

Randomized trial of peanut consumption in infants at risk for peanut allergy.

- RCT of 640 infants (4-11 months) with Hx: severe eczema, egg allergy, or both
- *Skin prick testing*: divided by response: no wheal vs 1 to 4 mm wheal
- Consume vs avoid peanuts until 60 months of age.
- **RESULTS:**
- **Group** Prevalence of peanut allergy at 60 months
- **Initially negative**: Avoidance group 13.7% vs Consumption group 1.9% (P<0.001).
- **Initially positive**: Avoidance group 35.3% vs Consumption group 10.6% (P=0.004).
- No significant differences in serious adverse events.
- **CONCLUSIONS:**
- Early introduction of peanuts significantly decreased the frequency of peanut allergy among high risk children.

N Engl J Med. 2015 Feb 26;372(9):803-13. doi: 10.1056/NEJMoa1414850. Epub 2015 Feb 23.

↑ in Celiac Disease Risk With Gluten Introduction After Age 6 Months: Systematic Review & Meta-Analysis

- SR & MA of 15 studies timing of gluten introduction and breastfeeding on the risk of developing celiac disease.
- **CONCLUSION:**
- **25% ↑ in Celiac Disease risk with late (>6 months) vs early (4-6 months) gluten introduction (risk ratio [IRR], 1.25; 95% CI, 1.08-1.45).**
- No effect of breastfeeding on CD risk (OR, 0.55; 95% CI, 0.28-1.10)

J Pediatr. 2015 Oct 20. pii: S0022-3476(15)01045-8. doi: 10.1016/j.jpeds.2015.09.032.

Infant Animal Exposure reduced Asthma Risk

- Swedish cohort study association between early exposure to dogs and farm animals and the risk of asthma in from 1/1/01 – 12/31/10
- Dog exposure during the first year of life → ↓ risk of asthma in school-aged children (OR, 0.87; 95% CI, 0.81-0.93) and in >= 3 years (HR, 0.90; 95% CI, 0.83-0.99) but *not in children < 3 years* (HR, 1.03; 95% CI, 1.00-1.07).
- Farm animal exposure → ↓ risk of asthma in both school-aged children and preschool-aged children (OR, 0.48; 95% CI, 0.31-0.76, and HR, 0.69; 95% CI, 0.56-0.84), respectively.
- Tell Parents DOGS may lower asthma risk

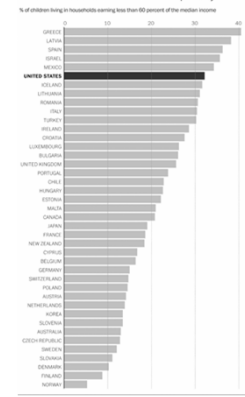
JAMA Pediatr. 2015 Nov;169(11):e153219

2014 Child Poverty

“Reporting Nations”
To
UNICEF

US 6th

One in three U.S. children lives in poverty



<https://www.unicef-irc.org/publications/733>

AAP: Clinicians Should Screen Children for "Food Insecurity"

- ~ 20% of U.S. children live without consistent access to food
- Clinicians should screen their patients/families for "food insecurity"
- **A two-question screen**
- 1. Within the past 12 mo, we **worried** whether our food would run out before we got money to buy more. (Yes or No)
- 2. Within the past 12 mo, the food we bought just **didn't last** and we didn't have money to get more. (Yes or No)
- **Resources** for providers who identify food-insecure patients:
- 2-1-1: <http://www.211.org/>
- Food Hub: <http://healthyfoodbankhub.feedingamerica.org/>
- **Ask your local congressperson**

AAP Policy Statement: <http://pediatrics.aappublications.org/content/136/2/e433>

Online help for Alcoholics

“Reddit is an entertainment, social news networking service, and news website” Reddit’s community submits content. Registered users vote on submissions

–Reddit’s “**StopDrinking**” > 30,000 subscribers, most of whom describe it as “their most helpful tool in their fight against alcohol.”

–StopDrinking has no philosophy on addiction and recovery

–Volunteer led, including important parts of an effective support program: **daily check-ins, round-the-clock support, and activities like virtual book clubs** that offer alternatives to social drinking.

<https://www.washingtonpost.com/news/the-intersect/wp/2015/01/05/the-surprising-internet-forum-some-alcoholics-are-choosing-over-aa/>

2016 USPSTF: Aspirin for Primary Prevention of ASCVD & CRC

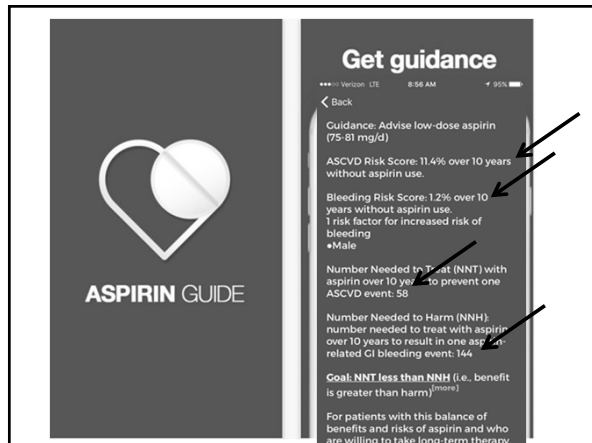
- **50-59 Years:** Low-dose aspirin for primary prevention of CVD and CRC who have a **10% or greater 10-year CVD risk**, are not at increased risk for bleeding, have a life expectancy of at least 10 years, and are willing to take low-dose aspirin for at least 10 years (**B; net benefit moderate**).
- **60-69 Years:** Low-dose aspirin for primary prevention of CVD and CRC in adults aged 60 to 69 years who have a **10% or greater 10-year CVD risk** should be an individual one. (**C; net benefit small**).
- **Younger than age 50 or over age 70:** The current evidence is **insufficient** to assess balance of benefits and harms of aspirin use for the primary prevention of CVD and CRC. (**I; Insufficient**)

Ann Intern Med. doi:10.7326/M16-0577.



Aspirin for Primary Prevention App

- Brigham and Women's Hospital: free app -calculates risks & benefit of aspirin on 10 year atherosclerotic cardiovascular disease risk.
- This app, called **Aspirin-Guide**, is free.
- Input: Age, total and HDL-cholesterol, SBP, smoking status, and diabetes
- The app → the patient's 10 year risk for cardiovascular events and bleeding risk.



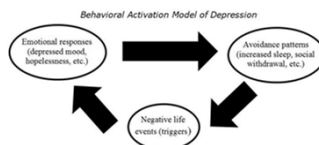
Aspirin for primary prevention of cardiovascular and all-cause mortality events in diabetes

- Meta Analysis 10 RCT's aspirin vs placebo for 1 Prevention in Diabetes
- Slight reduction in risk of combined major adverse cardiovascular 0.90 (95% CI 0.81-0.99) with aspirin compared with control
- Subgroup analyses adverse events differed by baseline cardiovascular disease risk, medication compliance and sex (P for interaction for all > 0.05)
- NO significant reduction in the risk of myocardial infarction, coronary heart disease, stroke, cardiovascular mortality or all-cause mortality.

Diabet Med. 2016 Apr 17. doi: 10.1111/dme.13133

Behavioral Activation Equivalent to CBT for Depression

- 221 Randomized to BA vs CBT; Rx controlled
- BA: Identify "LOOPS" of thought → Social Isolation → Depression
- BA **non-inferior** to CBT (PHQ-9: 8.4 v 8.4, p=0.89)
- Adverse events > in CBT vs BA (non-sig)
- CBT-Advanced degree/training; **BA-no advanced training**
- BA, a simpler psychological treatment than CBT, can be delivered by lower cost providers



www.thelancet.com 7/22/16

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www.thelancet.com 7/22/16

BA Apps:

Mood Coach (VA): Motivates + Activities
Moodivate(alone) &
Behavioral Appivation (Therapist)
MoodTools (uses BA & CBT) → TRAC
iCBT (TRAP → TRAC, voice enabled)

Suicide Rate Increase

- Suicides in the U.S. increased 24% from 1999 to 2014
- 1999-2006, ~1%/year; 2006-14 ↑ 2% annually (recession)
- *Males was 3 times > in females* (20.7 vs 5.8 per 100,000).
- **AGE: Highest in men > aged 75 and in women aged 45–64.**
- Children (10–14) ↑ (200% in females, 37% in males)
- Adolescents: 65.1% Dx behavioral disorder, 26.3% mood disorder, 3.8% psychotic disorder, & 4.8% “other”
- Most frequent Method-- Men: firearms; Women, poisoning.

<http://www.cdc.gov/nchs/products/databriefs/db241.htm> Children and Youth Services Review; 2016;68: 73–79

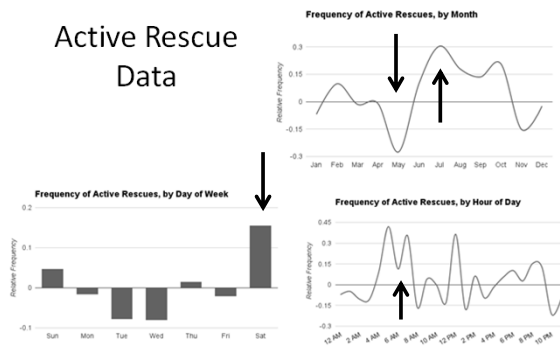
Text for *Help*: 741741 Crisis Text Line

- Non-Profit 24/7 texting service
- Top issues depression, anxiety, suicidal ideation, family issues, and romantic relationships, substance abuse, sexual health, sexual abuse, and eating disorders.
- Text how you feel to 741741 & trained Volunteer Crisis Counselor move “hot moment” to a cool moment
- > 80% of Texters < 25 Years
- ~ 30 Million Texts since 2013
- Ave: 10 “Active Rescues”/day



- Nancy Lubin TED talk

Active Rescue Data



2009 Oropharyngeal exercises on patients with moderate obstructive sleep apnea syndrome

- **31 patients** with moderate OSAS: 3 months of daily (~30 min) sham therapy (n = 15, control) or a set of oropharyngeal exercises (n = 16)
- OP Exercises involving the tongue, soft palate, and lateral pharyngeal wall.

Outcomes:

- No significant change occurred in the control group in all variables.
- Oropharyngeal Exercise patients *significant decrease* ($P < 0.05$) in:
 - Neck Circumference (39.6 +/- 3.6 vs. 38.5 +/- 4.0 cm),
 - Apnea-hypopnea index: 22.4 +/- 4.8 vs. 13.7 +/- 8.5 events/h)
 - Snoring Frequency, Snoring Intensity
 - Daytime Sleepiness, Sleep Quality

- *Am J Respir Crit Care Med*. 2009 May 15;179(10):962-6

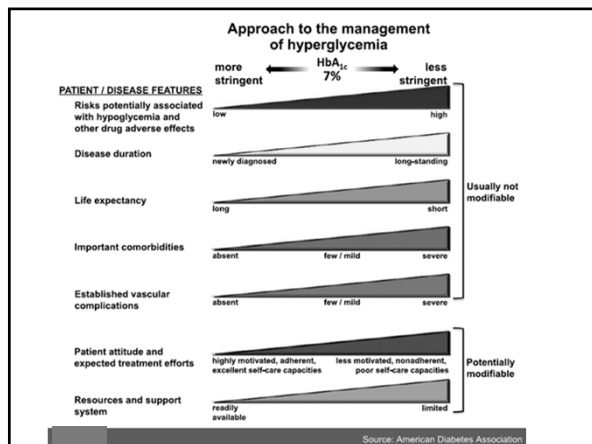
2015: Effects of Oropharyngeal Exercises on Snoring

- **RCT** over 3 months of **39 patients**; Control: nasal dilator strips plus respiratory exercises vs. Intervention: oropharyngeal (OP) exercises.
- Both groups were similar at study entry.
- No significant changes occurred in the control group.
- Compared to Control OP Exercise group had significant *decrease* in
 - Snore Index: 99.5 (49.6-221.3) vs 48.2 (25.5-219.2); $P = .017$ and
 - Total snore index (total power of snore/h), 60.4 (21.8-220.6) vs 31.0 (10.1-146.5); $P = .033$
- **CONCLUSIONS**: “*Oropharyngeal exercises are effective in reducing objectively measured snoring and are a possible treatment of a large population suffering from snoring.*”
- *Chest*. 2015;148(3):683-691

2015 SR & Meta Analysis on Oropharyngeal Exercises for OSA

- 9 studies exercises on snoring and/or sleepiness
- Apnea-hypopnea indices (AHI) ↓ from **24.5 ± 14.3/h** to **12.3 ± 11.8/h**, $P < 0.0001$.
- Lowest O2 saturations improved from **83.9 ± 6.0% to 86.6 ± 7.3%**, MD 4.19% (95% CI 1.85, 6.54), $P = 0.0005$.
- Snoring ↓ **14.05% ± 4.89% to 3.87% ± 4.12%** of total sleep time, $P < 0.001$
- Epworth Sleepiness Scale decreased from **14.8 ± 3.5 to 8.2 ± 4.1**.
- **CONCLUSION**:
 - OP exercises ↓ apnea-hypopnea index by ~ 50%. Low O2 saturation, snoring, and sleepiness outcomes improve in adults.

• *Sleep*. 2015 May 1;38(5):669-75. doi: 10.5665/sleep.4652.



2016 ADA Guidelines



- Screening for T2DM:** all age ≥ 45 , hypertension, on atypical anti-psychotics or HIV medications, those with $BMI \geq 25$ or, if of Asian descent, at $BMI \geq 23 + 1$ CVD RF
- Hemoglobin A1c frequency:** The ADA "should depend on the clinical situation" and at least twice a year and quarterly if therapy has been changed.
- Glucose Self Monitoring:** Patients on "intensive insulin regimens" or those on an insulin pump should consider testing pre-prandial. "Evidence is insufficient to determine when to prescribe SMBG." No evidence on frequency.
- Lipids:** ADA supports AHA recommendations on statin using 10 year risk calculator.
- Aspirin:** For both women and men, low dose (82 milligrams per day) of aspirin therapy over the age of 50 for the primary prevention of heart disease when the atherosclerotic cardiovascular risk is greater than 10%. For both T1DM & T2DM.
- Hypertension:** The ADA's current goal is a systolic < 140 , and a diastolic < 90 . 1st line: ACEi or ARB (but not both) 2nd: Thiazides. Lower systolic pressures are not currently evidence based.

(http://care.diabetesjournals.org/content/suppl/2015/12/21/39.Supplement_1.DC2/2016-Standards-of-Care.pdf)

2016 ADA Guidelines: Rx



- Metformin** 1st line for all
- 2nd Line:**
 - DDP 4 inhibitors** \uparrow incretin activity, which \downarrow glucagon release that leads to \uparrow insulin secretion, & \downarrow gastric emptying; (alogliptin (Nesina), linagliptin (Tradjenta), sitagliptin (Januvia), saxagliptin (Onglyza))
 - GLP 1 agonists** \uparrow insulin secretion, \downarrow glucagon secretion, and \downarrow gastric emptying; (albiglutide (Tanzeum), exenatide (Byetta/Bydureon), dulaglutide (Trulicity), liraglutide* (Victoza)& (Saxenda--for weight loss w/o diabetes)
 - SGLT-2 inhibitors** \uparrow glucose excretion in the urine; (canagliflozin (Invokana), dapagliflozin (Farxiga), empagliflozin (Jardiance)
- 3rd Line:** Long acting and regular insulin, sulfonylureas, (SU), and thiazolidinedione (TZD) can be added, but no morbidity and mortality benefit & may \rightarrow harm.
- SURGERY:** "Bariatric surgery considered for adults whose BMI is $> 35 \text{ kg/m}^2$ "

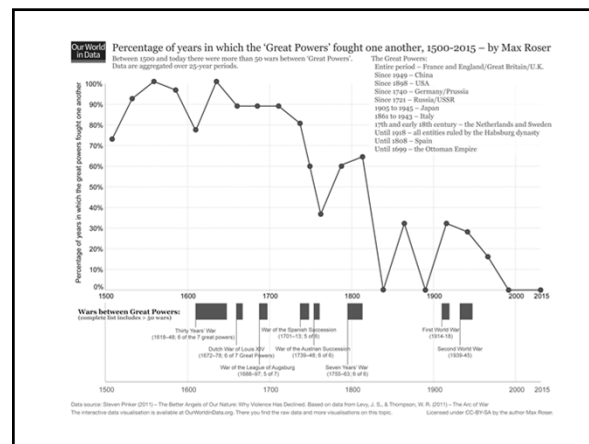
(http://care.diabetesjournals.org/content/suppl/2015/12/21/39.Supplement_1.DC2/2016-Standards-of-Care.pdf)

2014 World "More dangerous than it has ever been"

Martin Dempsey, Chair Joint Chiefs

Terrorism: the use of violence and intimidation in the pursuit of political aims.

- San Bernardino
- Orlando
- AA Community
- Nice
- Paris
- Syria



A Safer World

The number of people who have died in wars has declined sharply since the 20th century.

Battle-related deaths per 100,000 people*

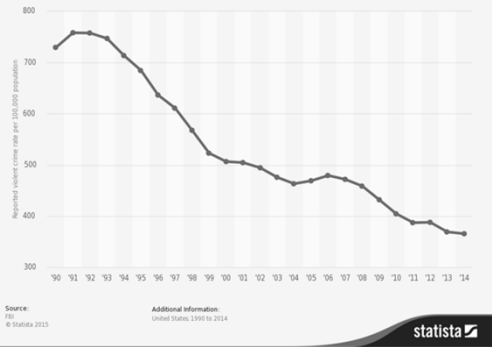


HOMICIDE RATES IN THE US AND ENGLAND 1967-2013, AND THE WORLD, 2003-2012



Sources: U.S., FBI Uniform Crime Reports; England (including Wales), U.K. Office for National Statistics; World: U.N. Office on Drugs and Crime, reported in U.N. Economic and Social Council's "World crime trends and emerging issues and responses in the field of crime prevention and social justice," Feb. 12, 2014, Figure 1. The percentages were converted to homicide rates by setting the 2012 rate at 6.2, the figure reported in the UNODC Global Study on Homicide 2013, Page 12.

Reported violent crime rate in the United States from 1990 to 2014

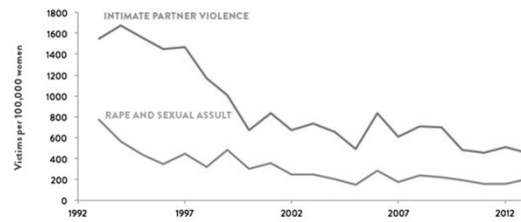


Source: FBI
© Statista 2015

Additional information:
United States, 1990 to 2014

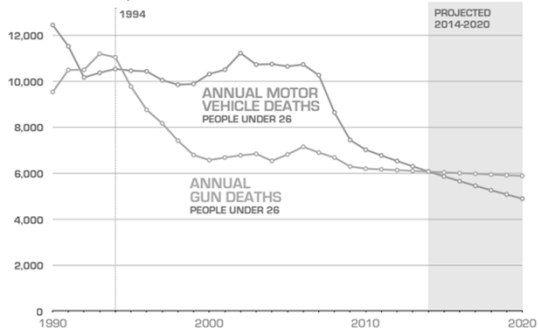
statista

RAPE/SEXUAL ASSAULT AND VIOLENCE AGAINST INTIMATE FEMALE PARTNERS IN THE US 1993-2013



Source: Bureau of Justice Statistics (bjs.gov), using the National Crime Victimization Survey Victimization Analysis Tool

Brady Bill



Perspective

- 2005-2015:
71 US Killed Terrorism
> 301,000 US Killed by Gun Violence
--40% "Crime related"; 60%: DV, Accident, Suicide
 - 2015: 7 Children/Teens Killed by guns/DAY
 - 2015: A Toddler shoots someone every 7 days
31% Kill self, 5% kill others
40% injure self, 24% injure others
- Ref: CDC: 2015
- Screen Kids, Teens, Encourage Safety

FDA Updated 2014: Long-Term Clopidogrel Does NOT Affect Mortality Rates in Heart Patients

- DAPT: Dual Anti Platelet Therapy—(clopidogrel (Plavix) + aspirin)
- The incidence of death for clopidogrel plus aspirin for 12 months or longer was ~ same as for ≤ 6 months (~7%).
- Long-term treatment on does not change overall risk for death with NO increase in cancer risk with DPAT
- <http://www.fda.gov/downloads/Drugs/DrugSafety/UCM471586.pdf>

Do No Harm

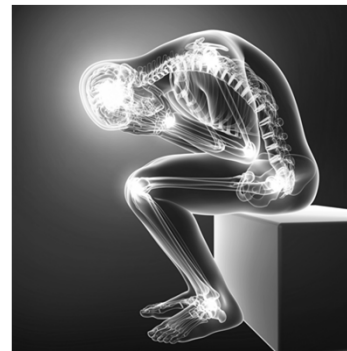


Understanding Over-diagnosis How Mammography Increases Dx of Cancer, But Does Not Decrease Mortality

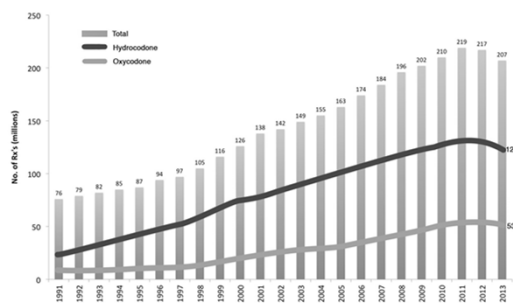
- Over-diagnosis: Screening \rightarrow \uparrow rate of cancer diagnosis but have no positive effect on patient's health or mortality.
- Retrospective cohort > 16 million women ≥ 40 years of age.
- For 10% increase in breast cancer screening \rightarrow increase in breast cancer diagnosis RR=1.16; 95% CI: 1.13-1.19.
- No decrease in 10 year breast cancer mortality was found.
- The majority of cancers Dx were considered "small" (≤ 2 cm); \rightarrow increase in stage 0-2 breast cancer diagnosis
- But no change in stage 3-4 breast cancer.
- "Large screening programs do not decrease diagnosis of more dangerous tumors & have no impact on mortality BUT have a significant **increase** in diagnostic morbidity" (biopsies, repeat imaging, angst).

JAMA Inter Med. 2015; July 6 [epub]

Pain

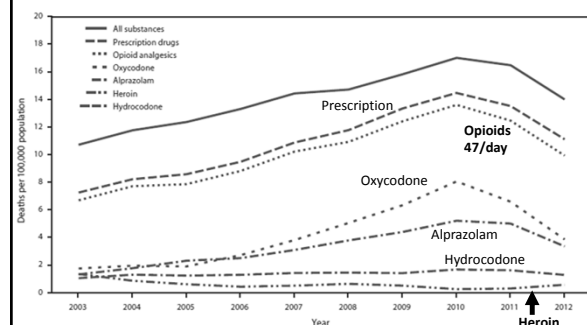


2012: 259 Million Opioid Rx 1 Rx for every adult in the United States



CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016
Recommendations and Reports / March 18, 2016 / 65(1);1–49

2012 CDC: Death from All Substances








CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016
Recommendations and Reports / March 18, 2016 / 65(1);1–49

Opioid Overdose Survivors Receive Repeat Opioid Rx

- 2,848 Adults with nonfatal opioid OD
- Stratified by morphine-equivalent dosage (MED)
- Large (≥ 100 mg), Moderate (50 to <100 mg), Low (<50 mg)
- Time to repeated overdose
- **At 299 days, opioids dispensed to 91% of patients after overdose**
- **7% ($n = 212$) had a repeat opioid overdose.**
- **At 2 years, the incidence of repeated overdose was:**
 - Large MED: 17% (95% CI, 14% to 20%)
 - Moderate MED: 15% (CI, 10% to 21%)
 - Low MED: 9% (CI, 6% to 14%)

Ann Intern Med. 2016 Jan 5;164(1):1-9. doi: 10.7326/M15-003

Naloxone

| | Injectable (oral intranasal) (N generic) | Intranasal branded ¹ | Injectable generic ² | Injectable generic ² | Auto-injector branded |
|---|--|---|---|---|---|
| Brand name | | Narcan Nasal Spray | | | Evzio Auto-Injector |
| Product comparison | | | | | |
| |  |  |  |  |  |
| FDA approved (Labeling includes instructions for injection use) | X (for IN, IM, SC) | X X | X | X | X X |
| Expiration date | X | | X | | X |
| Assembly required | X | | X | X | |
| Fragile | X | | | | |
| Can tolerate dose | X | | X | X | |
| Strength | 1 mg/mL | 4 mg/0.5 mL | 0.4 mg/mL OR 4 mg/20 mL | 0.4 mg/mL | 0.4 mg/0.5 mL |
| Total volume of box/package | 4 mg/4 mL | 8 mg/0.2 mL | 0.8 mg/2 mL OR 4 mg/20 mL | 0.8 mg/2 mL | 0.8 mg/0.8 mL |
| Storage requirements (all protect from light) | Store at 59-86°F Fragile Glass | Store at 59-77°F Excursions from 59-86°F | Store at 59-77°F Excursions from 59-86°F | Store at 68-77°F Breakable Glass | Store at 59-77°F Excursions from 59-86°F |
| Cuts/Kit ³ | SS | SS | S | S | SSS ⁴ |
| Prescription variation | | | | | |
| Refills | Two | Two | Two | Two | Two |

Prescribe to Prevent

PrescribeToPrevent.org

January 21, 2016

| | Injectable (oral intranasal) (N generic) | Intranasal branded ¹ | Injectable generic ² | Injectable generic ² | Auto-injector branded |
|--------------------------------------|--|--|---|---|--|
| Rx and quantity | #2 2 mL Luer-Lok™ Luer-Lock needleless syringe plus #2 mucosal atomization device (MAD-300) | #1 two-pack of two 4 mg/0.5 mL intranasal devices | #2 single-use 1 mL vials OR #1 20mL multi-dose vial PLUJ #2 3 mL syringe w/ 23-25 gauge 1.5-1.5 inch IM needles | #2 single-use 1 mL vials PLUJ #2 3 mL syringe w/ 23-25 gauge 1.5-1.5 inch IM needles | #1 two-pack of two 0.4 mg/0.5 mL prefilled auto-injector devices |
| Sig. (for suspected opioid overdose) | Spray 1 mL (1/2 of syringe) into each nostril. Repeat after 2-3 minutes if no or minimal response. | Spray 0.5 mL into one nostril. Repeat with second device into other nostril after 2-3 minutes if no or minimal response. | Inject 1 mL in shoulder or thigh. Repeat after 2-3 minutes if no or minimal response. | Inject 1 mL in shoulder or thigh. Repeat after 2-3 minutes if no or minimal response. | Inject into outer thigh as directed by English voice prompt system. Place black side firmly on outer thigh and depress and hold for 5 seconds. Repeat with second device in 2-3 minutes if no or minimal response. |
| Ordering information | | | | | |
| How supplied | Box of 10 Luer-Lok™ prefilled glass syringes | Two-pack of single use intranasal devices | Box of 10 single-dose 1 mg/0.5 mL OR Case of 20 multi-dose 1 mg/0.5 mL | Box of 10 single-dose 1 mg/0.5 mL | Two-pack of single use auto-injectors + 1 trainer |
| Manufacturer | AMC/Amphastan | Twiflex (N adapt) | Adapt Pharma | Twiflex | Mylan |
| Web address | Amphastan.com | Twiflex.com | Narcannasal.org | Mylan.com | Evzio.com |
| Customer service | 800-423-8136 | 866-246-8090 | 844-462-7236 | 877-946-7947 | 724-518-1800 |
| NDC | 78329-1000-01 78329-1000-02 | 89547-353-01 | 00408-1235-01 (1 mL) 00408-1235-02 (20 mL) | 67457-0290-02 | 60842-030-01 |

¹ Evzio (Amphastan) has an additional volume product, which is not recommended for injection and some volume use because it is too strong of a dose for injection only for respiratory, intranasal, or intramuscular use. It is not recommended for injection and some volume use because it is too strong of a dose for injection only for respiratory, intranasal, or intramuscular use. It is not recommended for injection and some volume use because it is too strong of a dose for injection only for respiratory, intranasal, or intramuscular use.

² All of 11/1/16, Narcan Nasal Spray has been approved by the FDA, but is not yet publicly available.

³ Evzio has an additional volume product, which is not recommended for injection and some volume use because it is too strong of a dose for injection only for respiratory, intranasal, or intramuscular use.

⁴ There is a separate price schedule for each product. Your pharmacy is able to provide specific local pricing.

⁵ Product and co-pay programs are available - visit manufacturer website for more information.

Image development supported by J451040002-01 Friedman/tech

Prescribe to Prevent

PrescribeToPrevent.org

January 21, 2016

Antibiotics Given More Than Wanted

- MMWR survey of US consumers & 1500 healthcare providers
- $>50\%$ of healthcare providers believe patients expect antibiotics during a visit for a viral illness
- $\sim 25\%$ of consumers actually expect them
- 20% of consumers obtained Antibiotic Rx from source others (grocery stores, friends & family, or leftovers from a previous illness)

MMWR / July 24, 2015 / Vol. 64 / No. 28

CDC: 1/3 of Out Patient Antibiotic Rx “Inappropriate”

- CDC 184,000 ambulatory care visits 2010–2011 national antibiotic Rx rates
- 506 antibiotic Rx/1000 patients annually; 353 were deemed “appropriate”
- Respiratory infections (e.g., URI) accounted for 221 antibiotic Rx/1000, but just 111/1000 were appropriate (1/10)
- Sinusitis (56 antibiotic Rx), otitis media (47 antibiotic Rx), then pharyngitis (43 antibiotic Rx)
- JAMA. 2016;315(17):1864-1873
- **HARM:** C. diff, Diarrhea, ↑ Rx in Future...
Children with ABX exposure < 2 Yr have greater risk of childhood obesity and T2DM risk
Gastroenterology. 2016; 151(1): 120–129.e5

Best Evidence Antibiotic Guidelines

- **Sinusitis:** (A.A.of Otolaryngology(AAO-HNSF))
 - Viral rhinosinusitis S/S last < 10 days and do not worsen
 - Acute bacterial rhinosinusitis S/S last > 10 days, or worsen within 10 days after initial improvement (double worsening)
- **Otitis Media** (AAFP Practice Guideline 2013):
- **Pain control**
- **6 - 24 months:** Antibiotics for severe S/S (**moderate or severe otalgia/otalgia for > 48 hours or $T \geq 39^{\circ}\text{C}$ [102.2°F]**) OR Antibiotic for **bilateral AOM**
- **For nonsevere unilateral AOM 6 - 24 months, or non-severe AOM** (either unilateral or bilateral) **in >24 months, antibiotic therapy OR observation** offered with close follow up
- **Pharyngitis:** Use Scoring System (Modified Centor): Tonsillar exudates, ANTERIOR Cervical Nodes, Fever, Age 2-4 Yrs; Neg: Cough/Rhinorrhea, Age > 14

How to NOT Give Antibiotics

1. Identify patient's (parent) concern. "What are you worried about & what do you think you may need?"
2. Verbalize your exam. State out loud: "Ears are normal, throat is a little red, lungs are clear... I suspect you have a viral infection that will resolve in a few days." (Patient Educ Couns (2010), doi:10.1016)
3. Delay of antibiotic Rx. most studied and effective method. Tell your patients : *I suspect you have a viral infection which will get better over next 7-10 days. If you are not **improving** by Friday morning, call office and I **may** call in an Rx.*
(Cochrane Database Syst Rev. 2004 18;(4):CD004417).

How NOT to Give Antibiotics

4. Symptom control. Very best evidence offers:
 - Fever/aches: Acetaminophen (15 mg/kg) PLUS an NSAID like Ibuprofen (10 mg/kg) **together** every 6 hours (alternating doses ↑ risk of overdose)
 - Nasal Congestion & Cough due to post nasal drip:
Oral or nasal decongestants.
 - Cough not due to post nasal drip:
Honey alone or mixed w/lemon juice, every hour or two
 - To shorten viral URI Duration:
Zinc **Acetate** Lozenges q 4 hours
Pelargonium sidoides (Alcohol based preparations) 30 gtts TID
5. What does NOT work: antibiotics for URI's, bronchitis, sinusitis; cough medications (including codeine), Echinacea, Vitamin C, anti-histamines

Zinc Lozenges: Meta Analysis

- 3 RCTS on zinc acetate (75 mg/d) lozenges for common cold
- Zinc acetate lozenges shortened duration of:
- Illness by > 24 hours
- Nasal discharge by RRR=34% (95% CI: 17% to 51%),
- Nasal congestion 37% (15% to 58%), Scratchy throat 33% (8% to 59%), Cough by 46% (28% to 64%), Myalgia by 54% (18% to 89%)
- There was no difference in the duration of headache and fever.
- Zinc Lozenge at least 4/day, dissolved in mouth

BMC Fam Pract. 2015; 16: 24
Br J Clin Pharmacol. 2016 Jul 5.
doi: 10.1111/bcp.13057
Cochrane DSR- 2013
Jun 18;(6):CD001364



Not Zn Acetate

Practice Changers



Stop ICS's in COPD

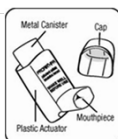
- Methods: > 100,000 patients w/COPD on inhaled corticosteroids (ICS) x 5 five years
- Compared "severe pneumonia" and ICS use.

- Outcomes: 14,000 developed "severe pneumonia"

- Patients who stop their ICS had ↓ rate Pneumonia (rate ratio [RR], 0.63; 95% CI, 0.60-0.66) vs those on ICS.
- Stopping ICS → Risk ↑ 4 months after stopping

- Conclusions: COPD patients on chronic ICS were at higher risk of developing pneumonia than those not; Stop if able

Ref: Chest 2015; 148: 1177



Single Dose Dexamethasone Not Inferior to Prednisone in Mild to Moderate Asthma

- Methods: RCT~ 380 adult patients
Dexamethasone 12 mg (two 6 mg tablets) x 1 dose vs
Prednisone 60 milligrams/day x 5 days.
- Outcomes evaluated by telephone at 2 weeks.

- Outcomes:
- Relapse in Dex 12.1% vs 9.8% in Pred (non-inferior)
- Hospitalization relapse 3.4% in Dex vs 2.9% Pred (NS)
- Adverse effects were the same in both groups.

- Conclusion: Single dose of oral Dext 12 mg not inferior to 5 days of prednisone at 2 weeks

Ann Emerg Med. 2016 Apr 14. pii: S0196-0644

Consumption of spicy food inversely associated with risk for death

- Prospective cohort of ~500,000 men & women U.S. & China over 7 years: consumption of Spicy Foods on Total and Cause Specific Mortality
- After adjusting, hazard ratios for DEATH:
 - HR
 - 1-2 days per week-- 0.90 (95% CI, 0.84 to 0.96)
 - 3-5 days per week-- 0.86 (0.80 to 0.92)
 - 6-7 days per week-- 0.86 (0.82 to 0.90)
- This inverse association was also true for ischemic heart disease, cancer and lung disease.

BMJ. 2015 Aug 4;351:h3942

- BMJ.** 2015 Aug 4;351:h3942

Watching cooking shows correlates with obesity

- Survey of 501 females (20–35) how obtained information on new recipes, cooking habits, weight and height.
- Obtaining information from print, online, or in-person sources was not associated with ↑ BMI.
- Obtaining information from cooking shows and social media correlated with higher BMI ($p < 0.05$)
- **Watching** cooking shows & **cooking** from scratch (“*doers*”) was associated with higher BMI ($p < 0.05$) vs “viewers”

Appetite: 2015; 90: 131–135

- Appetite; 2015; 90: 131–135

Summary

- Introduce nuts, gluten, eggs, fish & pets early
- Screen for Food Insecurity & Where to Refer
- Use Tech: Alcohol Abuse, ASA for 1 Prevention
- Child/Teen Safety: Gun, Text for Crisis (741741)
- Snoring Exercises

- ## Summary
- DM: Screen BMI $\geq 25/23$, Metformin 1st
 - DAPT ~ 1 Yr, Cardiac Test Appropriately
 - Understand Over Diagnosis
 - Prescribe Naloxone
 - Appropriate Antibiotic Use; Zinc Acetate
 - Hold ICS in COPD, Steroid in Asthma & Gout
 - Add Some Hot Sauce at least 3 times a week

- BLOG:** <http://www.ebpupdate.com/>