Climate Change and Cancer Care

Deborah K. Mayer, PhD, RN, AOCN®, FAAN, and Mary McCabe, RN, BS, MA

The summer weather forecast was recently announced, predicting a greater number of storms along the East Coast (Rice, 2013). That forecast includes a prediction for 18 tropical storms and 9 hurricanes—a typical year has 12 and 7, respectively. This prediction may be frightening for those who survived Hurricane Katrina or Sandy, flooding in Illinois, or fires in northern California.

So what is the connection between this prediction and climate change? And between climate change and cancer care? At a minimum, extreme weather events cause disruption of services, but they also can lead to loss of life and inflict massive damage to the environment and the economy (Costello et al., 2009). These events have always existed but have been shifting in patterns and frequency because of climate changes (Dutzik & Willcox, 2012; National Academy of Sciences, 2013). We have all been affected by some form of extreme weather, including prolonged droughts, hurricanes, fires, and new super storms, which have affected 49 of the 50 states in the United States since 2007, impacting 80% of the U.S. population (Dutzik & Willcox, 2012) (see Figure 1). And these climate changes are directly and indirectly affecting our health (Costello et al., 2009).

In 2009, *Lancet* and the University College London Institute for Global Health Commission issued a detailed report describing the health effects of climate change, which they identified as the biggest global health threat of the 21st century (Costello et al., 2009). The report portrayed issues with changing patterns of diseases and morbidity, food, water and sanitation, shelter and human settlements, extreme events, population, and migrations (Costello et al., 2009). More detailed briefs on each of these topics have been posted and can be found at [www.thelancet.com/global-health](http://www.thelancet.com/global-health) and [www.ucl.ac.uk/igh/research/projects/all-projects/lancet-1](http://www.ucl.ac.uk/igh/research/projects/all-projects/lancet-1).

So what does this mean for cancer care? Our colleagues along Hurricane Sandy’s path can tell you (Rosenthal, 2012). Some patients with cancer were transferred from one healthcare system to another. Other patients were unable to get their planned treatments or contact their providers. For example, in the transition of patients with cancer to Memorial Sloan-Kettering, details were needed about actual treatments delivered, including timeframes and information about comorbidities. The information was not always readily available.

Hospitals are focusing on refining their disaster plans. However, it may not be a
Commission on Cancer, 2012). The guide-
cancer (American College of Surgeons
summary and care plan for patients with
quiring the development of a treatment
college of Surgeons guidelines re
find themselves dislocated from their home
for patients to have in hard copy if they
admission. This document is very valuable
medications are reviewed at each visit or
ciliation, which requires that a patient’s
patient safety goals is medication recon
from one institution to another.
One of the Joint Commission’s national
patient safety goals is medication reconcili-
cation, which requires that a patient’s
medications are reviewed at each visit or
admission. This document is very valuable
for patients to have in hard copy if they
find themselves dislocated from their home
and/or needing new medical personnel.
Groups are focusing on the new Ameri-
can College of Surgeons guidelines re-
quiring the development of a treatment
summary and care plan for patients with
cancer (American College of Surgeons
Commission on Cancer, 2012). The guide-
lines take on new importance when they
become the only records available that
the patient takes with him or her when
seeking care in a new location or with
providers who have limited access to
information. Patients also should receive
a written copy of their diagnosis and
treatment plan for the same reasons. In
addition, more attention is being given
to the sharing of information or test re-
results through patient Web portals. This
information can be downloaded and kept
along with other key health documents.
So what can you do? Thinking about
and preparing for a hurricane or other
natural disaster before it occurs is
 prudent. Think about how to prepare your
patients and practices for potential dis-
ruptions in care in places vulnerable to
extreme weather. Make sure patients
have some type of documentation about
their diagnosis and current treatment
plan. Participate in safety committees or
discussions about emergency readiness.
And then learn more about the global
implications of climate change on health.

References
American College of Surgeons Commission
on Cancer. (2012). Cancer program stan-
dards 2012: Ensuring patient-centered
cancer/coc/programstandards2012.pdf
Costello, A., Abbas, M., Allen, A., Ball, S., Bel-
Managing the health effects of climate
change: Lancet and University College
London Institute for Global Health Com-
Dutzik, T., & Willcox, N. (2012). In the path
of the storm: Global warming, extreme
weather, and the impacts of weather-
related disasters in the United States.
Retrieved from http://www.environment
america.org/sites/environment/files/ reports/In%20the%20Path%20of%20
the%20Storm-2013.pdf
National Academy of Sciences. (2013). A
review of the draft 2013 national climate
ly/110mS8x
Rice, D. (2013). Hurricane forecast: Above-
average Atlantic season. Retrieved from
http://www.usatoday.com/story/weather/
2013/04/10/2013-atlantic-hurricane
season-forecast-colorado-state/2067
953
Rosenthal, E. (2012). How the cancer com-
munity fared during Hurricane Sandy’s
Mid-Atlantic sweep. Oncology Times,
34(23), 8, 10.

Celebrity Cancers
Deborah K. Mayer, PhD, RN, AOCN®, FAAN, and Seth M. Noar, PhD

You may be aware that Angelina Jolie an-
nounced her recent prophylactic bilateral
mastectomies and re-
constructive surgery
(Jolie, 2013). Her moth-
er died of ovarian cancer and Ms. Jolie
has the BRCA1 mutation. It certainly re-
ceived a fair amount of news coverage.
Her op-ed piece in the May 14th New
York Times quickly generated more
than 1,500 comments, and Google
reported a huge surge in searches for
Angelina Jolie. We hope the message
people take home from this is about
knowing your family history about
cancer and the possibility of genetic
counseling and testing in high-risk
individuals (not necessarily about having
bilateral mastectomies).
This public attention is not unusual
when a public figure has a health issue. We
saw a mammography bump when Betty
Ford had breast cancer surgery in 1974
and an uptick in colonoscopies after Katie
Couric had the procedure in 2000 as part
of a weeklong TV series on colon cancer. A
recent review demonstrates that celebrity
events like these not only garner the pub-
ic’s attention but also have measurable ef-
effects (Noar, Willoughby, Myrick, & Brown,
in press). For those interested in following
celebrity health issues, go to www.celebri-
tydiagnosis.com to get the facts behind the
news. And be prepared to educate your pa-
tients, their families, and others in response
to questions about this issue.

ms/YSjkBU
Noar, S. M., Willoughby, J. F., Myrick, J. G.,
& Brown, J. (in press). Public figure
announcements about cancer and op-
portunities for cancer communication: A
review and research agenda. Health
Communication.
Deborah K. Mayer, PhD, RN, AOCN®, FAAN, is an
associate professor in the School of Nursing and Seth
M. Noar, PhD, is an associate professor in the School
of Journalism and Mass Communication, both at the
University of North Carolina–Chapel Hill. The authors
take full responsibility for the content of the article.
No financial relationships relevant to the content
of this article have been disclosed by the editorial
staff. Mayer can be reached at CJOEditor@ons.org.
© iStockphoto.com/GYI NSEA