

# Wikidata and causality

Emw

Wikipedia Day

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Representing cause and effect  
is a  
common knowledge task

Cause -> Effect

-> Effect

Cause -> Effect

Cause -> Effect

Cause -> Effect

Cause -> Effect

Cause ->

# Chain of causality



# cause of death (P509)

CAUSE OF DEATH (See instructions and examples)	
<p>32. <b>PART I.</b> Enter the <u>chain of events</u>-diseases, injuries, or complications-that directly caused the death. <b>DO NOT</b> enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. <b>DO NOT ABBREVIATE.</b> Enter only one cause on a line. Add additional lines if necessary.</p>	
<p><b>IMMEDIATE CAUSE</b> (Final disease or condition resulting in death) →</p>	<p>a. <u>Pulmonary embolism</u> Due to (or as a consequence of):</p>
<p>Sequentially list conditions, if any, leading to the cause listed on line a. Enter the</p>	<p>b. <u>Congestive heart failure</u> Due to (or as a consequence of):</p>
<p><b>UNDERLYING CAUSE</b> (disease or injury that initiated the events resulting in death) <b>LAST</b></p>	<p>c. <u>Acute myocardial infarction</u> Due to (or as a consequence of):</p>
<p>d. <u>Chronic ischemic heart disease</u></p>	
<p><b>PART II.</b> Enter other <u>significant conditions contributing to death</u> but not resulting in the underlying cause given in PART I.</p> <p>Diabetes mellitus, Hypertension</p>	<p>33. WAS AN AUTOPSY PERFORMED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>34. WERE AUTOPSY FINDINGS COMPLETE THE CAUSE OF DEATH?</p>

^ U.S. Standard Certificate of Death

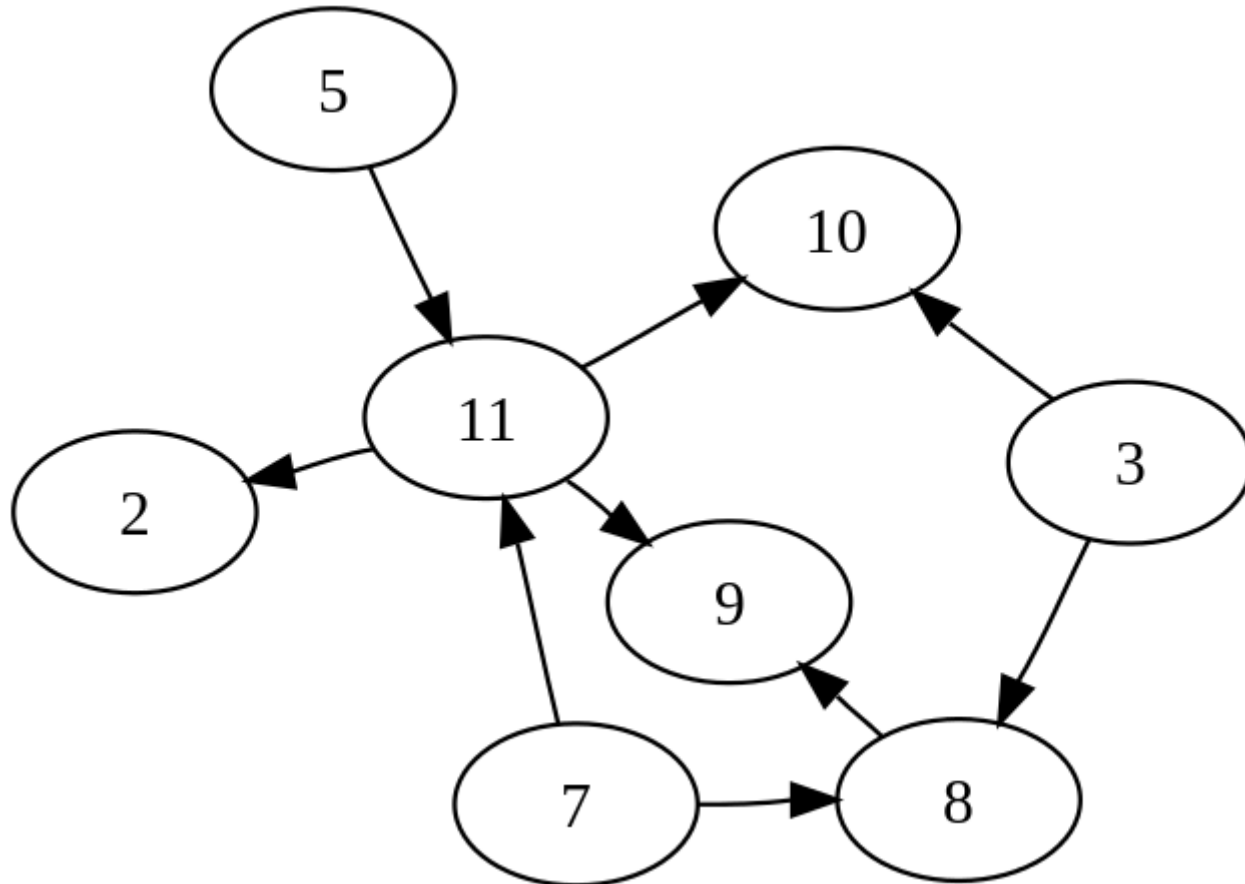
see also: manner of death (P1196)

We chain represent “causal chains” on Wikidata  
but  
reality is more complex





Causality is actually more of a “network”  
a.k.a.  
directed graph



But that's hard.

Let's focus on things we can do now.

# Causation on Wikidata

- [https://www.wikidata.org/wiki/Help:Modeling\\_causes](https://www.wikidata.org/wiki/Help:Modeling_causes)
- ***has cause*** (P828) (alias *underlying cause*): thing that ultimately resulted in the effect
- ***has immediate cause*** (P1478): thing that proximately resulted in the effect
- ***has contributing factor*** (P1479): thing that significantly influenced the effect, but did not directly cause it

# What caused the American Civil War?

American Civil War (Q8676)

has cause:

slavery in the United States (Q118382) (preferred rank)  
states' rights (Q48527) (deprecated rank)

...

has immediate cause:

Battle of Fort Sumter (Q543165)  
United States presidential election, 1860 (Q698842)

...

has contributing factor:

caning of Charles Sumner (Q5032419)  
Dred Scott v. Sandford (Q690462)  
Bleeding Kansas (Q331377)  
Uncle Tom's Cabin (Q2222)

...



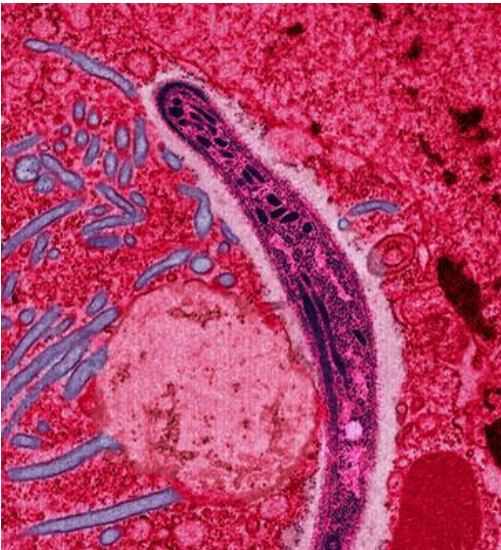
# What causes malaria?

malaria (Q12156)

has cause: Plasmodium (Q130948)

has immediate cause: mosquito (Q7367)

has contributing factor: poverty (Q10294)



# Things to avoid

- Very causally distant statements
  - Bad: Alps *has cause* formation of the Solar System
  - Good: Alps *has cause* continental collision
- Bias about causes, esp. in controversial events
  - e.g. *cause of War* in Donbass (Q16335075)
  - Good place to have multiple contradictory claims, referenced and with a rank of “normal”
  - Check out *statement disputed by* (P1310)

# Learn more

- On Wikipedia:
  - Proximate and ultimate causation
  - Four Causes
- On Wikidata:  
[https://www.wikidata.org/wiki/Help:Modeling\\_causes](https://www.wikidata.org/wiki/Help:Modeling_causes)
- *Documenting Death*. PBS
- *Guns, Germs, and Steel*. Jared Diamond
- *Causality*. Judea Pearl