to give your digestive tract a pro-biotic boost, before switching to raw milk.

[Home](#)[Raw Milk FAQ](#)[About Raw Milk](#)[Milk History](#)[Raw Milk Safety](#)[Health Benefits](#)[What's in Raw Milk?](#)[Raw Medicine](#)[About Cows](#)[Find Raw Milk](#)[Related Links](#)[Scientific Stuff](#)[Contact Us](#)[Selected Books](#)[In The News...](#)[Site Contents](#)

Raw Milk FACTS

✓ Real raw milk from free-range grass fed cows is a complete food.

Nothing needs to be added.

✓ Contains all 20 necessary amino acids.

✓ Strengthens the immune system.

✓ The best source for the natural fats the body loves.

EDUCATE YOURSELVES!

Discover the benefits of Real Raw dairy products and understand the legal battles taking place which seek to keep the sale of Raw Milk a criminal offense.

Want to learn more about Raw Milk? See our **FAQ** or read the latest press the movement has recieved. →

{ LET'S LEGALIZE IT }

(The Real Milk Song)

Brought to you by:



26 North Hanover St.
Carlisle, PA 17013
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online at www.TheGoodLifeCafe.com

A Prolonged Outbreak of *Escherichia coli* O157:H7 Infections Caused by Commercially Distributed Raw Milk

William E. Keene, Katrina Hedberg, Donald E. Herriott,
Dale D. Hancock, Ronald W. McKay, Timothy J. Barrett,
and David W. Fleming

Acute and Communicable Disease Section, Oregon Health Division,
Portland, and Animal and Plant Health Inspection Service,
Department of Agriculture, and Food Safety Division,
Department of Agriculture, Salem, Oregon; Field Disease Investigation
Unit, Washington State University, Pullman, Washington; Food and
Drug Administration, Division of Field Epidemiology, Center for Disease Control,
Atlanta, Georgia

HUMAN CAMPYLOBACTERIOSIS

MORRIS E. POTTER, I

Bl
int

228

Marcia L. Headrick, DVM MPH
Babgaleh Timbo, MD DrPH
Karl C. Klontz, MD MPH
S. Benson Werner, MD

At the time of this study, Dr. Headrick was at the Center for Food Safety and Applied Nutrition, Food and Drug Administration (FDA), Washington, DC; she is currently a Veterinary Epidemiologist with the Center for Devices and Radiological Health, FDA, Rockville, MD. Dr. Timbo and Dr. Klontz are with the Epidemiology Branch, Center for Food Safety and Applied Nutrition, FDA, Washington, DC; Dr. Timbo is an Epidemiologist, and Dr. Klontz is a Medical Officer. Dr. Werner is Chief of the Disease Investigation Section, Division of Communicable Disease Control, California Department of Health Services, Berkeley.

Profile of Raw Milk Consumers in California



SYNOPSIS

Objectives. The authors sought to describe the consumption in California—States—and to describe the profile of raw milk consumers in that State. **Methods.** The authors used the Behavioral Risk Factor Surveillance System Survey that asked respondents about whether they drank raw milk, the amount consumed, the reason for drinking raw milk, and where raw milk was most often obtained.

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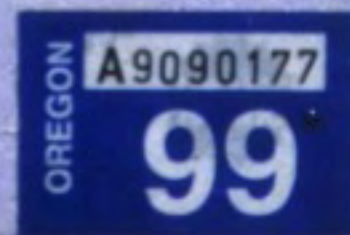
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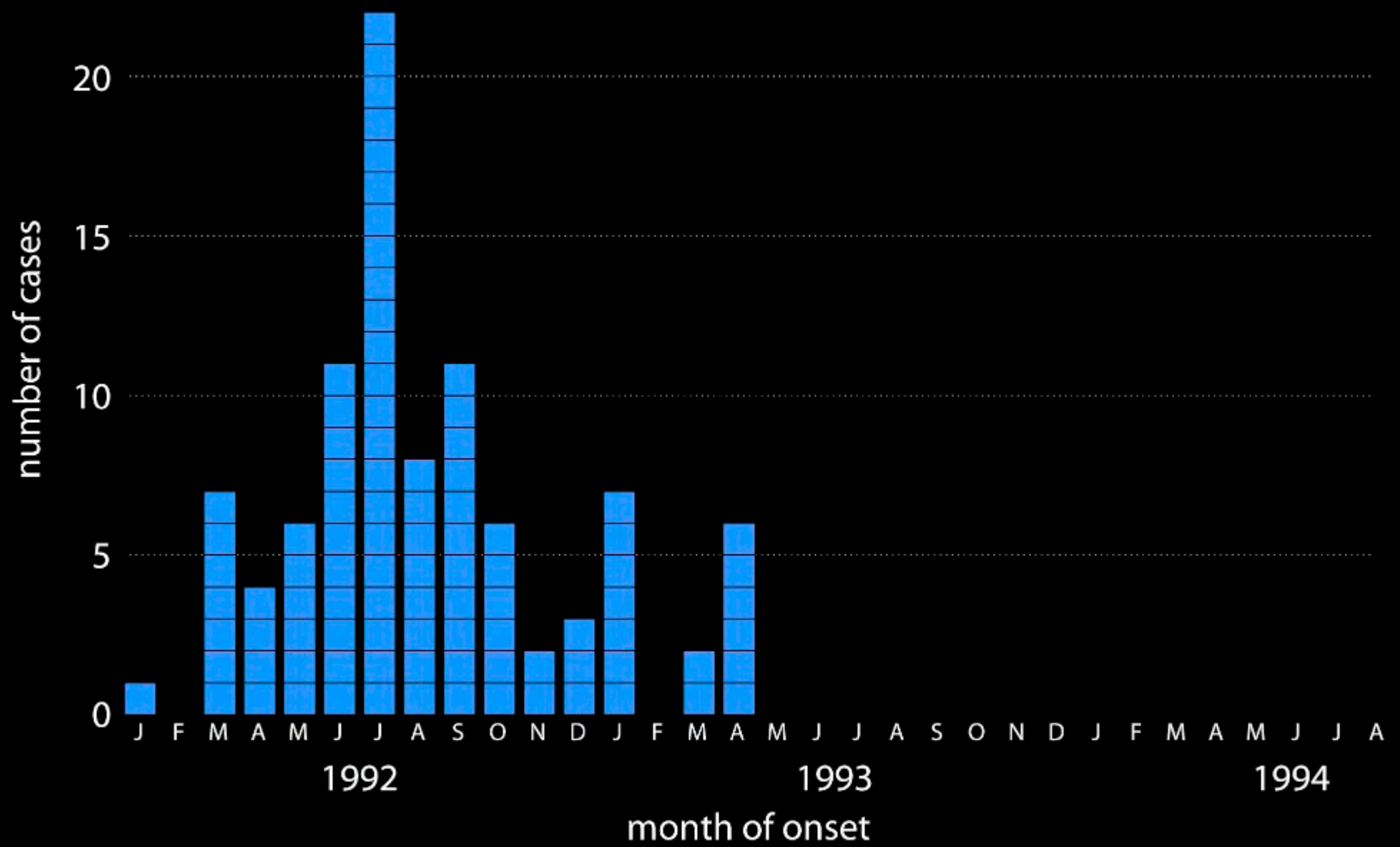
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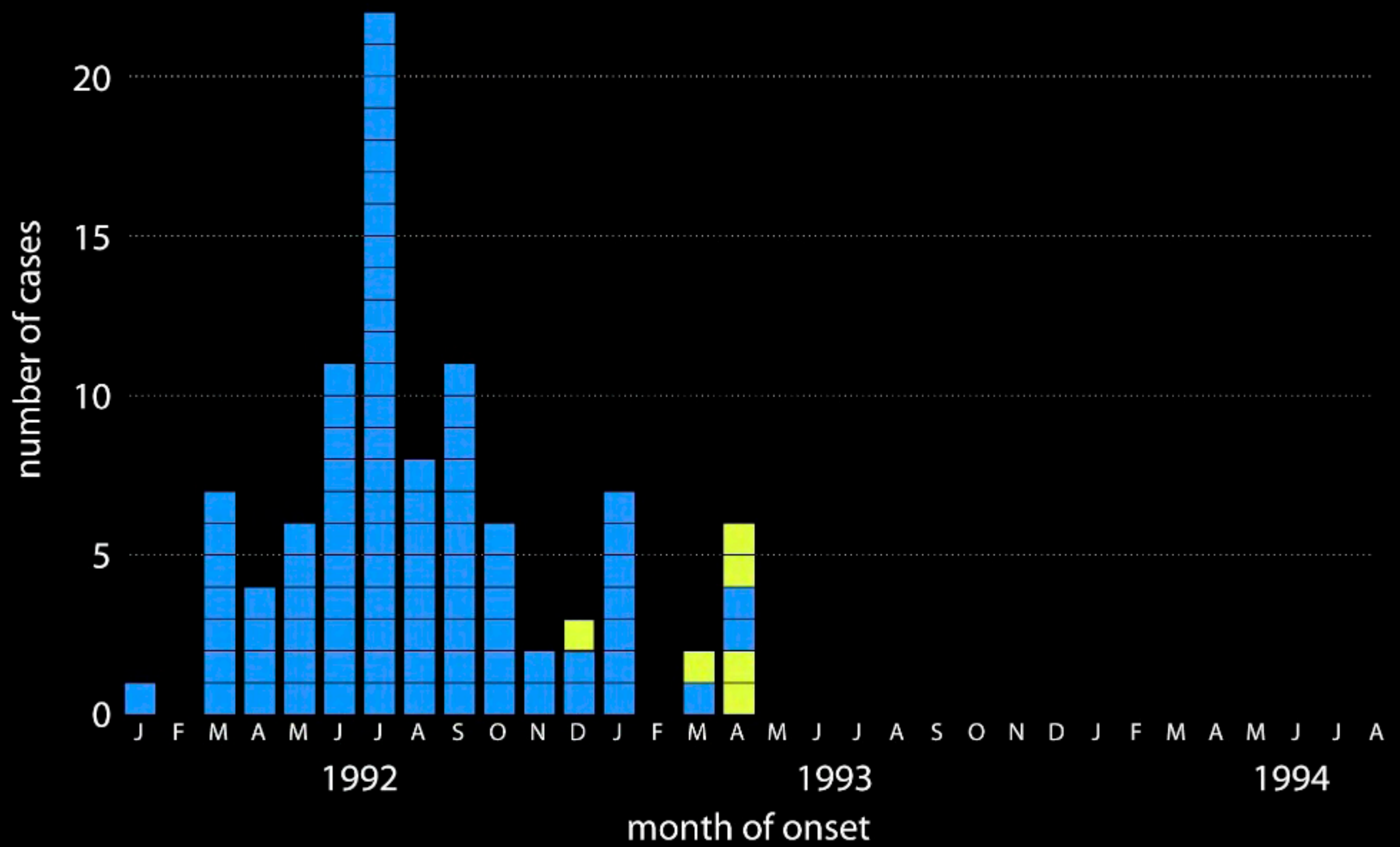
Oregon

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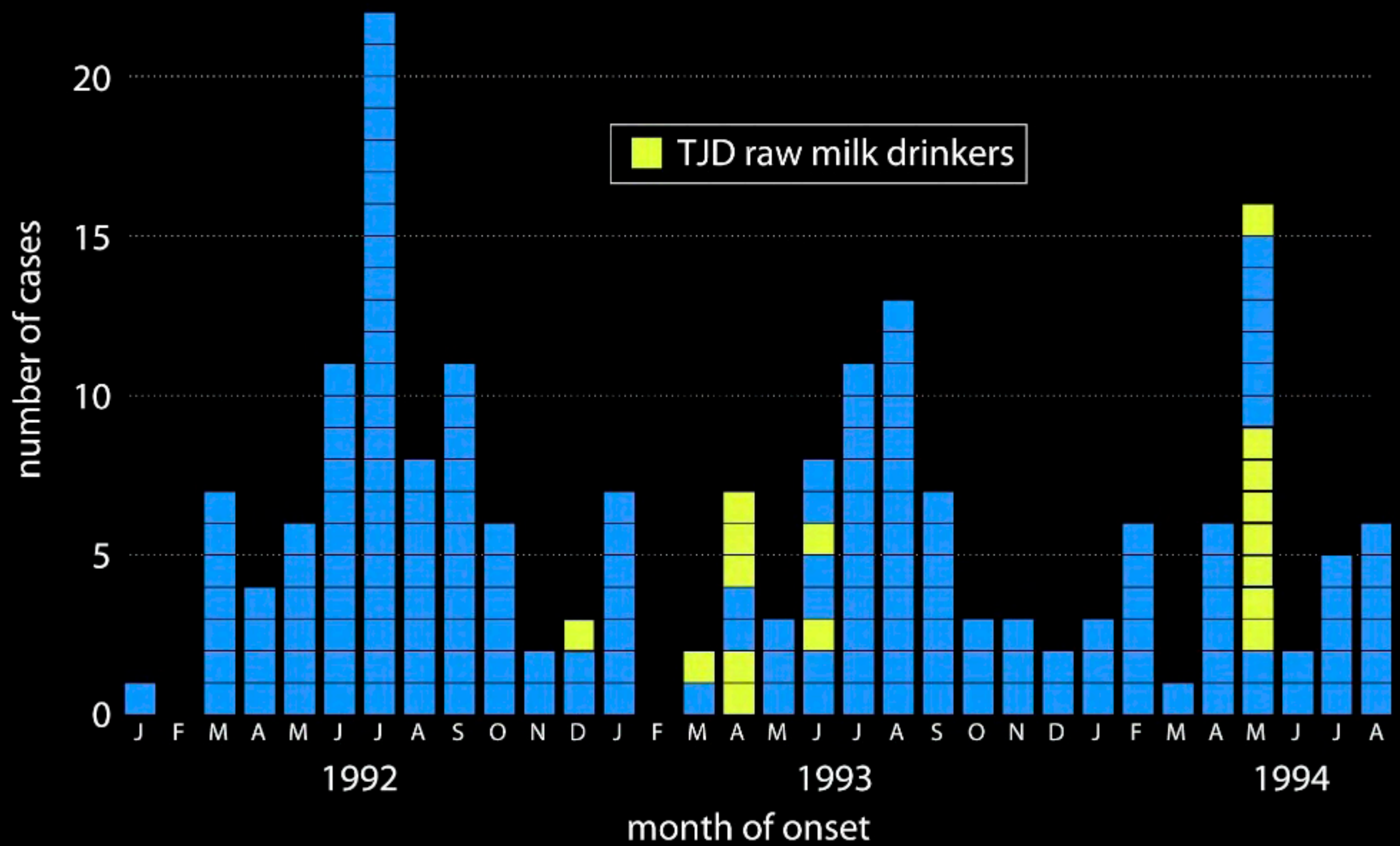






Thomas Jersey Dairy O157 Outbreak

- Identified in April 1993
- 14 lab-confirmed cases over 18 months
- sales continued despite health department objections
- legal entanglements eventually killed it





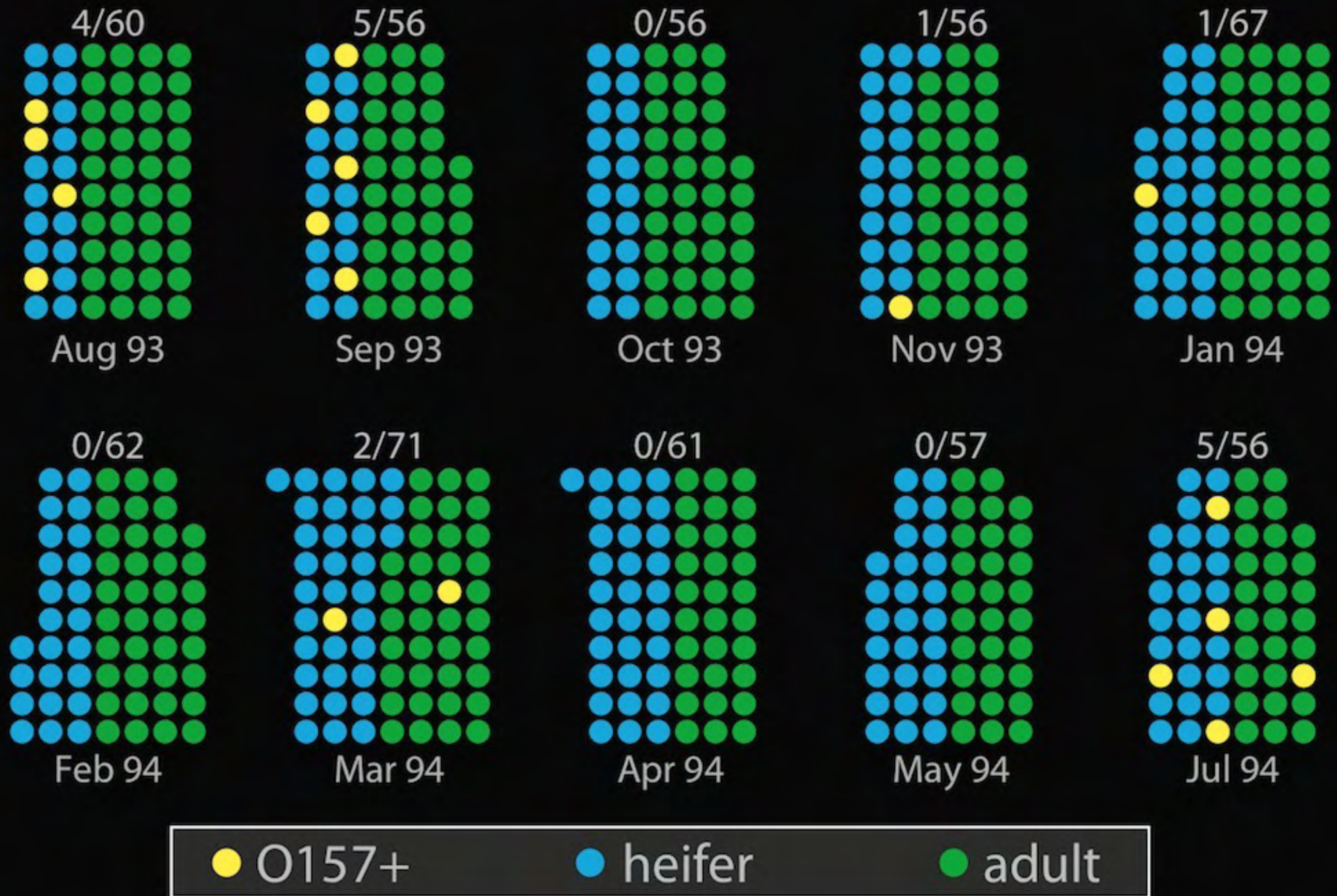








Lakeside Dairy Herd Testing



THOMAS JERSEY DAIRY

Drink Milk  *for Health*

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for Health

E A
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85th Ave.
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**STATE REQUIRED
WARNING**

**...MAY CONTAIN DISEASE
PRODUCING ORGANISMS.**

**THIS MILK DOES
NOT CONTAIN
ANY ADDED
HORMONES OR
PRESERVATIVES**



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GRADE 'A' RAW GOAT MILK



THIS PRODUCT HAS NOT
BEEN PASTEURIZED
...MAY CONTAIN DISEASE
PRODUCING ORGANISMS.

32 Fl.Oz. (ONE QUART) 946mL

LAKE SIDE DAIRY



**GRADE A
RAW MILK**

**THIS PRODUCT HAS NOT BEEN PASTEURIZED
MAY CONTAIN DISEASE PRODUCING ORGANISMS**



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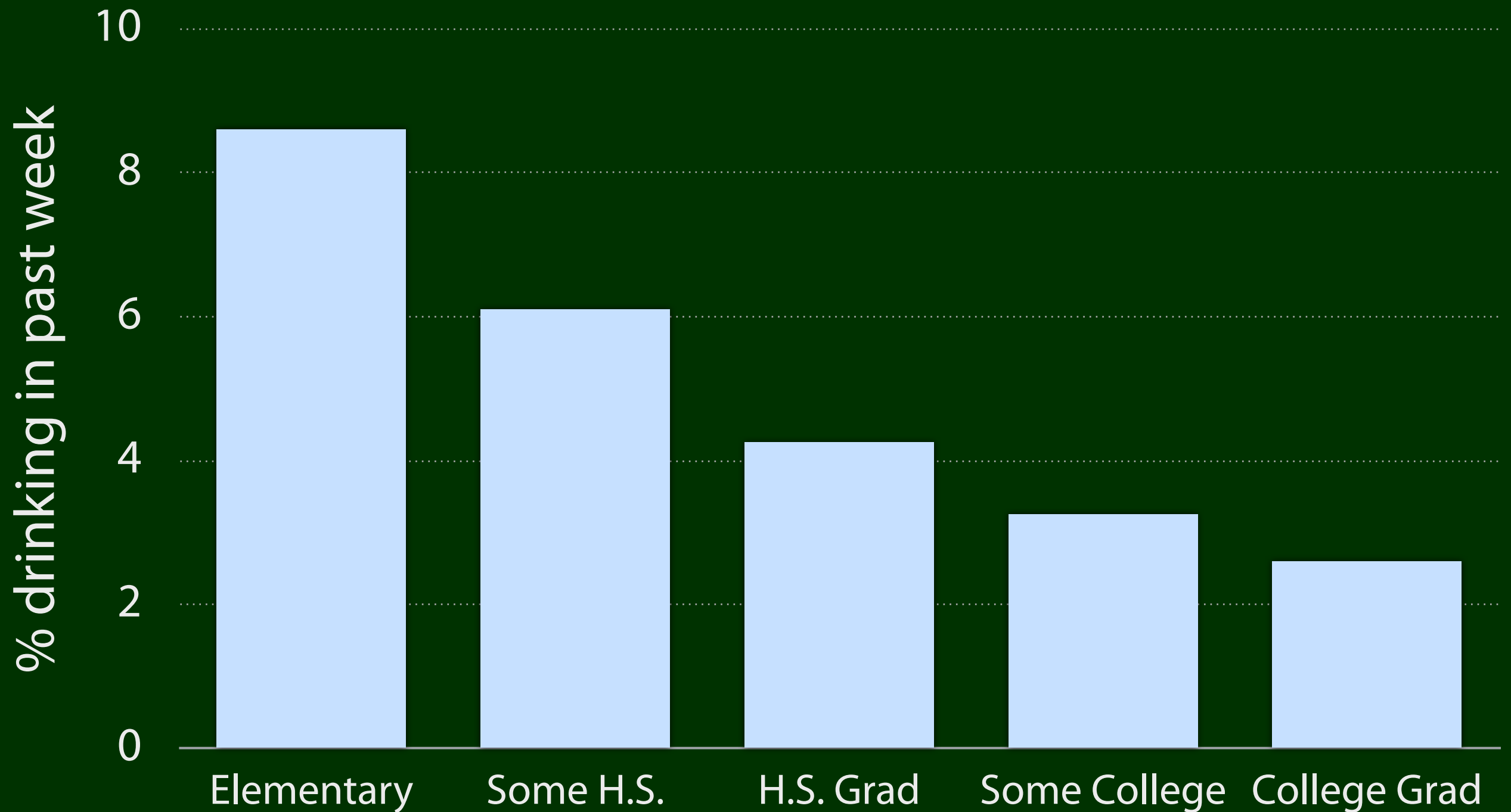


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99 YEARS! WE WISH WE
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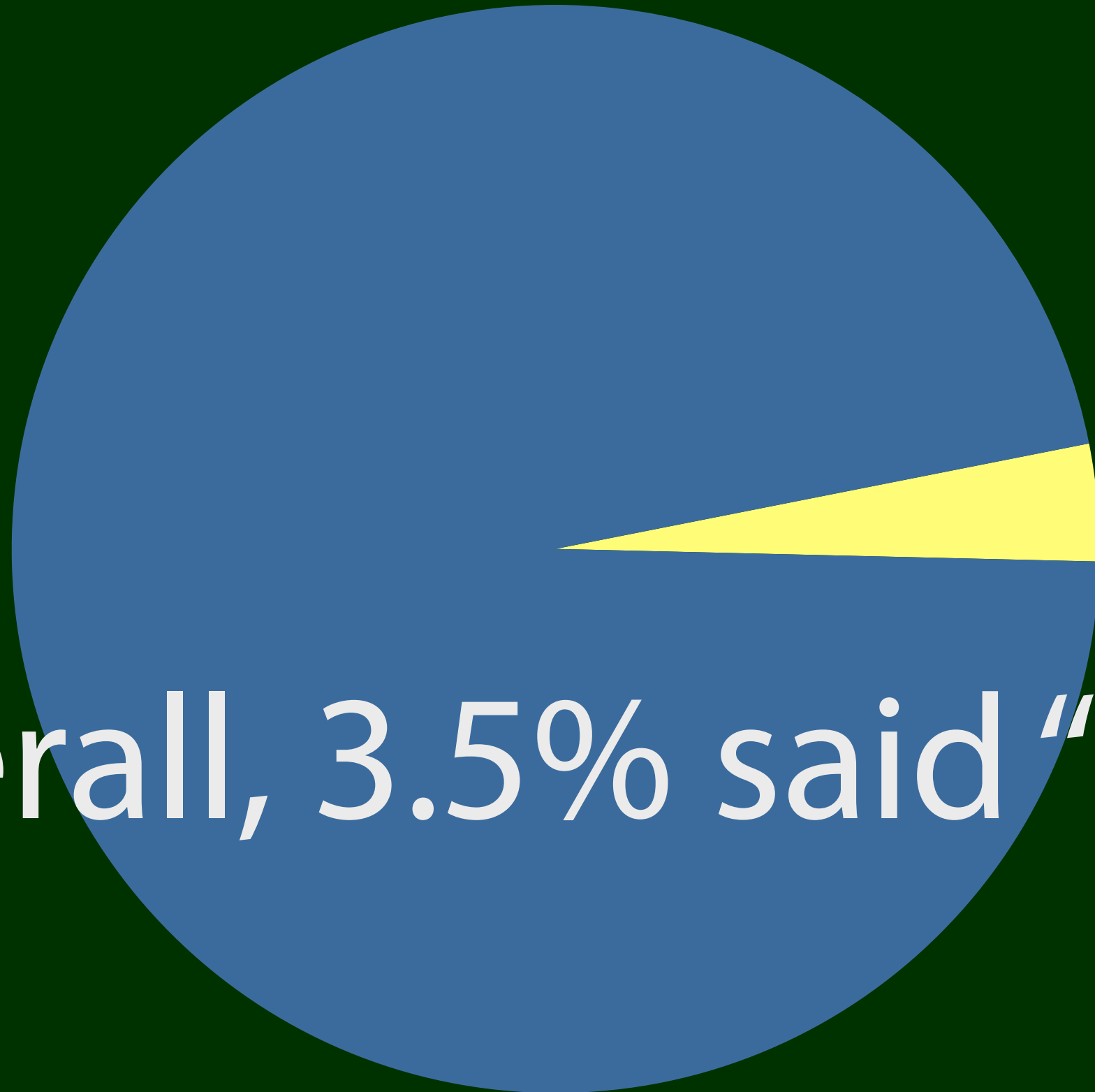


Prevalence of Raw Milk Consumption Among Adults by Education



FoodNet Population Survey, 2002

“Did you drink raw milk in the last week?”



Overall, 3.5% said “yes”



A clear plastic bottle of Odwalla 100% Fresh Apple Juice is centered in the frame. The bottle has a red flip-top cap and is filled with a light-colored juice. The label is white and yellow with red text and graphics. The background is a close-up of several red and yellow apples, some with green leaves, creating a fresh and natural setting.

odwalla.



**100%
FRESH
APPLE
JUICE**

DRINK IT & THRIVE™
NO CONCENTRATES
NOT PASTEURIZED
FRESH & PERISHABLE
SHAKE & REFRIGERATE

juice for humans™
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PASTURE RAISED • NO ANTIBIOTICS

CELTIC SHEPHERD CREAMERY



cheese. the way it used to be.

FAMILY OWNED & OPERATED

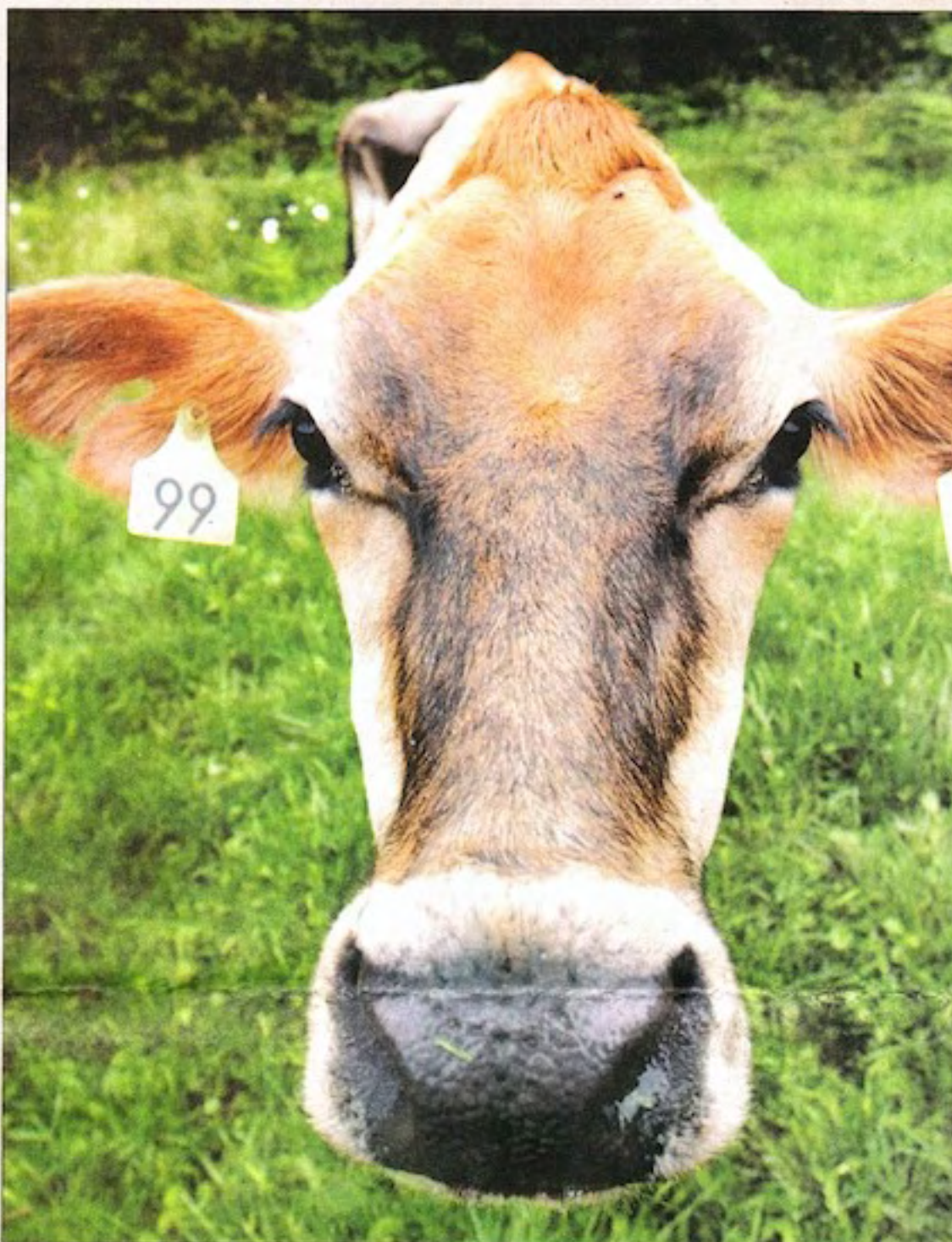
Ingredients: Pasteurized sheep milk, culture, enzymes, salt

Enright Family Farm, LLC Canby, Oregon 97013

Refrigeration required

Kinnitty Cream
a
Soft Ripened Cheese

Got raw milk



***Escherichia coli* O157:H7 Infection Associated with Drinking Raw Milk — Washington and Oregon, November–December 2005**

During the week of December 5, 2005, public health officials in Clark County, Washington, were notified of four county residents with laboratory-confirmed *Escherichia coli* O157:H7 infection. All four residents reported having consumed raw (i.e., unpasteurized) milk obtained from a farm in neighboring Cowlitz County, Washington. The farm participated in a cow-share program, in which persons purchase interests in, or shares of, dairy cows in return for a portion of the milk produced.* The farm had five dairy cows and regularly provided raw milk to shareholders. Although the sale of raw milk and cow-share agreements are illegal in certain states, they are legal in Washington; however, Washington farms that provide raw milk to consumers must be licensed, meet state milk-production and processing standards, and pass health

the legal loopholes

By AMANDA PENNELLY
for The Tribune

As health-conscious Portlanders gravitate toward more organically grown foods, some also are putting stock in raw cow milk.

Literally.

Growing numbers of local residents are buying shares of cows' milk production and hauling raw, or unpasteurized, milk to their neighborhoods — something the state said wouldn't happen until ... well, the cows came home.

But despite warnings from health officials, and Oregon dairy laws that prohibit the retail sale of unpasteurized milk to humans, many people are doing everything they can to get a hold of the raw stuff.

Because raw milk drinkers can't legally buy it, they're investing in the cow that produces it. Through "cow sharing," people can buy a percentage of a cow's milk production for a one-time fee — anywhere between \$60 and \$80,



Judy Aydt picks up raw milk from a drop-off point in Portland. Delivery, perhaps the most onerous part of cow sharing, calls for creativity among investors.

See MILK / Page 2

TRIBUNE PHOTOS: JIM CLARK

The owners of Dee Creek Farm in Woodland, Wash., thought they would build their customer base with free-range poultry, but it's the raw milk drinkers that keep business ticking, thanks in part to the efforts of Lilly, one of three milk cows at the farm.

Unpasteurized Milk

The Hazards of a Health Fetish

Morris E. Potter, DVM; Arnold F. Kaufmann, DVM; Paul A. Blake, MD; Roger A. Feldman, MD

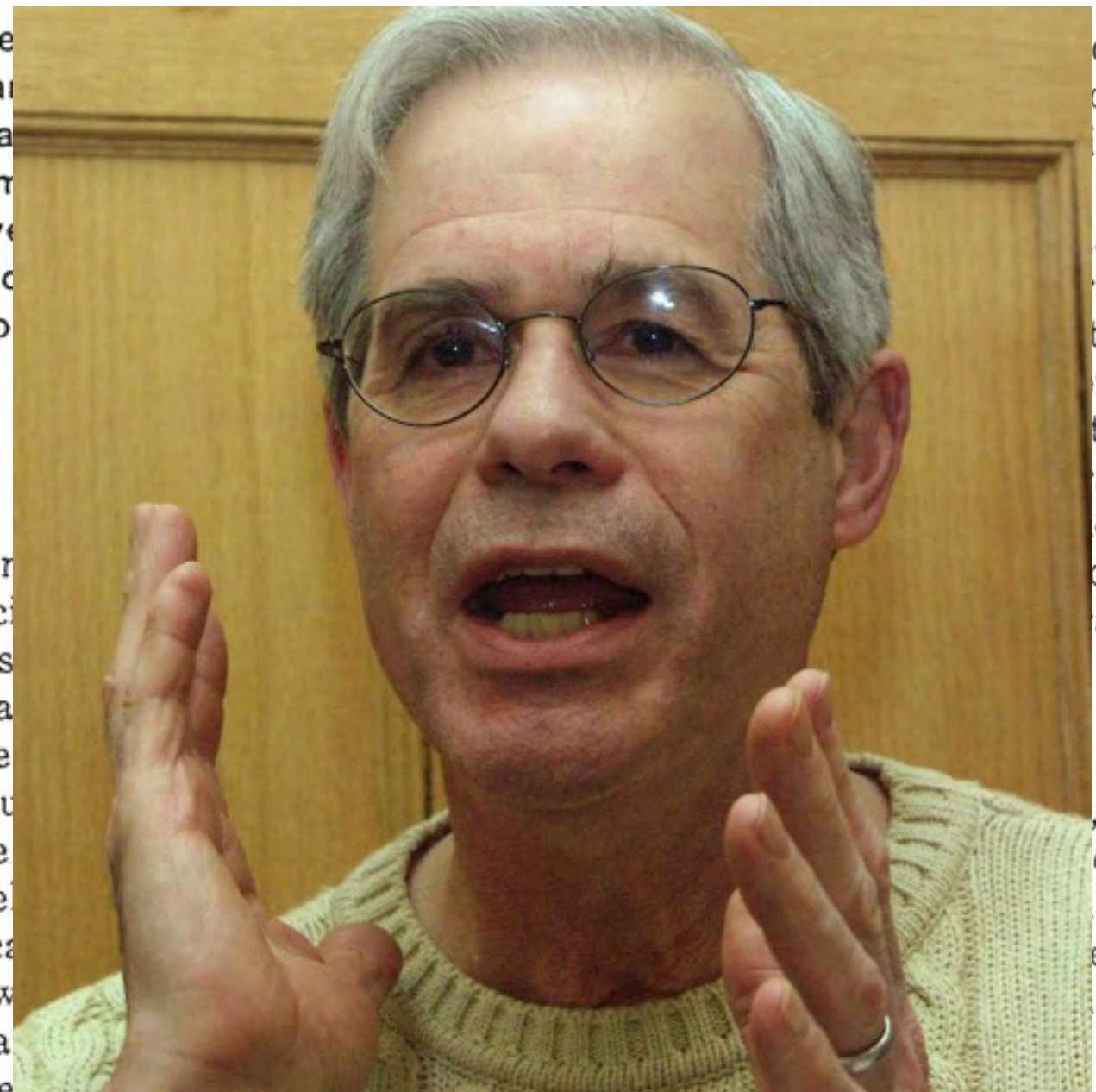
- Meaningful differences in nutritional value between unpasteurized milk have not been demonstrated, and benefits of raw milk consumption have not been substantiated. The role of unpasteurized dairy products in the transmission of diseases has been established repeatedly. To effectively counter the health claims made for raw milk, practitioners must understand both the rationale used by proponents of raw milk and the magnitude of the risk involved in drinking raw milk.

(JAMA 1984;252:2050-2054)

AS THE dairy industry began to industrialize in the 1800s, the mass production and distribution of milk and dairy products led to widespread outbreaks of milkborne disease. The greatest perceived milkborne hazards of the time were poor sanitation and handling procedures, as well as diseased dairy cows. Repeated outbreaks of typhoid, scarlet fever, diphtheria, diarrheal disease, and septic sore throat were caused by milk that was produced, transported, and sold under unhygienic conditions.¹

Nationwide problems with contam-

teurization, claimed nutritional deficiencies, and the marketing of spoiled milk destroyed the natural milk movement. Conversely, the raw milk movement denounced pasteurization as unsafe despite scientific evidence to the contrary.^{1,2} Ultimate success of the raw milk movement became a reality with the Pasteurization of Milk Ordinance (PMO) of 1933. The PMO was the primary safeguard for the raw milk supply after several epidemics were traced to certified raw milk, while the sanitary concepts of the pasteurized milk movement were incor-



raw (unpasteurized) milk may be certified or uncertified. Certified raw milk is produced in accordance with methods and standards established

Regulating Raw Milk: Pros and Con

Pro

- Dangerous product
- Hazard not always appreciated by public
- Bans reduce illness
- Medical costs reduced
- No known benefits
- Cheap and safe alternative

Con

- Taste?
- Freedom
- Consistency

Survey Shows Gap Between Scientists and the Public

BY CORNELIA DEAN

JULY 10, 2009

When it comes to [climate change](#), the teaching of evolution and the state of the nation's research enterprise, there is a large gap between what scientists think and the views of ordinary Americans, a new survey has found.

On the whole, scientists believe American research leads the world. But only 17 percent of the public agrees, and the proportion who name scientific advances as among the United States' most important achievements has fallen to 27 percent from nearly 50 percent in 1999, the survey found.

And while almost all of the scientists surveyed accept that human beings evolved by natural processes and that human activity, chiefly the burning of fossil fuels, is causing global warming, general public is far less sure.

Almost a third of ordinary Americans say human beings have existed in their current form since the beginning of time, a view held by only 2 percent of the scien-

tists. Only about half of the public agrees that people are behind climate change, and 11 percent does not believe there is any warming at all.

According to the survey, about a third of Americans think there is lively scientific debate on both topics; in fact, there is no credible scientific challenge to the theory of evolution and there is little doubt that human activity is altering the chemistry of the atmosphere in ways that threaten global climate.

[The survey](#), by the [Pew Research Center](#) for the People & the Press and the American Association for the Advancement of Science, the world's largest scientific organization, involved about 2,000 members of the public and 2,500 scientists drawn from the rolls of the science advancement association, which includes teachers, administrators and others involved in science as well as researchers.

The survey, made public Thursday, is available at people-press.org.

It found that at least two-thirds of Americans hold scientists and engineers in high regard, but the feeling is hardly mutual.

The report said 85 percent of science association members surveyed said public ignorance of science was a major problem. And by large margins they deride as only "fair" or "poor" the coverage of science by newspapers and television.

Only 3 percent of the scientists said they "often" spoke to reporters.

In a telephone news conference announcing the survey, Alan I. Leshner, chief executive of the science association, said scientists must find new ways to engage with the public.

"One cannot just exhort 'we all agree you should agree with us,' " Mr. Leshner said. "It's a much more interactive process that's involved. It's time consuming and can be tedious. But it's very important." ■





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Is Regulation Necessary?

- Absolute vs. relative risk
- Regulation vs. common law liability
- This is not the 1920s
- Not many cases
- Easy pickings for epidemiologists
- Should we care more about these people's kids than they do?



Oregonian
DAY, JULY 11, 2009

METRO

NEWS FROM THE PORTLAND AREA AND THE NORTHWEST



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ANNA GRIFFIN

COMMENTARY

It's gonna
on Kruger's
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Kruger always fig-
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Sauvie Island farmer,
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to this lush little forest

'I did everything I could'



ROSS WILLIAM HAMILTON/THE OREGONIAN

Raylene Worthington testifies that Ava was an "average" baby, with an independent streak and playful attitude, who always ate well.

Faith healing | Carl Brent Worthington testifies he was shocked when his daughter, Ava, stopped breathing

By **STEVE MAYES**
THE OREGONIAN

Carl Brent Worthington said his daughter caught a bad cold, but he never believed the illness imperiled the child's life or would abruptly end it.

Worthington said that he saw no reason to take the 15-month-old child to a doctor, even though her breathing concerned him and phlegm had to be suctioned from her mouth so she could breathe.

Worthington, who goes by his middle name, and his wife, Raylene, testified Friday in their Clackamas County

Circuit Court trial. They are charged with second-degree manslaughter and criminal mistreatment for not providing adequate medical care, resulting in Ava's death March 2, 2008.

The couple belong to the Followers of Christ, an Oregon City congregation that favors faith healing over medical care.

In hindsight, Worthington said he would not have done anything differently.

"I did everything I could," he said, adding that the faith-healing treatments were working and there was no need for a physician. The Worthingtons said they were shocked when Ava suddenly stopped breathing.

The couple described their daughter as a petite but chubby child with a playful attitude and an independent streak.

Please see **TRIAL**, Page B2



ROSS WILLIAM HAMILTON/THE OREGONIAN

Carl Brent Worthington says his daughter was never bothered by a cyst on her neck that doctors said blocked her airway and esophagus.



MILK



TRUCKERS DO NOT !

PICK UP MILK AT
FARMS WHERE
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OF **DIPHThERIA**

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INFANTILE PARALYSIS
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