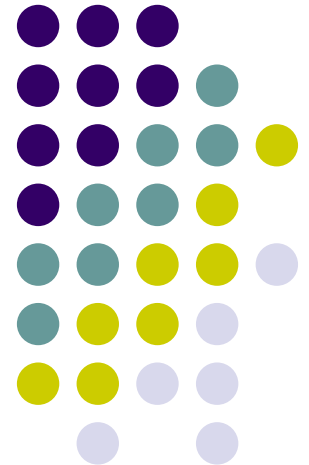


PRIMARY CARE ISSUES IN THE OIF/OEF VETERAN

Jean Baum PA-C

OIF/OEF Primary Care Provider

VA NWIHCS-Lincoln



Most Common Diagnoses in Returning OIF/OEF Veterans*



- Tobacco Use Disorder
- Back Pain
- Dyslipidemia
- Tinnitus &/or Partial Hearing Loss

*Excludes mental health diagnoses

- Other Areas of Concern
 - Sexual Dysfunction
 - Weight Gain
 - Traumatic Brain Injury



Tobacco Use

- 37% of Lincoln OIF/OEF vets use tobacco (National average 23% of males and 19% of females)
 - smoking >> smokeless tobacco use
- Smoking
 - Single most preventable cause of disease and death in the US
 - **Smokers lose an average of 13 years of life due to this addiction**
 - Causes over 36% of all cardiovascular disease
 - Responsible for 30% of all cancer-related deaths



Cancer and Smoking

- Decades of research show strong association between smoking and cancers of many organ systems
- Causation proven in cancers of lung, bladder, kidney, pancreas, mouth, throat, larynx, esophagus, stomach, uterus and cervix
- Probably linked to breast and colon cancers

Lung Cancer and Smoking



- Second most common type of cancer in US
- Most common cause of cancer-related deaths in US-- **315,350 deaths per year**
- Smoking increases risk of lung cancer by 10-20 fold

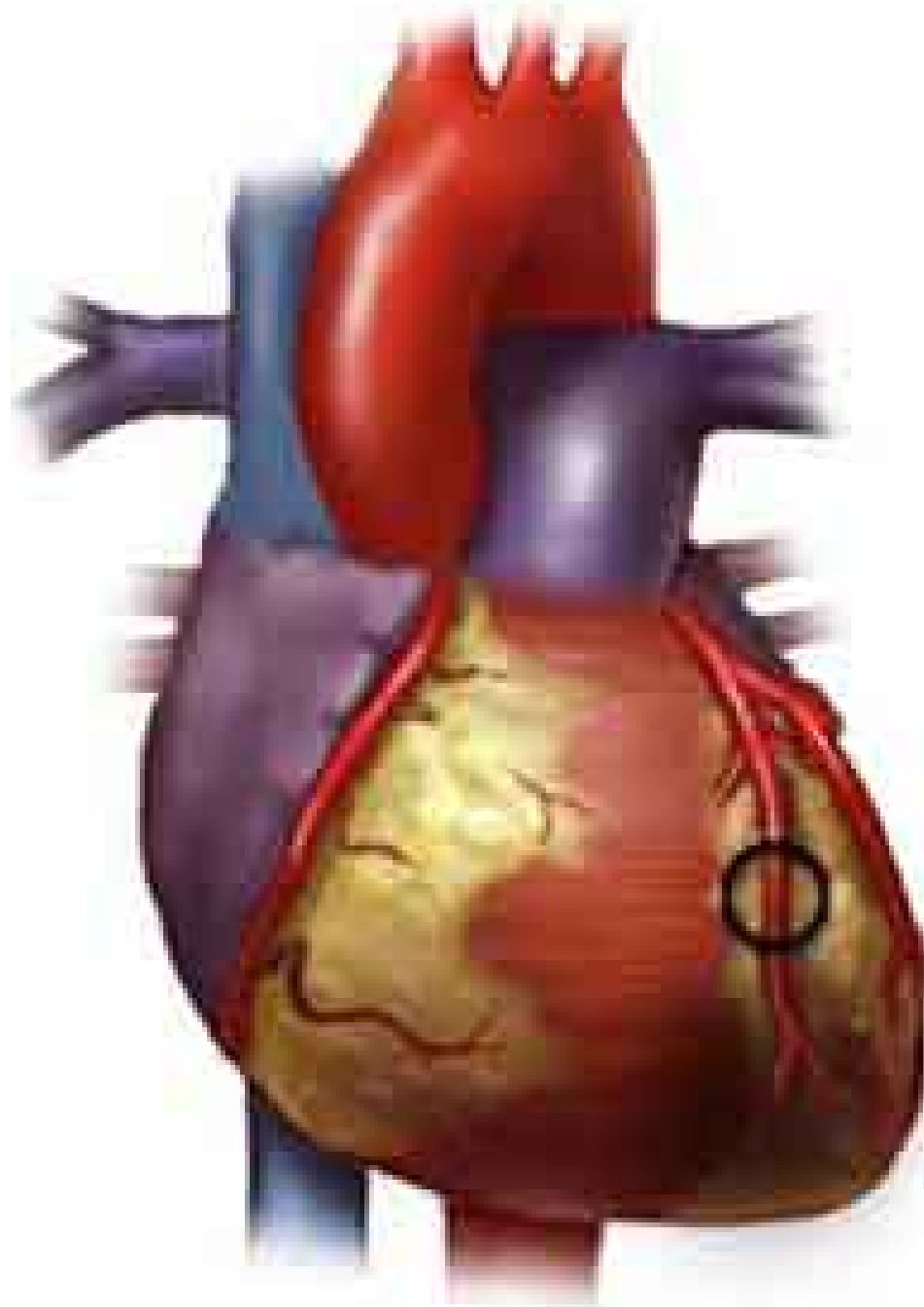


Smoking
causes fatal lung cancer

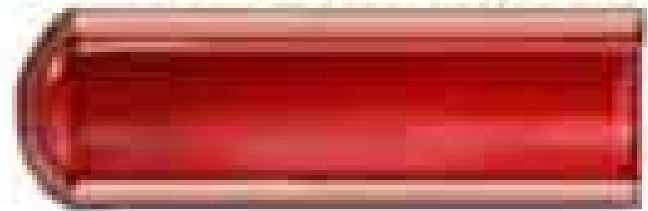
Cardiovascular Disease and Smoking



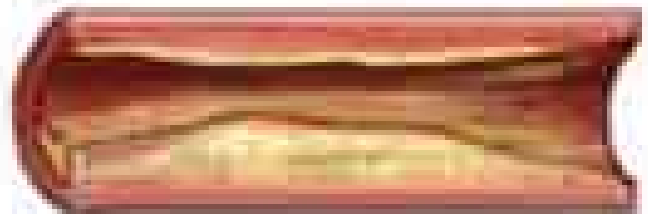
- CVD: Disease of the heart and blood vessels due to atherosclerosis-plaque in the arteries
 - Kills one in three Americans
 - 400,000 deaths/yr in US from CV disease
- Smoking is a strong risk factor
 - 1 ppd smokers: males 6x more likely, females 3x more likely to suffer heart attack than nonsmokers



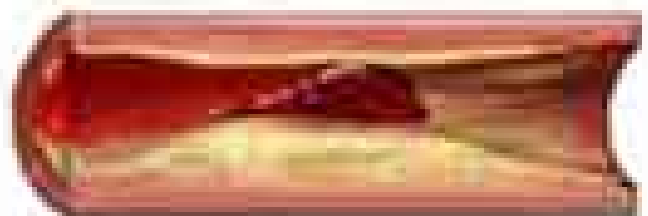
Normal coronary artery



Atherosclerosis



Atherosclerosis
with blood clot





Tobacco Cessation

- HOW THE VA CAN HELP:
 - Smoking Cessation Classes
 - 3-4 pm on Thursdays or help by phone
 - Smoking cessation medications
 - Bupropion (Zyban), varenicline (Chantix), nicotine replacement (NR) products
 - Slightly greater efficacy when med is used with NR product



Bupropion (Zyban)

- Works on the craving center of the brain
- Used first line at the VA with or without NR
 - Allow one week on med before attempting to quit
 - Doubles the likelihood of quitting
 - Works slightly better in combination with NR
 - May cause insomnia and dry mouth
 - Usually prescribed for 7-12 weeks



Varenicline (Chantix)

- Studies: More effective than bupropion
- Used at the VA if bupropion & NR fail
- May cause abnormal dreams and nausea
 - Rarely can cause aggressive, erratic & /or suicidal thoughts
 - pt must enroll in smoking cessation program so behavior can be monitored

Back pain



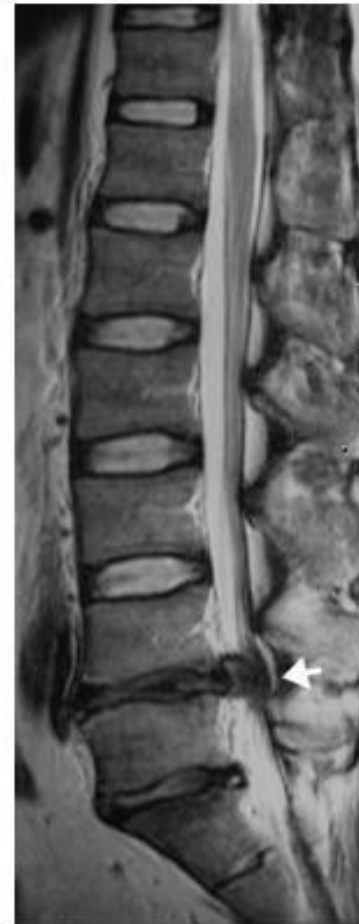
- 38% of new OIF/OEF have back pain
- Most back pain from wearing IBA
 - Very common in convoy units
- Usually soft tissue origin x-rays normal
- Frequently chronic, can be self-managed, not cured
 - physical therapy, home exercises, NSAIDS, steroid inj into the spine; narcotics avoided
- Smoking, obesity increase likelihood of chronic pain



Back pain with sciatica

- Pts with bulging or ruptured (herniated) disks may present with sciatica
 - Pain, tingling, numbness, or weakness of the leg
- Symptoms may come and go
- Usually just one leg
- Surgery may be indicated if leg weakness occurs

MRI lower back injury





Dyslipidemia

- 2nd most common diagnosis in OIF/OEF vets
- Risk factor for cardiovascular disease
 - Most people will die of CV disease
- Dyslipidemia includes
 - High levels of triglycerides and/or
 - High levels of LDL cholesterol and/or
 - Low levels of HDL cholesterol
- Affected by diet, genetics, smoking, exercise levels

Decreased Hearing &/or Tinnitus



- Decreased Hearing
 - Usually high frequency hearing loss
 - Short blast at >120-155 dB can cause hearing loss. Power lawn mower is 90 dB
 - Results from damage to the “hair” cells in the cochlea by loud blasts or prolonged exposure to loud noises

Inner Ear

Healthy vs. Damaged Cells

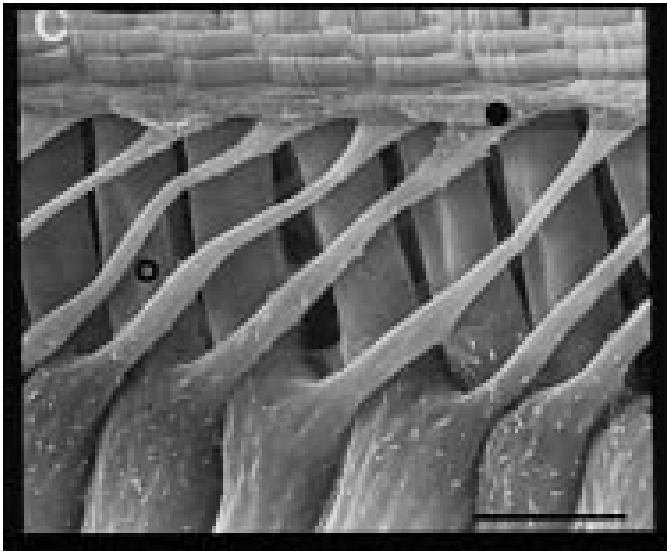


Figure 2 – Scanning electron micrograph of “healthy” organ of Corti

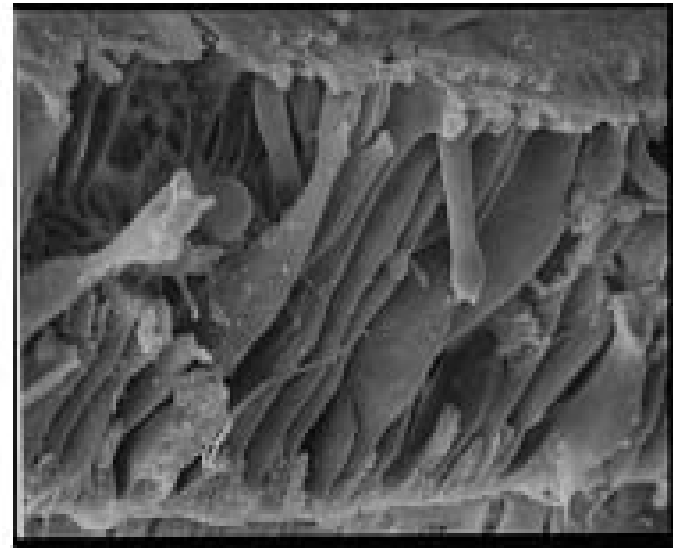


Figure 3 – Scanning electron micrograph of “noise-damaged” organ of Corti.

Tinnitus

(Ringing in the ears)



- Disruption of nerve impulses from ear to the brain similar to phantom limb syndrome
- About 25% of tinnitus will worsen over time
- Chronic and unlikely to go away
- Some people experience tinnitus, other people suffer from it

Disability perceived by the patient does not directly correlated with the loudness or length of time with tinnitus

Tinnitus



- Disabling tinnitus
 - Underlying mood disorders increase the likelihood that tinnitus will be perceived as disabling
 - More bothersome in those with insomnia
 - Lack of distractions makes tinnitus more noticeable



Treatments for tinnitus

- Treating severe hearing loss with hearing aids
- Treat insomnia with sleep aids and sleep hygiene
 - Avoid excessive and late caffeine consumption, get up if can't sleep, avoid night caps, avoid disturbing TV or reading, etc
- Tinnitus Centers
 - Tinnitus Retraining Therapy
 - Biofeedback
 - Cognitive Behavioral Therapy

Sexual Dysfunction

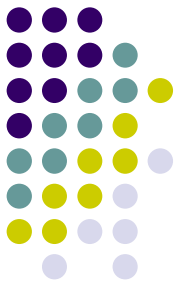


- Under diagnosed
 - Younger vets aren't being asked direct questions
 - Vets unease with discussing sexual issues
- National Health and Social Life Survey in younger men ages 18 to 59--31% with sexual dysfunction
- Massachusetts Male Aging Study
 - 40 % of men age 40 had some level of impaired sexual function, i.e. erectile dysfunction, diminished libido or abnormal ejaculation

Risk Factors for Sexual Dysfunction



- Depression and Stress
 - Erectile dysfunction and decreased interest in sex are common components of depression in men
 - Erectile dysfunction leads to performance anxiety
 - Treating the underlying depression can be a two-edged sword as many of the antidepressants have sexual side effects



Other Risk Factors for Sexual Dysfunction

- Weight Gain
- Dyslipidemia
- Smoking
- Lack of physical activity
- Excessive alcohol use
- HTN
- Advancing age



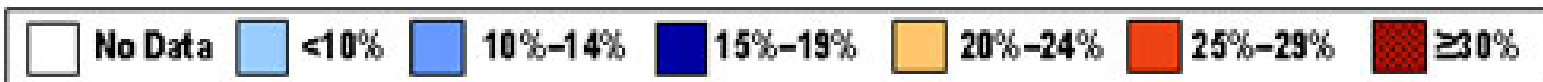
Treatment for Sexual Dysfunction

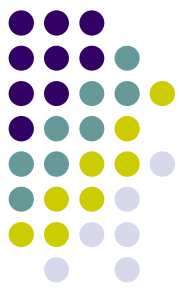
- Treating the underlying depression
 - Counseling for depression &/or performance anxiety
- Lifestyle modification
 - Stop smoking, lose wt, increase exercise, decrease alcohol
- Eliminating offending meds
 - Certain BP meds, diuretics, some antidepressants
- Treating HTN, abnormal chol levels
- Use of medications for erectile dysfunction
 - VA can prescribe vardenafil (similar to Viagra)



Weight Gain/Obesity

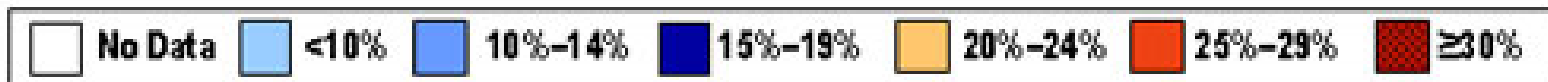
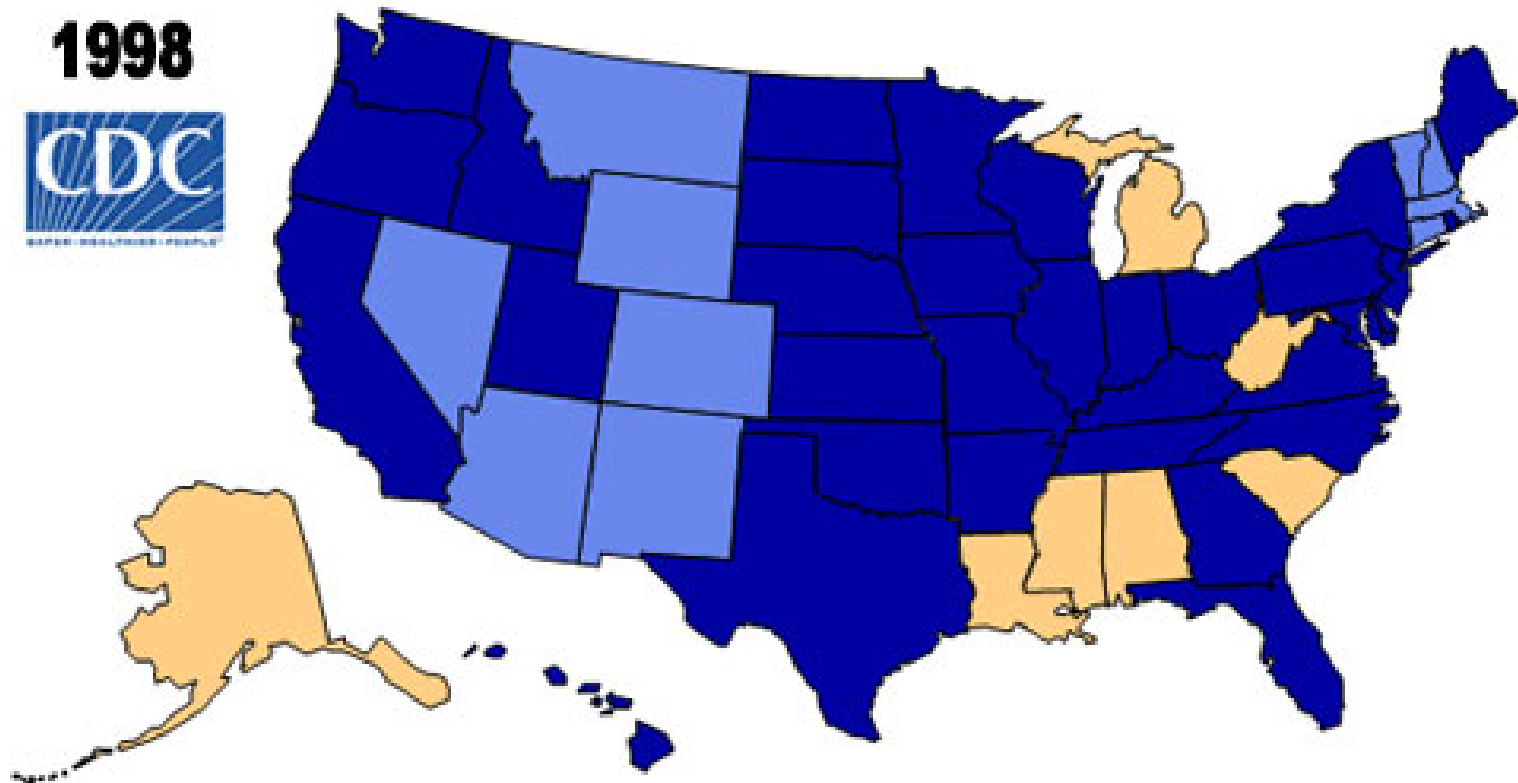
- Most veterans experience weight gain on return-- average 10-20 lbs
- Overweight : body mass index (BMI) of ≥ 25
Obese: BMI of ≥ 30
- 191,700 veterans in VSN 23 are overweight or obese, nationally 70% of all veterans obese or overweight





Percent of Obese US Adults

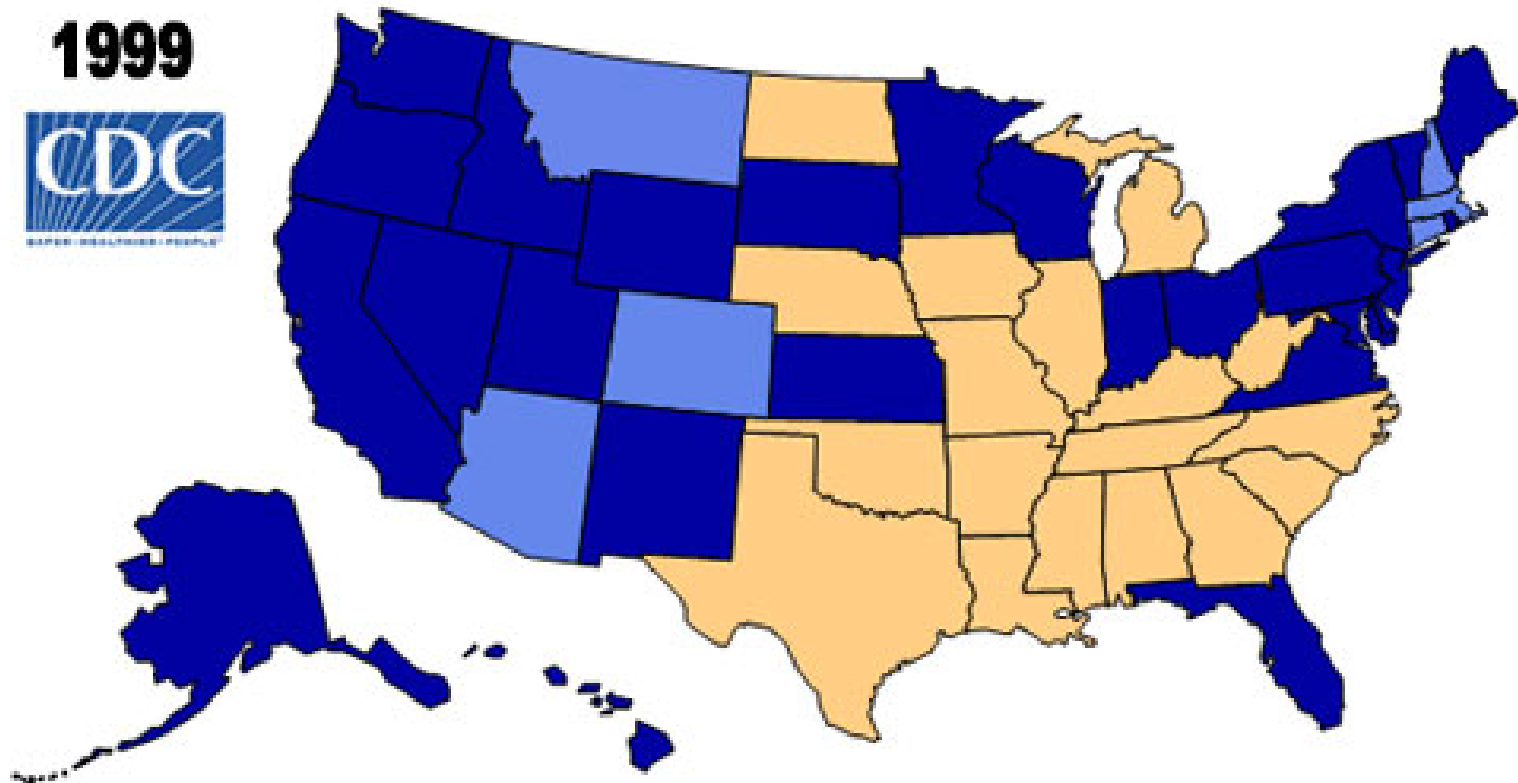
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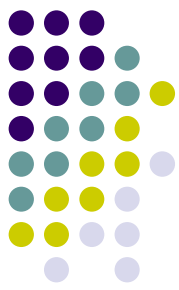




Percent of Obese US Adults

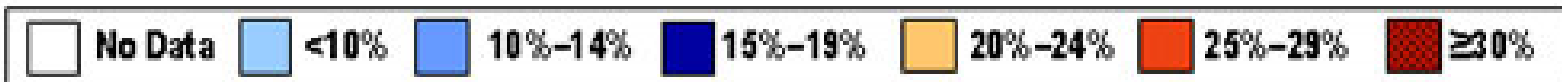
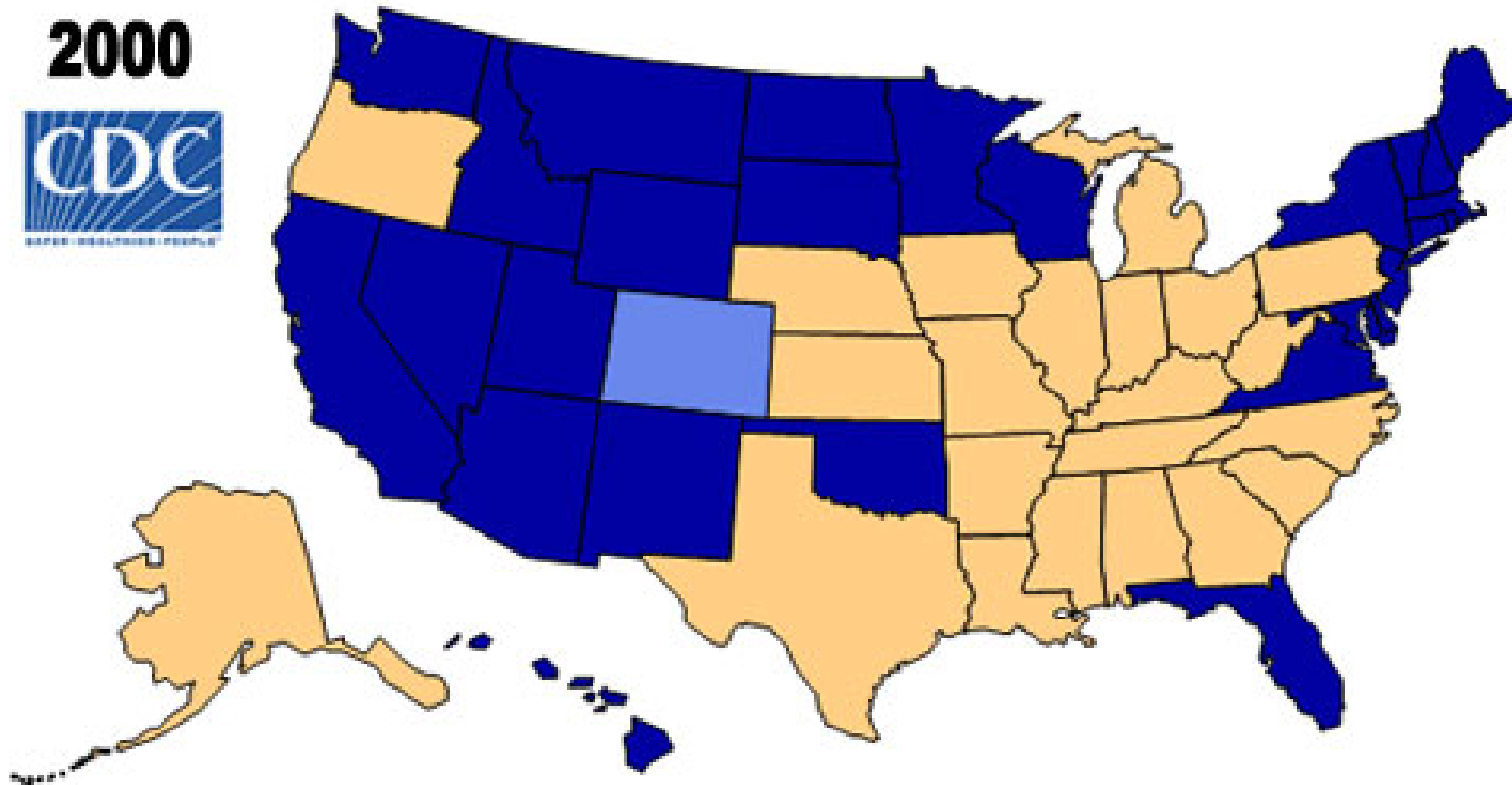
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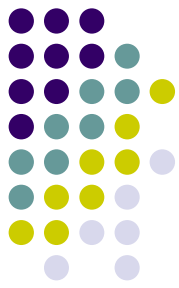


Percent of Obese US Adults

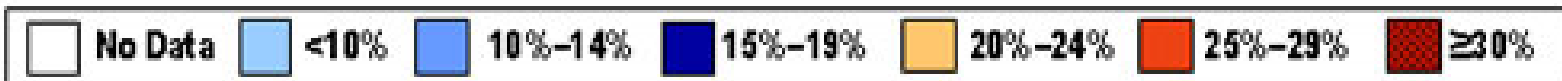
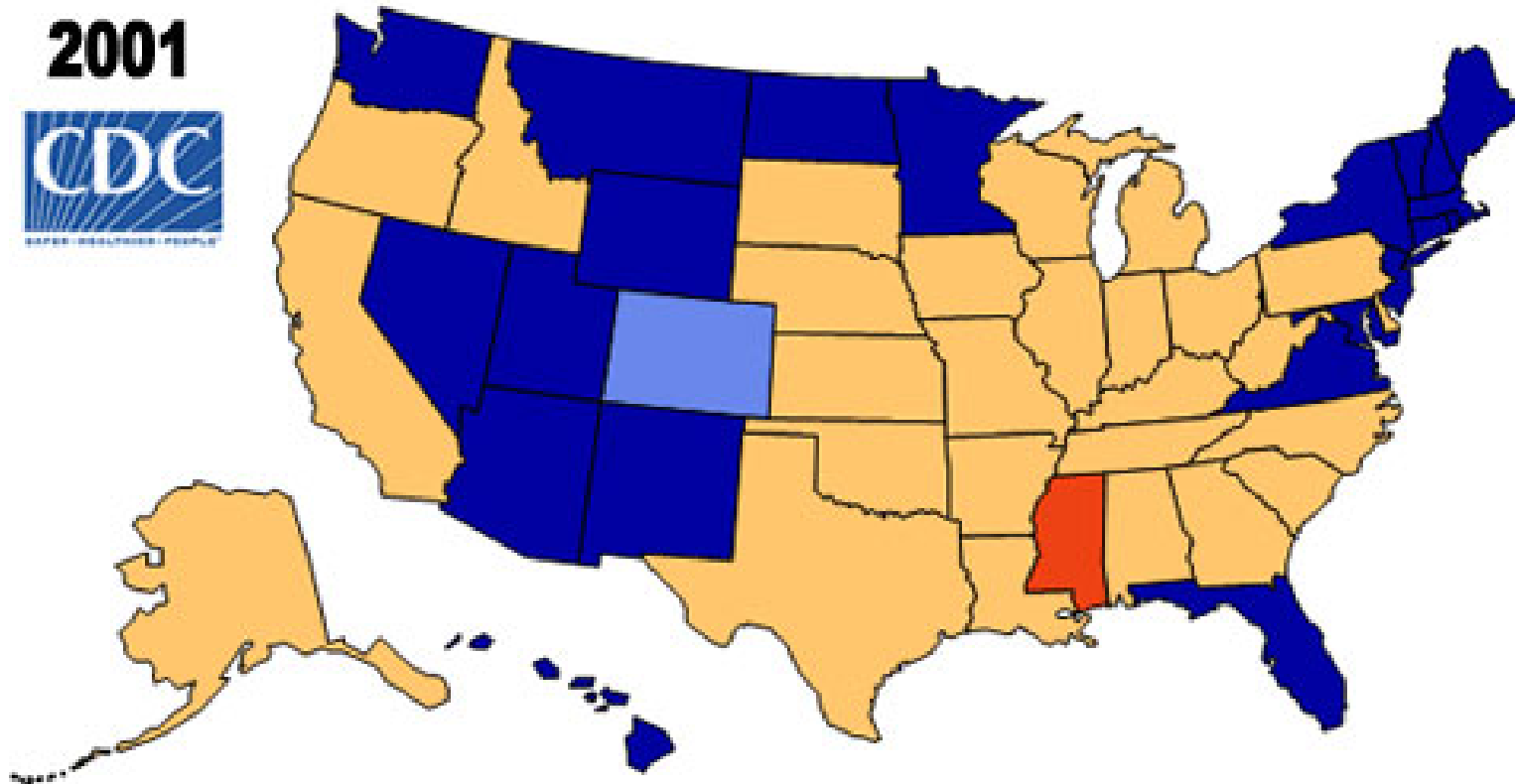
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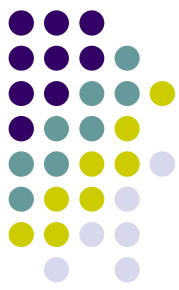


Percent of Obese US Adults



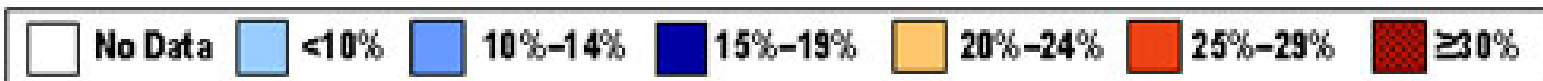
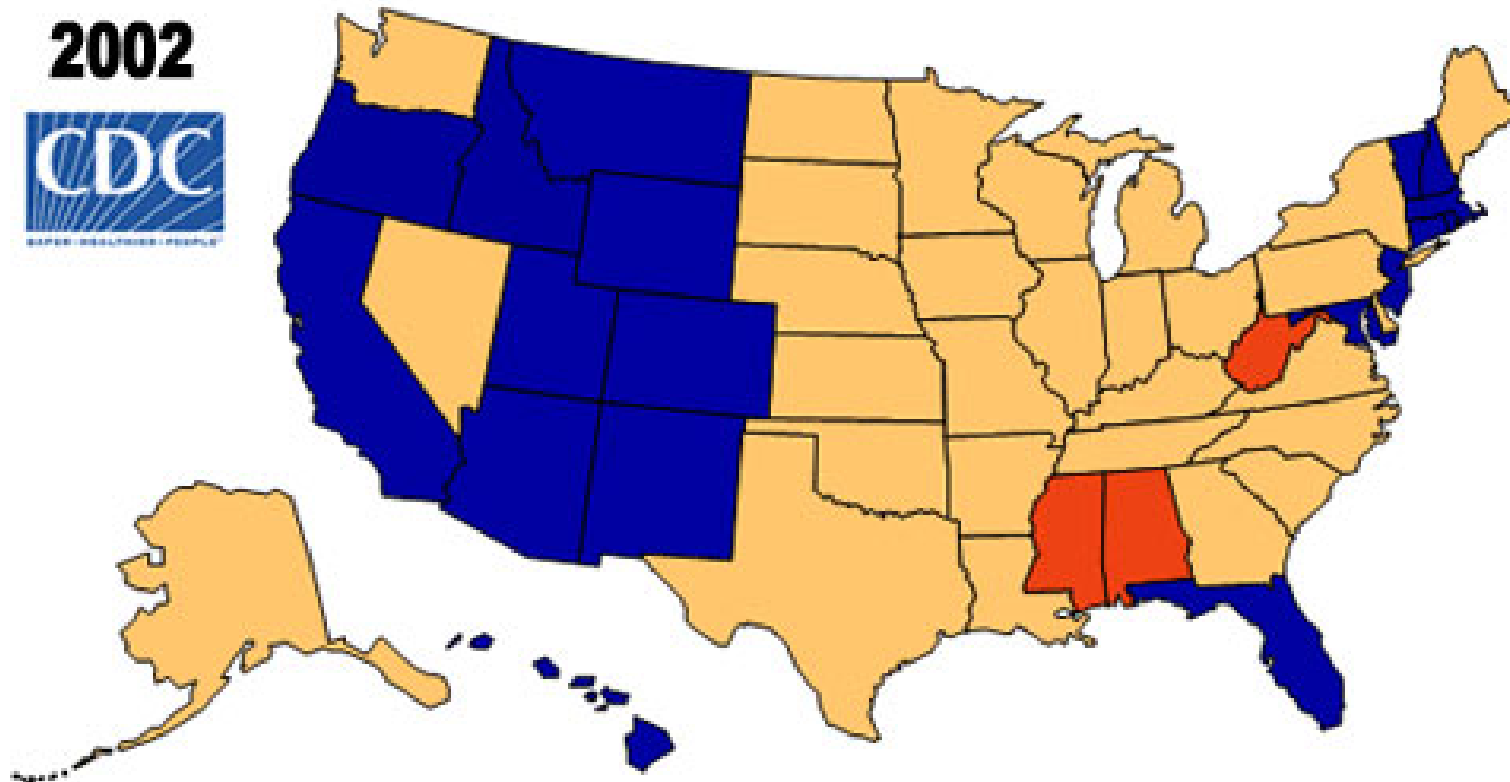
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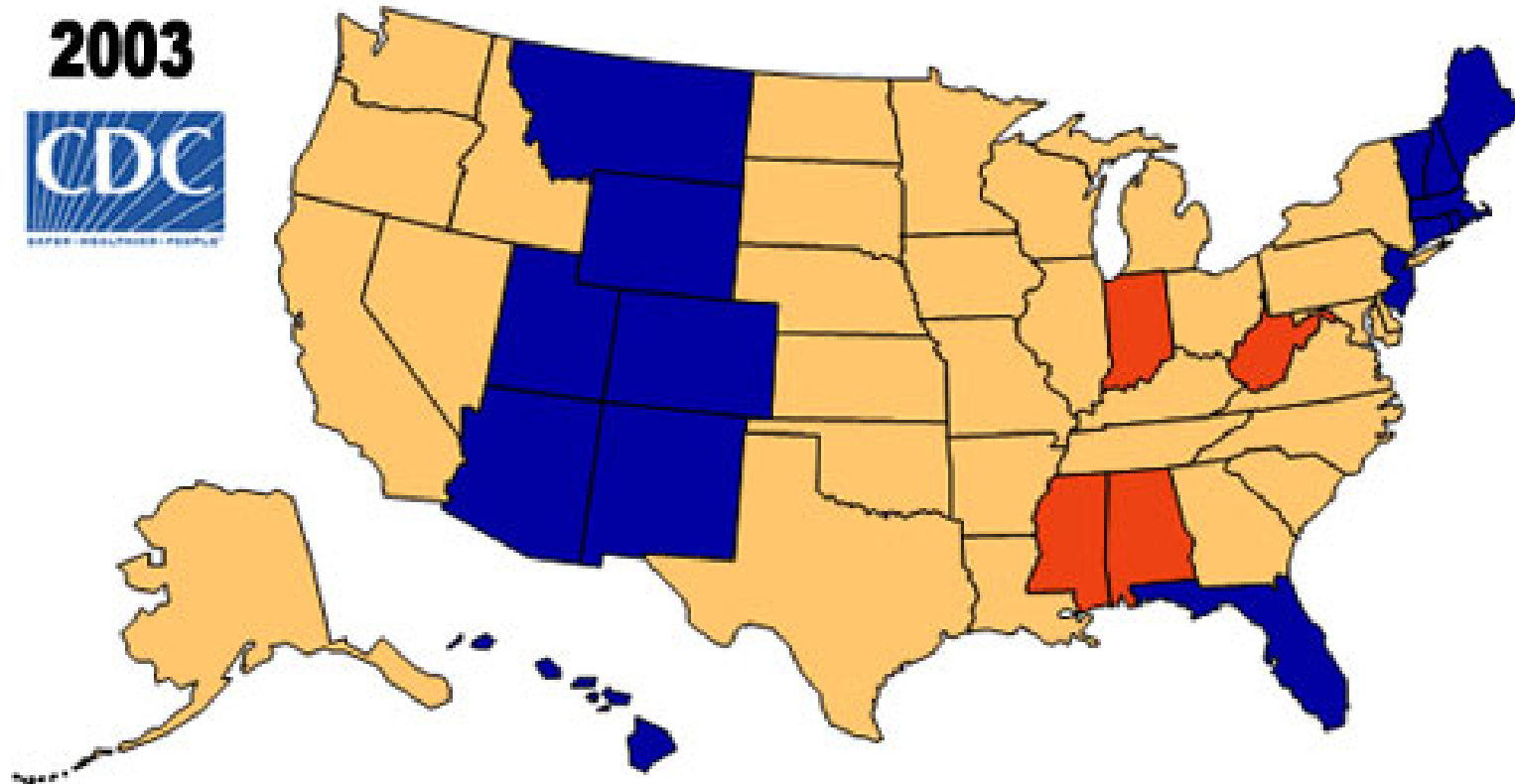
Percent of Obese US Adults

2002



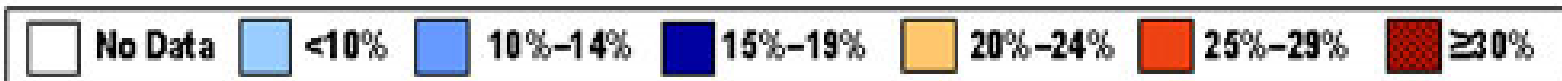
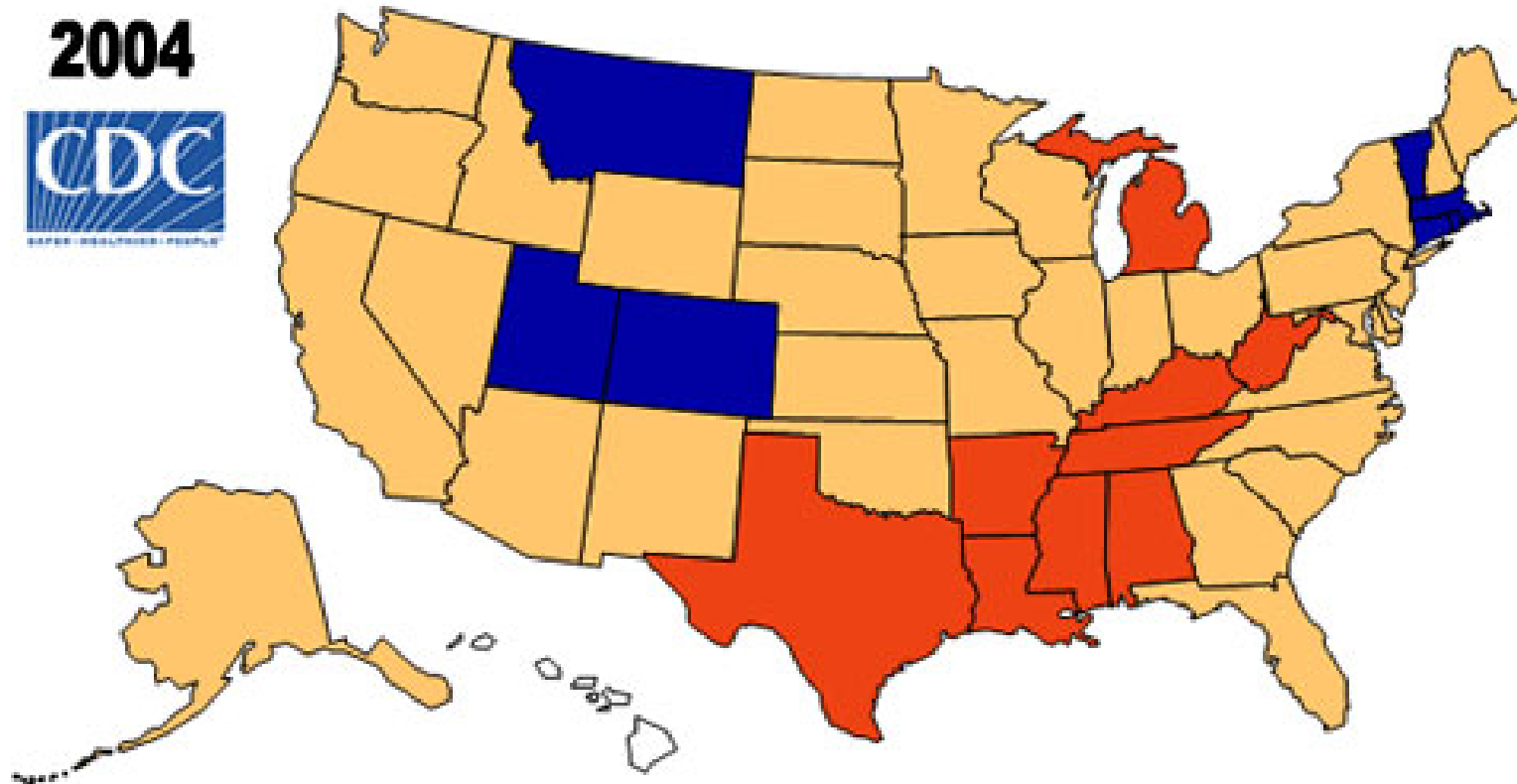


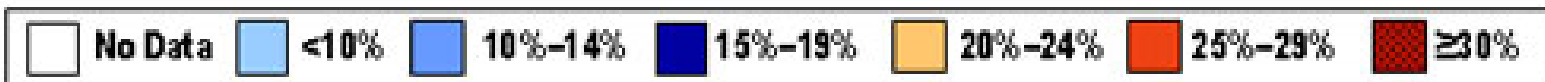
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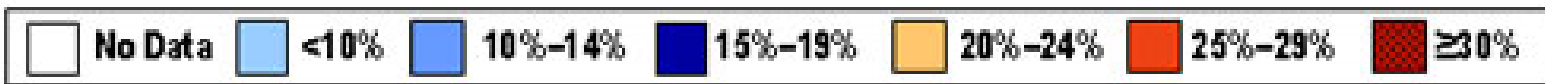




2004

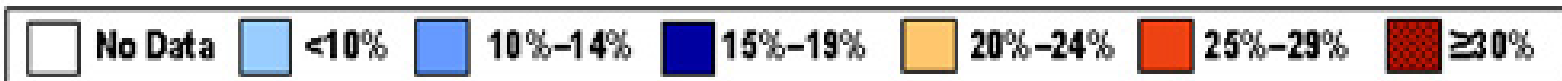
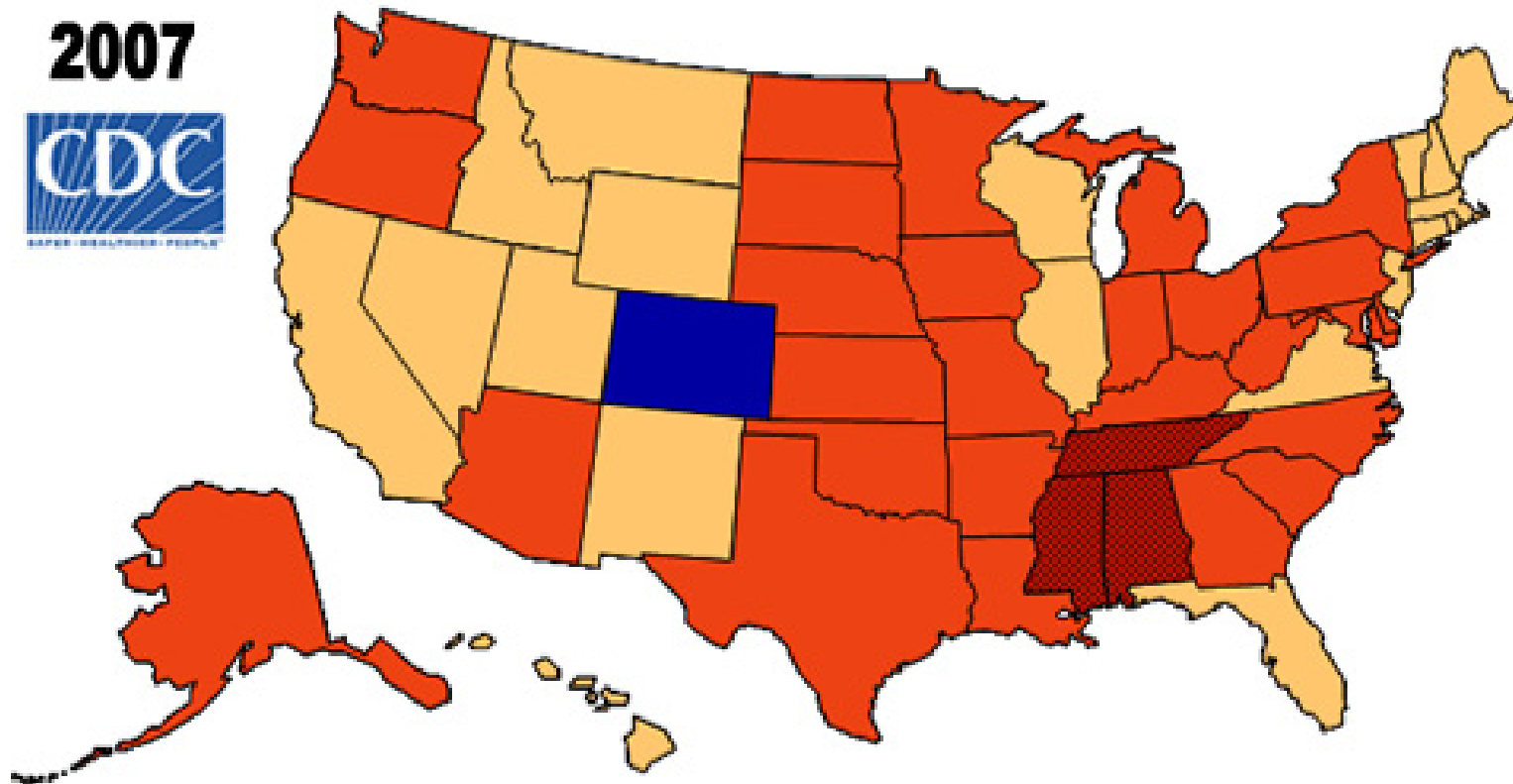








2007



High risk: Overweight & obese



- Type 2 diabetes
- Coronary artery disease
- Stroke
- High blood pressure
- Abnormal cholesterol levels
- Sleep apnea
- Arthritis
- Back pain
- Gallbladder disease
- Some cancers such as uterine, breast, and colon)
- Gynecological & sexual problems (abnormal menses, infertility, erectile dysfunction)

MOVE! Program



- BMI of ≥ 30 or ≥ 25 with other health risk factors
- Five levels of MOVE! to meet individual needs:
 - Level 1: Meet with counselor and no phone calls
 - Level 2: Group Sessions once a week
 - Level 3: Wt loss meds prescribed
 - Orlistat-unpleasant GI side effects if fat intake exceeds 30%
 - Level 4: Optifast Program
 - Level 5: Bariatric Surgery



Traumatic Brain Injury

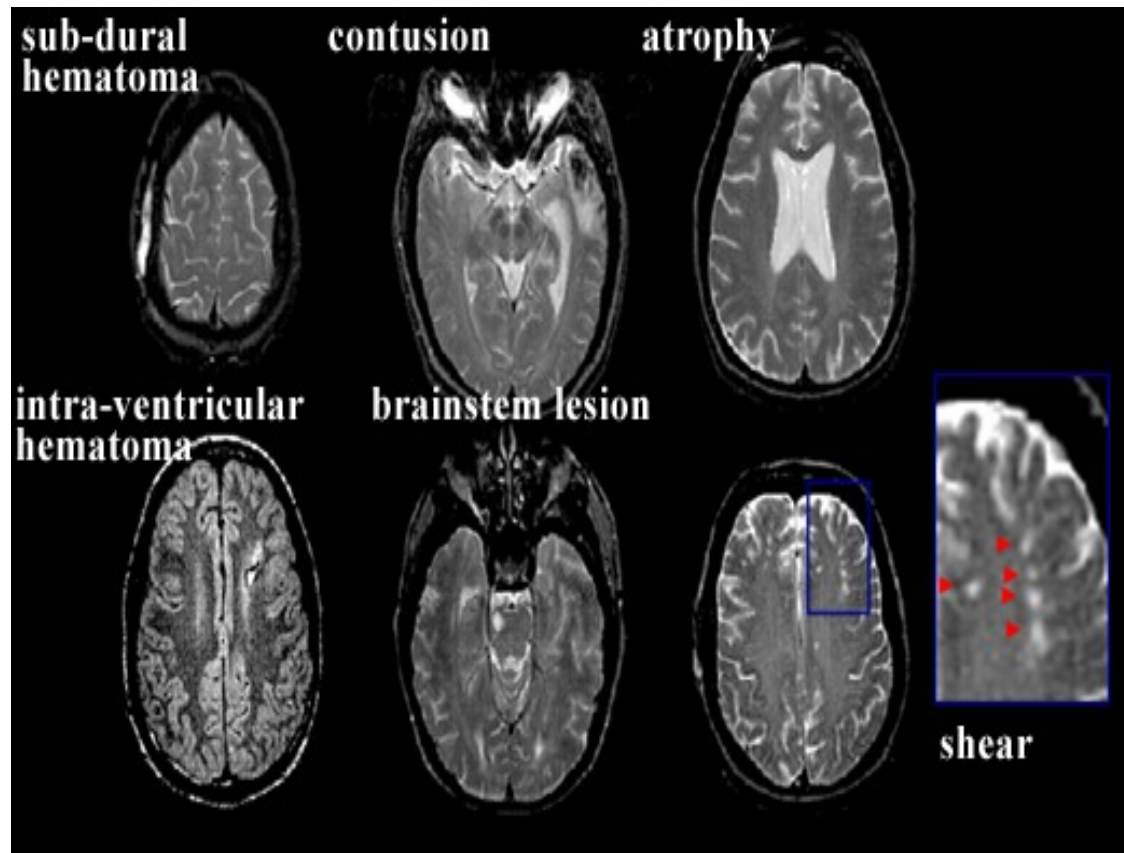
- Defined as mild, moderate or severe
 - Severity depends on length of loss of consciousness, verbal & motor skills after injury and interval of post traumatic amnesia
- May result in a lifetime of impairments in behavioral, emotional, cognitive and physical functioning

Mild TBI (MTBI)



- 75-95% of TBI is mild
- MTBI Common among combat soldiers
 - survey of 2525 Army infantry soldiers post 1yr deployment to Iraq: 5% had injuries with LOC, 10% had injuries with altered consciousness

Normal Brain Scan in MTBI





Symptoms of MTBI

- Poor concentration
 - Memory difficulty
 - Intellectual impairment
 - Irritability
 - Depression
 - Anxiety
 - Many similarities to PTSD symptoms
- Dizziness
- Blurred Vision
- Light Sensitivity
- Sound Sensitivity
- Headache
- Fatigue



MILD TBI

- Most patients have complete recovery within 3 months
 - If residual symptoms, most of the recovery (80-85%) occurs within six mo
 - Some improvement may continue for up to 18-36 mo
- Some pts have persistent and disabling symptoms
 - Studies estimate 7-8% of MTBI patients



Treatment for MTBI

- Treat co-morbidities
 - Frequently also have PTSD-makes symptoms of TBI worse
- Treat vestibular dysfunction with PT
 - Eliminates dizziness
- Treat Traumatic Vision Syndrome with OT
 - Scanning and accommodation difficulties lead to headaches, fatigue, irritability
- Treat memory impairment with OT
 - Teach memory improvement skills