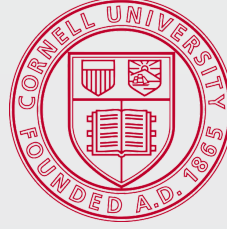


-THE RISKS OF-

RAW MILK



Cornell
CALS
College of Agriculture
and Life Sciences

The consumption of raw milk can pose severe health risks to consumers, possibly resulting in reduced trust in the dairy industry and potentially impairing the dairy farm business viability.

KEY FOOD-BORNE PATHOGENS

Estimated Annual No.		Pathogen	Key Symptoms and Long-term Effects ³
Cases ^{1,2}	Deaths ^{1,2}		
1,027,561*	378*	<i>Salmonella</i> spp., nontyphoidal	Vomiting, diarrhea, reactive arthritis
845,024*	76*	<i>Campylobacter</i> spp.	Neurological symptoms (Guillain-Barré Syndrome), Irritable Bowel Syndrome, arthritis, vomiting, diarrhea
175,905*	20*	Shiga toxin-producing <i>E. coli</i>	Kidney failure, bloody diarrhea
1,591*	255*	<i>Listeria monocytogenes</i>	Meningitis, abortions, septicemia
212**	not reported	<i>Coxiella burnetii</i>	Fever, persistent fatigue

* Estimates of domestically acquired food-borne illnesses and death based on the US population in 2006 are adjusted for under-diagnosis and underreporting.
** Data represent the total number of reported cases of acute and chronic Q-fever in 2019 in the US; therefore, the number of cases is likely underestimated.

KEY POINTS



During a 19 year period, there were⁵

73 reported outbreaks linked to non-pasteurized products

1,571 total illnesses

202 total hospitalizations

The risk of raw milk causing an outbreak is **≥ 150x** greater than the risk of pasteurized milk causing an outbreak.⁵



Hospitalization rates are **13 times higher** for patients in outbreaks linked to raw milk than the rate for people in outbreaks linked to pasteurized milk.⁵

Numbers of illnesses attributed to raw milk consumption are likely higher due to underreporting.

CASE STUDY

Economic Impact Study⁶

Connecticut | 2008

14 cases, 7 confirmed cases

5 hospitalized, 3 experienced hemolytic uremic syndrome

E. coli O157:NM isolated from raw milk produced on 1 farm

Estimated total cost of a single *E. coli* outbreak:

\$413,402

RISKS FOR DAIRY INDUSTRY

- Loss in the sales of dairy products
- Loss of export markets if food-borne disease cases or outbreaks are linked to dairy products
- Lost confidence in dairy products

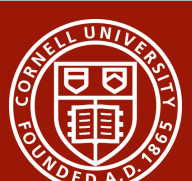
RISKS FOR FARMERS

Personal Consequences

Responsibility of illness or potential death

Financial Loss

Lawsuits
Loss of sales & demand



Want more information on risks of raw milk? Contact Martin Wiedmann (martin.wiedmann@cornell.edu) or visit our website <https://foodsafety.foodscience.cornell.edu/mqip/>

¹ DOI: 10.3201/eid1701.P11101
² <https://www.cdc.gov/qfever/stats/index.html>
³ DOI: 10.1016/j.idc.2013.05.003
⁴ DOI: 10.3201/eid2101.140447
⁵ DOI: 10.3201/eid1803.111370
⁶ DOI: 10.1086/657304