There are basic tenets we all learn growing up: wash your hands frequently, brush your teeth, eat your vegetables and get a good night’s sleep. While all of us know the importance of each of these fundamental principles, there is significant variation in adherence observed in the population. You know who you are. Of relevance to this particular article is the last principle and its importance not only to your well-being, but your patients’ as well.

On December 14, 2011, The Joint Commission (TJC) issued a Sentinel Event Alert titled “Health care worker fatigue and patient safety” http://www.jointcommission.org/assets/1/18/SEA_48.pdf. TJC typically issues such an alert when it observes an unusual frequency of events that raise concern for patient safety and quality of care. The TJC policy in regard to sentinel events states that it reviews organization activities in response to sentinel events in its accreditation process as part of its mission to continuously improve safety and quality of health care to the public. As TJC acknowledges, the link between fatigue and adverse events is well-documented in the literature. Patients and health care workers can be harmed and efficiency diminished as a result of worker fatigue. While it acknowledges that the problem of fatigue is multi-factorial, TJC focuses its alert on the risks of an extended work day and accumulation of such extended days.

As TJC articulates, fatigue can result from either an insufficient quantity of sleep or an insufficient quality of sleep over an extended period of time. Problems that can be exhibited include:

- Lapses in attention and inability to stay focused.
- Reduced motivation.
- Compromised problem-solving.
- Confusion.
- Irritability.
- Memory lapses.
- Impaired communication.
- Slowed or faulty information processing and judgment.
- Diminished reaction time.
- Indifference and loss of empathy.

Evidence

TJC cites several studies as support for this alert. One study documented an increased error rate of three-fold for nurses who worked shifts of 12.5 hours or longer. Other studies show increased occupational injuries to nurses as a result of working shifts in excess of 12 hours. With respect to resident physicians, TJC acknowledges the 2003 Accreditation Council for Graduate Medical Education (ACGME) duty hour restrictions limiting work shifts to 30 hours and no more than 80 hours per week. It goes on to state, however, the dangers of extended resident work hour realities even under the current limitations. For instance, residents working recurrent 24-hour shifts make 36 percent more serious preventable adverse events than individuals working up to 16-hour shifts, make five times as many serious diagnostic errors and 300 percent more fatigue-related preventable adverse events that led to a patient’s death. The last point, especially, is worth taking a minute to let sink in.

Physicians, including anesthesiologists, are highly motivated and driven individuals. It is your essence. You would not be where you are today and perform the incredible services you provide for patients if this was not the case. The RAND study on anesthesia workforce trends stated that anesthesiologists work an average of 63 hours per week, of which 49 hours are clinical; and nurse anesthetists work an average of 44 hours per week, of which 37 hours are clinical. But in this environment where everyone seems asked, nay demanded, to do more with less, we need to be cognizant not to include sleep in that chaos.
So what is an anesthesia practice to do to ensure its anesthesiologists are afforded adequate sleep? First, you can make sure your hospitals are aware of this recent Sentinel Event Alert and the various actions TJC suggests hospitals take to guard against health care worker fatigue. For instance, hospitals should do the following:

- Assess for fatigue-related risks, including off-shift hours, consecutive shift work and their respective policies and procedures.
- Assess hand-off process and procedures.
- Encourage staff input in designing work schedules and provide opportunities for staff to express concerns about fatigue.
- Create and implement a fatigue management plan that includes scientific strategies for fighting fatigue.
- Educate staff about sleep hygiene and impacts of fatigue on patient and worker safety.
- Encourage teamwork to mitigate against the effects of fatigue.
- Consider fatigue as a contributing factor in all adverse events.
- Assess the environment provided for sleep breaks to ensure it fully protects sleep.

In addition, ASA is considering development of additional information and guidance for members. The Committee on Occupational Health plans to continue its work on this issue, including an upcoming ASA NEWSLETTER article, as well as the Committee on Quality Management and Departmental Administration.

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Other Sentinel Event Alerts

There are 48 Sentinel Event Alerts issued from TJC covering a wide range of issues. In order to find a list of the alerts, please visit the following link: [http://www.jointcommission.org/daily_update/joint_commission_daily_update.aspx?k=721&b=&t=4](http://www.jointcommission.org/daily_update/joint_commission_daily_update.aspx?k=721&b=&t=4). TJC also shares data related to sentinel events reported by organizations on a voluntary basis. A sentinel event with respect to anesthesia is defined as resulting in death or permanent loss of function. The data are based on root cause analyses conducted by the organization, and the majority of events have multiple root causes. As a point of reference, here is the following information reported by TJC on anesthesia-related events from 2004 through third quarter 2011 (n=82).

- Assessment (adequacy, timing, or scope of) – 48
- Anesthesia Care (planning, monitoring and/or discharge) – 47
- Human Factors (staffing levels, staffing skill mix, staff orientation, in-service education, competency assessment, staff supervision, etc.) – 41
- Communication (oral, written, electronic, among staff, with/among physicians, with administration, with patient or family) – 39
- Leadership (organizational planning, culture, community relations, service availability, priority setting, resource allocation, complaint resolution, leadership collaboration, standardization, etc.) – 34
- Information Management (needs assessment, confidentiality, security of information, data definitions, availability of information, technical systems, patient identification, etc.) – 14
- Physical Environment (general safety, fire safety, security systems, hazardous materials, emergency management, smoking management, equipment management, utilities management) – 12
- Medication Use (formulary, storage/control, labeling, ordering, preparing/distributing, administering, patient monitoring) – 12
- Continuum of Care (access to care, setting of care, continuity of care, transfer of patient, discharge of patient) – 6
- Care Planning (planning and/or collaboration) – 5