

***MMWR* Weekly Overview and Initial Considerations**

MMWR

Morbidity and Mortality Weekly Report

Charlotte K. Kent, PhD, MPH
Executive Editor, *MMWR* Series

2018 CSTE MMWR Intensive Writing Training Course
February 1, 2018



1976



1976

CENTER FOR DISEASE CONTROL

August 6, 1976 / Vol. 25 / No. 30

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

Current Trends

- 237 Cigarette Smoking in the United States – 1975
- 243 St. Louis Encephalitis – California, Mississippi, Tennessee

Epidemiologic Notes and Reports

- 238 Atypical Mycobacteria Wound Infections – North Carolina, Colorado
- 244 Respiratory Infection – Pennsylvania

International Notes

- 244 *Clostridium septicum* Bacteremia – United Kingdom

Epidemiologic Notes and Reports

Respiratory Infection – Pennsylvania

A total of 152 persons associated with a state American Legion convention in Philadelphia July 21-24 have been hospitalized with respiratory infections. Onsets of illness

other Legionnaires who may be ill with less severe symptoms.

The patients, among several thousand attending the

1976

CENTER FOR DISEASE CONTROL

August 1976 / Vol. 5 / No. 30

Communicable Diseases in the United States — 1975

224 St. Louis Encephalitis — California, Mississippi, Tennessee

Epidemiologic Notes and Reports

238 Atypical Mycobacteria Wound Infections — New Mexico, Colorado

240 Hantavirus Infection — Pennsylvania

Epidemiologic Notes and Reports

244 *Candida glabrata* Bacteremia — United Kingdom

LEGIONNAIRES' DISEASE

Epidemiologic Notes and Reports

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1981



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CENTERS FOR DISEASE CONTROL

June 5, 1981 / Vol. 30 / No. 21

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

	Epidemiologic Notes and Reports
249	Dengue Type 4 Infections in U.S. Travelers to the Caribbean
250	<i>Pneumocystis</i> Pneumonia — Los Angeles
	Current Trends
252	Measles — United States, First 20 Weeks
253	Risk-Factor-Prevalence Survey — Utah
259	Surveillance of Childhood Lead Poisoning — United States
	International Notes
261	Quarantine Measures

Pneumocystis Pneumonia — Los Angeles

In the period October 1980-May 1981, 5 young men, all active homosexuals, were treated for biopsy-confirmed *Pneumocystis carinii* pneumonia at 3 different hospitals in Los Angeles, California. Two of the patients died. All 5 patients had laboratory-confirmed previous or current cytomegalovirus (CMV) infection and candidal mucosal infection. Case reports of these patients follow.

Patient 1: A previously healthy 33-year-old man developed *P. carinii* pneumonia and oral mucosal candidiasis in March 1981 after a 2-month history of fever associated with

1981

CENTERS FOR DISEASE CONTROL

June 5, 1981 / Vol. 10 / No. 21

Epidemiology and Reports

249 *Pneumocystis Pneumonia* — Los Angeles

252 *Pneumocystis Pneumonia* — United States, First 20

252 *Pneumocystis Pneumonia* — Utah

252 *Pneumocystis Pneumonia* — States

252 *Pneumocystis Pneumonia* — Notes

252 *Pneumocystis Pneumonia* — Measures

AIDS

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[CDC Home](#)[Search](#)[Health Topics A-Z](#)**MMWR**TM*Dispatch*

April 21, 2009 / 58 (Dispatch);1-3

Swine Influenza A (H1N1) Infection in Two Children --- Southern California, March--April 2009

On April 21, this report was posted as an MMWR Early Release on the MMWR website (<http://www.cdc.gov/mmwr>).

On April 17, 2009, CDC determined that two cases of febrile respiratory illness occurring in children who resided in adjacent counties in southern California were caused by infection with a swine influenza A (H1N1) virus. The viruses from the two cases are closely related genetically, resistant to amantadine and rimantadine, and contain a unique combination of gene segments that previously has not been reported among swine or human influenza viruses in the United States or elsewhere. Neither child had contact with pigs; the source of the infection is unknown. Investigations to identify the source of infection and to determine whether additional persons have been ill from infection with similar swine influenza viruses are ongoing. This report briefly describes the two cases and the investigations currently under way. Although this is not a new subtype of influenza A in humans, concern exists that this new strain of swine influenza A (H1N1) is substantially different from human influenza A (H1N1) viruses, that a large proportion of the

MMWR Zika Virus Response

- 66 Zika reports since EOC activation
 - 53 as Early Releases (48 hour production)
 - 16 Reports summarized Interim Guidance

Morbidity and Mortality Weekly Report (MMWR)

MMWR

Publications + MMWR Zika Reports

About MMWR +

Manuscript Submission (MMWR Weekly)

Instructions for Authors +

Contact Us

Medscape CME

MMWR Continuing Education

October 20, 2017

September 1, 2017

August 11, 2017

• Updates: Interim Guidance for the Diagnosis, Evaluation, and Management of Zika Virus Infection — United States, October 2017

• Awareness, Beliefs, and Actions Concerning Zika Virus Among Virgin Islands, November–December 2016

Morbidity and Mortality Weekly Report

Update: Interim Guidance for Health Care Providers Caring for Pregnant Women with Possible Zika Virus Exposure — United States (Including U.S. Territories), July 2017

Titilope Oduyebo, MD¹; Kara D. Polen, MPH¹; Henry T. Walke, MD¹; Sarah Reagan-Steiner, MD¹; Eva Lathrop, MD¹; Ingrid B. Rabe, MBChB¹; Wendi L. Kuhnert-Tallman, PhD¹; Stacey W. Martin, MSc¹; Allison T. Walker, PhD¹; Christopher J. Gregory, MD¹; Edwin W. Ades, PhD¹; Darin S. Carroll, PhD¹; Maria Rivera, MPH¹; Janice Perez-Padilla, MPH¹; Carolyn Gould, MD¹; Jeffrey B. Nemhauser, MD¹; C. Ben Beard, PhD¹; Jennifer L. Harcourt, PhD¹; Laura Viers, MD¹; Michael Johansson, PhD¹; Sascha R. Ellington, MSPH¹; Emily Petersen, MD¹; Laura A. Smith, MA¹; Jessica Reichard, MPA¹; Jorge Munoz-Jordan, PhD¹; Michael J. Beach, PhD¹; Dale A. Rose, PhD¹; Ezra Barzilay, MD¹; Michelle Noonan-Smith¹; Denise J. Jamieson, MD¹; Sherif R. Zaki, MD¹; Lyle R. Petersen, MD¹; Margaret A. Honein, PhD¹; Dana Measney-Delman, MD¹

Notes from the Field

Injuries Associated with Bison Encounters — Yellowstone National Park, 2015

Cara Cherry, DVM^{1,2}; Kirsten Leong, PhD³; Rick Wallen MS⁴;
Danielle Buttke DVM, PhD²

Since 1980, bison have injured more pedestrian visitors to Yellowstone National Park (Yellowstone) than any other animal (1). After the occurrence of 33 bison-related injuries during

persons were gored, and three were tossed into the air. Four persons required hospitalization, three of whom were transported by helicopter ambulance. There were no deaths.

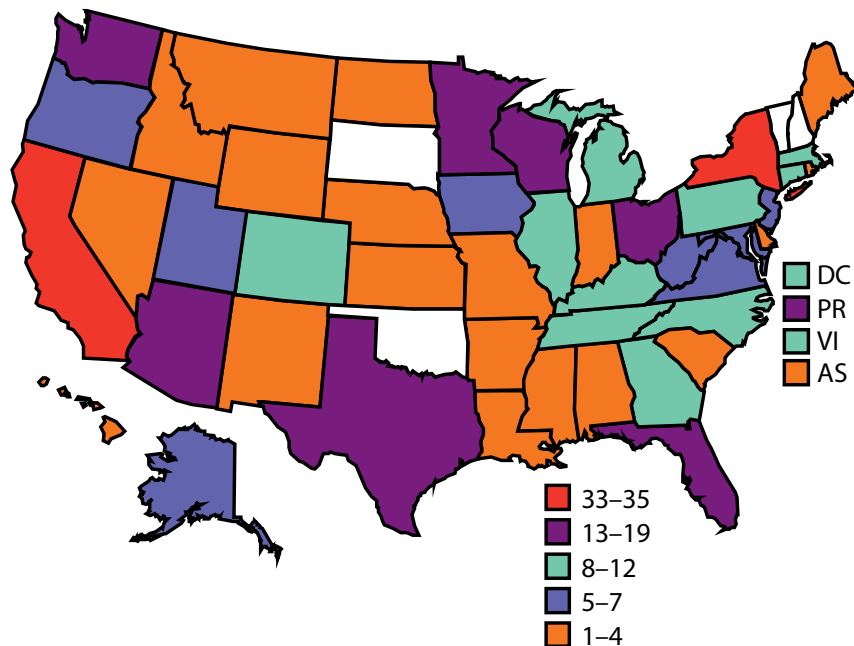
All encounters resulted from failure to maintain the required distance of 75 ft (23 m) from bison. Four injuries occurred when three or more persons approached the bison. Two persons were injured while walking on hiking trails. Three persons sustained injuries while taking photographs at a distance of



MMWR @CDCMMWR · Mar 29
5 bison-related injuries at Yellowstone illustrate need to adhere to park guidelines. [cdc.gov/mmwr/volumes/6...](https://www.cdc.gov/mmwr/volumes/6...)

Cherry et al., Morb Mortal Wkly Rep 2016;65:293–294

States Named in Report Titles, 2013–2017



Mission

- Voice of CDC
- Scientific periodical
- Public health capacity building

Components of *MMWR* Series

- *MMWR* Weekly
- *MMWR* Serials
 - Recommendations and Reports
 - Surveillance Summaries
 - Supplements
 - Annual Summaries

Types of articles in *MMWR* Weekly

- Full Reports
 - Outbreak Reports
 - Notes from the Field
 - Policy Notes
 - Vital Signs
 - CDC Grand Rounds
 - Announcements
- 
- A decorative horizontal bar at the bottom of the slide, composed of several colored rectangular segments in blue, green, teal, purple, dark green, and brown.

Criteria for Publication

- Appropriateness
 - Originality
 - Quality
 - Timeliness
 - Clarity
- 
- A decorative horizontal bar at the bottom of the slide, composed of several colored rectangular segments in blue, green, teal, purple, dark green, and brown.

Important Questions to be Answered When Considering Reports

- What is already known on this topic?
- What is added by this report?
- What are the implications for public health practice?

Question 1:

- Which of the following questions is NOT one considered as important to be answered in an MMWR report?
 - a. What is already known on this topic?
 - b. What are the implications of this report for state and local health departments?
 - c. What is added by this report?
 - d. What are the implications for public health practice?

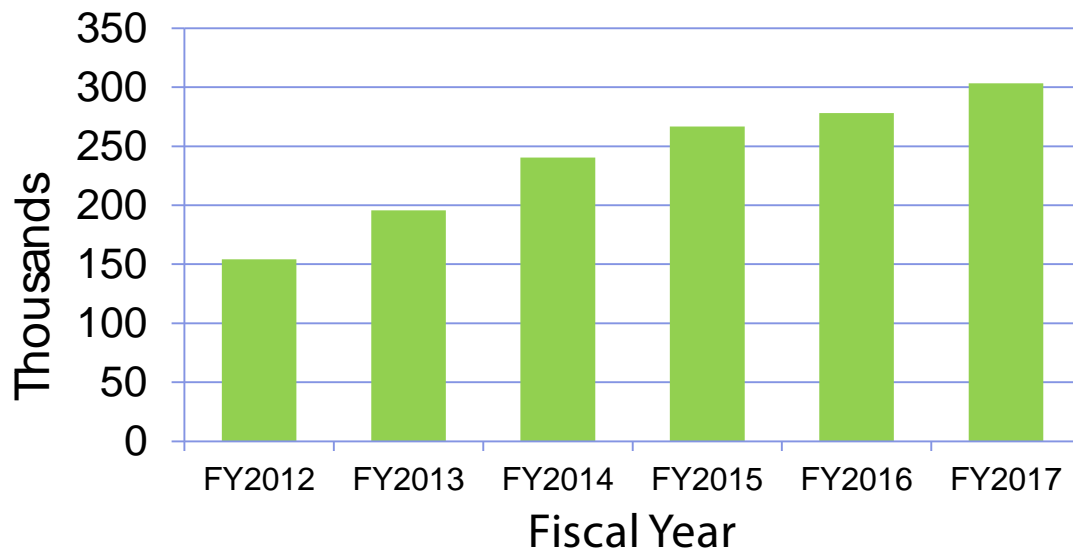
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ANSWER: b

***MMWR* Reach**

***MMWR* Electronic Subscriptions** **Fiscal Years 2012–2017**



Content Promotion — Tandem Publications

This Issue

Views **27,918** | Citations **0** | Altmetric **361**

Viewpoint

JAMA

August 1, 2017

New Data on Opioid Use and Prescribing in the United States

Anne Schuchat, MD¹

Vital Signs: Changes in Opioid Prescribing in the United States, 2006–2015

Weekly / July 7, 2017 / 66(26):697–704



Gery P. Guy Jr., PhD¹; Kun Zhang, PhD¹; Michele K. Bohm, MPH¹; Jan Losby, PhD¹; Brian Lewis²; Randall Young
Deborah Dowell, MD¹ ([View author affiliations](#))

View [suggested citation](#) and [related materials](#)

Article Metrics

Views:
33,143

Views equals page views
plus PDF downloads

Citations: 8

Altmetric:



News (106) [↗](#)
Blogs (8) [↗](#)
Policy documents (1) [↗](#)
Twitter (250) [↗](#)

Redistribution of Content — Mainstream Media



The opioid epidemic as seen in 6 charts

From: "Trends in Deaths Involving Heroin and Synthetic Opioids Excluding Methadone, and Law Enforcement Drug Product Reports, by Census Region — United States, 2006–2015"



Another Good Reason Not To Pee In The Pool

From: "Respiratory and Ocular Symptoms Among Employees of an Indoor Waterpark Resort — Ohio, 2016"



Scientists Find a Rare Superbug In Houston

From: "Notes from the Field: Pan-Resistant New Delhi Metallo-Beta-Lactamase-Producing *Klebsiella pneumoniae* — Washoe County, Nevada, 2016"

Redistribution of Content — Blogs

THE HUFFINGTON POST

CDC Releases Guidelines About How To Stay Healthy After A Hurricane

From: "Hurricane Season Public Health Preparedness,
Response, and Recovery Guidance for Health Care Providers,
Response and Recovery Workers, and Affected Communities —
CDC, 2017"

Redistribution of Content — Business Press

**BUSINESS
INSIDER**

5 reasons why you should absolutely get a flu shot this year

From: "Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2017–18 Influenza Season".

Forbes

Baby Suffers Lead Poisoning From Homeopathic Magnetic Healing Bracelet

From: "Notes from the Field: Lead Poisoning in an Infant Associated with a Metal Bracelet — Connecticut, 2016"

Redistribution of Content — News in Other Journals

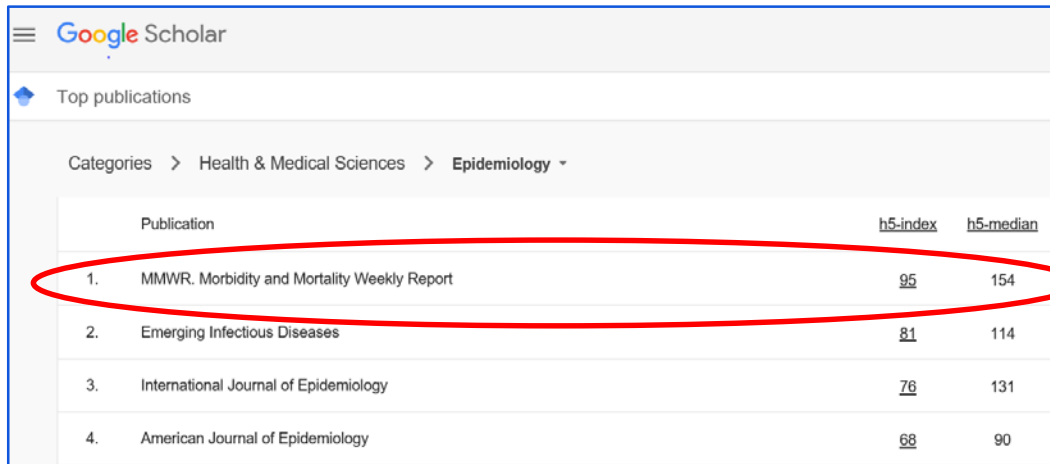


**CDC Updates Advice on Using
Nonpharmacologic Measures for Pandemic
Influenza**

From: "Community Mitigation Guidelines to Prevent Pandemic Influenza
— United States, 2017"

***MMWR* Bibliometrics**

2017 Google Scholar Top Publications - Epidemiology



Google Scholar

Top publications

Categories > Health & Medical Sciences > Epidemiology ▾

	Publication	h5-index	h5-median
1.	MMWR. Morbidity and Mortality Weekly Report	<u>95</u>	154
2.	Emerging Infectious Diseases	<u>81</u>	114
3.	International Journal of Epidemiology	<u>76</u>	131
4.	American Journal of Epidemiology	<u>68</u>	90

Retrieved October 13, 2017 from

https://scholar.google.com/citations?view_op=top_venues&hl=en&vq=med_epidemiology

2016 Journal Impact Factors

Journal	Journal Impact Factor
<i>New England Journal of Medicine</i>	72.4
<i>JAMA</i>	44.4
<i>Lancet</i>	44.0
MMWR	11.5
<i>Annual Review of Public Health</i>	10.2
<i>Pediatrics</i>	5.7
<i>Tobacco Control</i>	5.5
<i>American Journal of Public Health</i>	4.1
<i>Preventing Chronic Disease</i>	2.1

New *MMWR* Features

Online manuscript submission system — implementation of other publication best practices



Morbidity and Mortality Weekly Report

MMWR Author Submission Checklist

Report Title:

Corresponding Author:

Proprietary Considerations

☐

Authors agree that if their report is accepted for publication in the *Morbidity and Mortality Weekly Report (MMWR)*, it will upon publication be in the public domain and may be used and reprinted without permission. Citation as to source, however, is appreciated.



ICMJE Form for Disclosure of Potential Conflicts of Interest

Instructions

The purpose of this form is to provide readers of your manuscript with information about your influence how they receive and understand your work. The form is designed to be completed electronically. It contains programming that allows appropriate data display. Each author she form and is responsible for the accuracy and completeness of the submitted information. The

1. Identifying information.

MMWR Altmetric

Centers for Disease Control and Prevention

MMWR

Morbidity and Mortality Weekly Report

Weekly / Vol. 65 / No. 6

February 19, 2016

Prevalence of Healthy Sleep Duration among Adults — United States, 2014

Yong Liu, MD¹; Anne G. Wheaton, PhD¹; Daniel P. Chapman, PhD¹; Timothy J. Cunningham, ScD¹; Hua Lu, MS¹; Janet B. Croft, PhD¹

Altmetric.com
accessed 6/9/2016



About this score

In the top 5% of all research outputs scored by Altmetric

[MORE...](#)

Mentioned by

- 79 news outlets
- 7 blogs
- 860 tweeters
- 42 Facebook pages
- 9 Google+ users
- 5 Redditors

Readers on

- 16 Mendeley

Altmetric attention scores— CDC publications, 2016



- **8% (293/3690) of CDC authored publications published in *MMWR***
- **33% (31,439/94,894) of mentions about CDC publications in traditional and social media published in *MMWR***



Downloaded 03/15/17

Launched New Website – November 3

- Enhanced aesthetic
- Improved existing features
- New features
 - Homepage metrics
 - Report page metrics
 - Compilation of opioid reports



Question 2:

- What is Altmetric?
 - a. A new way to measure the number of mentions a paper gets in traditional and social media
 - b. A new way to measure the number of times a paper is cited in the medical literature
 - c. A new colorful graphic added to MMWR reports for visual interest
 - d. The best way to measure impact of an MMWR report

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ANSWER: a

Tips for Publishing in *MMWR*

- Read lots of *MMWR* articles
 - Familiarize yourself with format, style, and types of articles accepted
- Find an example article
- Follow the “Instructions for Authors”
- Get feedback by giving a presentation on your study
- Put yourself in the position of a reader
 - For *MMWR*, this should be a generalist, not a specialist


Requirements for *MMWR* Weekly Full Report/Outbreak Report

- Publication criteria: appropriateness, originality, timeliness, clarity
 - Word limit: <1400
 - Reference limit: <10
 - Tables, Figures and Boxes: <3
 - Summary boxes
 - Clearance
 - Corresponding author – needs to be available during production week
- 

Structure of *MMWR* Lead Paragraph (will serve as abstract in PubMed)

- Introduction
- Methods
- Results
- Discussion
- Single Overriding Communication Objective (SOCO) – what public health actions should follow?

Requirements for *MMWR* Weekly Notes from the Field

- Abbreviated reports intended to advise readers of ongoing or recent events of concern to the public health community
 - May contain early information, preliminary results, and other similarly incomplete information
 - Word limit: <500
 - Reference limit: “should be kept to an absolute minimum”
 - Tables, Figures and Boxes: <1
- 

Question 3:

- Which of the following is correct about word length and number of references permitted for MMWR reports?
 - a. Full Reports are limited to 3500 words and 30 references.
 - b. Notes from the Field are limited to 500 words and 10 references.
 - c. Outbreak Reports are limited to 500 words and 3 references.
 - d. Full Reports are limited to 1400 words and 10 references.

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ANSWER: d

Summary

- MMWR

- Plays a critical role in disseminating public health information, especially during public health responses
- Reaches broad audience through email subscriptions, news and social media
 - Recent modernization efforts likely to increase reach
- Cited frequently in peer-reviewed literature
- Encourages submissions from state and local health departments

***MMWR* Writing Training**

“Writing” training

VS

“Publishing” training

Before you start writing

- **Make sure your topic will help fill a gap in the literature**

How to determine whether your topic helps fill a gap in the literature

How to determine whether your topic helps fill a gap in the literature

- Literature review
 - Pubmed
 - Google Scholar
 - other search engines

“You don't write because you want to say something, you write because you have something to say.”

— F. Scott Fitzgerald

the public health version

You don't write because you want to publish something, you write because you have learned something that is new and will be useful to people who read your report.

The BMJ

- What they look for:
 - Is it new?
 - Is it true?
 - Do we care?

Is it new?

- **Literature review**
 - Pubmed
 - Google Scholar
 - other search engines
- **Contact Subject Matter Experts (SMEs)**

Question 4:

- To determine whether your topic will help fill a gap in the literature, it is best to rely on the literature rather than SMEs?
- a. True
- b. False

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- a. True
- b. False

ANSWER: b

Is it true?

- **Data source**
- **Definitions**
- **Study Design**
- **Statistical methods**

Is it true?

- **Data source**
e.g., validity of the data

Is it true?

- **Definitions**

e.g.:

“Among persons living in municipalities heavily impacted by hurricane Sandy. . .”

Is it true?

- **Definitions**

e.g.:

“Among persons living in municipalities heavily impacted by hurricane Sandy. . .”

But the study used BRFSS data, so it can report only on adults, not “persons”

Is it true?

- **Study design**

e.g.:

“The . . . Department of Public Health investigated an increase in fentanyl-positive drug-associated illnesses reported . . .”

Is it true?

- **Study design**

e.g.:

“The . . . Department of Public Health investigated an increase in fentanyl-positive drug-associated illnesses reported . . .”

“A case-control study was performed. . . ”

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Is it true?

- **Statistical methods**

e.g.:

“Because currently available screening tests for latent TB infection (LTBI) have poor sensitivity in populations with low prevalence of LTBI, national guidelines recommend testing persons at increased risk for progression from infection to TB disease.”

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e.g.:

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just one **problem**. . .

Is it true?

- **Statistical methods**

e.g.:

“Because currently available screening tests for latent TB infection (LTBI) have poor sensitivity in populations with low prevalence of LTBI, national guidelines recommend testing persons at increased risk for progression from infection to TB disease.”

just one **problem. . .**

The sensitivity of a screening test is constant regardless of the prevalence of the condition.

Question 5:

- What are characteristics of an article that increase the chances of it being accepted by a journal?
 - a. The information is new
 - b. The data used in the study have a high validity
 - c. The editor thinks the information will be useful to the journal's readers
 - d. All of the above

Question 5:

- What are characteristics of an article that increase the chances of it being accepted by a journal?
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 - d. All of the above

ANSWER: d

Do we care?

Do we care?

- Who are “we”?

Do we care?

- Who are “we”?
- “We” are the people who read the journal.

“MMWR Weekly publishes information useful to readers in the public health community, private clinicians, researchers, teachers and students, and the news media.”

Do we care?

- Who are “we”?
- “We” are the people who read the journal.
- One of the editor’s jobs is to serve as a proxy for “we”.

and: What do “we” care about?

and: What do “we” care about?

MMWR instructions for authors:

“Reports are based on science (especially epidemiology) or on public health policy or practice.”

“new and useful”

working definition of “useful”

“information that people who read the report can apply to their work to help reduce morbidity or mortality or improve quality of life in a defined population”

How begin writing an *MMWR* report?

- After literature review...
- Develop working title
- Prepare dummy tables and figures

Why working title?

- Focuses thinking about purpose of report
- Communicates this focus succinctly to co-authors

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- Focuses thinking about purpose of report
- Communicates this focus succinctly to co-authors

HINT: Review titles of *MMWR* reports

Why dummy tables and figures?

- Summarizes analytic plan and analyses
- Allows consensus building about primary focus of report among authors
- Streamlines writing process because already now focus on what you are doing

Why dummy tables and figures?

- Summarizes analytic plan and analyses
- Allows consensus building about primary focus of report among authors
- Streamlines writing process because already now focus on what you are doing

HINT: Review lots of *MMWR* tables and figures

Novice authors

Review papers in your target journal

Find a model

Follow it for success

Questions

For more information please contact:
Charlotte K. Kent, PhD, MPH
cgk3@cdc.gov

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

