

# Media Violence & Online Safety

## Advocacy & Injury Prevention

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# Media Violence

Advocacy & Injury Prevention

# Disclaimer

- I am an avid videogame player
  - This includes Grand Theft Auto
- I watch R rated movies
  - Pulp Fiction is one of my all time favorites
- I like the first amendment
- I have two kids at home
- I think that the ultimate responsibility for limiting childrens' exposure to media violence rests in the hands of parents

## In the news...

- September 2006 – A 25 year old man punched his 17 month old daughter in the face, and then killed her because she pulled his PlayStation 2 off the shelf, damaging the disc inside. Video games were partially blamed for his violent act
- December 2008 – Two boys, ages 6 and 7, hang a kitten with the cord from a video game controller and stone it to death. Police blame Grand Theft Auto

## In the news...

- February 2010 - Mistaking a loaded gun for a video game controller, a 3-year-old in Tennessee accidentally shot and killed herself

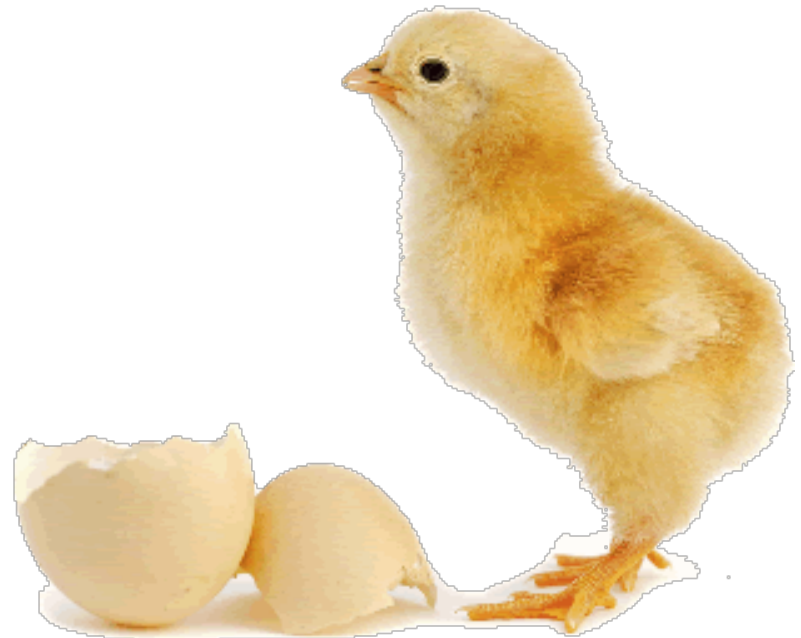


# Objectives

- Review and discuss...
  - The impact that violent media has on children and adolescents
  - Background information and historical perspective
  - Existing research
  - The role of Pediatricians in discussing media violence with patients and parents

# The debate on 'media violence'

- Are we violent because we are exposed to violent media, or is our media violent because we are inherently violent people?



# Public opinion

## Movies

Too violent	82%
Serious problem	80%

## TV

Too violent	57%
'Harmful' to society	80%
Personally bothered	59%



# Public opinion

## News media

Go too far in coverage of violence 49%

## Ratings systems

Stricter for movies 81%

Need better for TV 82%

# Public opinion

## Media violence

Contributes to crime	94%
'Numbs' us to violence	76%
Inspires youths to violence	75%

- People also prefer restrictions on TV violence over gun control if given the choice
- 75% of parents have left movie due to violent content

# Modeling

- Children learn from their environment
- Traditionally this has been from people
- They learn by observing, imitating, and adopting behaviors
- The advent of mass media has changed things



# Exposure

- Children 0-6 years spent almost 2 hours a day using screen media
  - 8-18 years old 6 hours 21 min per day!
- By age 18 years:
  - viewed 200,000 acts of violence on TV
  - including 16,000 murders
- 61% of TV programming portrays interpersonal violence, much in an entertaining manner

# Exposure

- Highest proportion of violence was found in children's shows:
  - Of all animated feature films made from 1937-1999, 100% portrayed violence
  - Violence with intent to injure has increased 80% over that time
  - 3-5 violent acts per hour in prime time versus 20-25 acts per hour on Saturday mornings

# Exposure

- A recent analysis of the Entertainment Software Ratings Board (ESRB) ratings of video games found that over half of all games are rated as containing violence, including over 90% of games rated as appropriate for children 10 years or older (E10+ and T ratings)



# Exposure

- TVs in the bedroom
  - 19% of infants
  - 29% of 2- to 3-year-olds
  - 43% of 4- to 6-year-olds
  - 68% of children >8
- The effects are just beginning to be understood
  - Increases TV viewing time by approx. 1 hour/day
  - Risk of obesity increases 31%
  - Risk of smoking doubles

# Imitation and reinforcement

- Social learning starts early on
- Media violence has appealing positive reinforcement
  - Effective
  - Heroes are rewarded
  - No consequences
- (Bandura, 1963) Kids watched 3 films depicting a child and a clown doll
  - Child kicks doll and it ends
  - Child is rewarded for kicking doll
  - Child is punished
- Viewers then taken to separate room with the doll
- Those that watched films 1 and 2 were more likely to kick the doll



# Desensitization

- Violence has been normalized in our society, the effects of which are;
  - Increased likelihood of aggression
  - Increased likelihood of being a victim
  - The bystander effect – encouraging others to fight in lieu of getting involved
- They may also (falsely) learn that objecting to violence will make them more likely to be a victim

# AAP on media violence

- Over 2000 studies examined association between media violence and violent behavior
  - Only 18 have **NOT** shown a positive relationship
  - Higher association than:
    - Calcium intake and bone mass
    - Lead ingestion and lower IQ
    - Environmental tobacco smoke and lung cancer
    - Not using condoms and sexually acquiring HIV

# Exposure to violence in the media has been shown to contribute to...

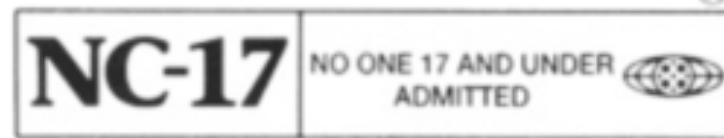
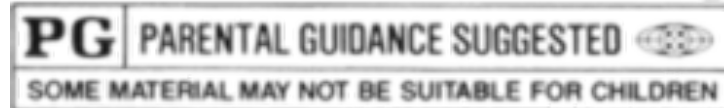
- Aggressive behavior
- Desensitization to violence
- Nightmares or sleep disturbances
- Fear of being harmed
- Anxiety, depression, post-traumatic stress disorder



# Rating systems

- 68% of parents of 10-17 year olds do not use TV ratings
- 90% do not check ratings of computer or video games
- Parents believe over 50% of TV-14 rated shows are inappropriate for their teenagers
- Different systems for each form of media confusing

# Rating systems



# Rating systems

- PTA study:
  - 80% parents prefer content rating
  - 20% prefer age-based rating
  - 69% want dual ratings for TV:
    - Violence
    - Sexual content
- Age-based ratings of “TV-14” and “R” has been shown to increase use by minors – “forbidden fruit” effect

# Top grossing movies of all time

1)	Avatar (2009)	760m
2)	Titanic (1997)	658m
3)	The Avengers (2012)	623m
4)	The Dark Knight (2008)	534m
5)	Star Wars: Episode I - The Phantom Menace (1999)	474m
6)	Star Wars (1977)	460m
7)	The Dark Knight Rises (2012)	448m
8)	Shrek 2 (2004)	441m
9)	E.T.: The Extra-Terrestrial (1982)	435m
10)	Pirates of the Caribbean: Dead Man's Chest (2006)	423m

# TV

- 99% of homes have a television (more than have a phone)
- Television has been shown as effective method of education





# TV

- Felt to account for 10% of violent behaviors in society (“mean world” syndrome)
- 66% of children’s shows had violence
  - 75% unpunished
  - 58% victims showed no pain
  - 67% humorous fashion
  - Only 5% showed long-term consequences
- Adult supervision shown to be most effective antidote to the effects of TV violence on the response children learn

# TV

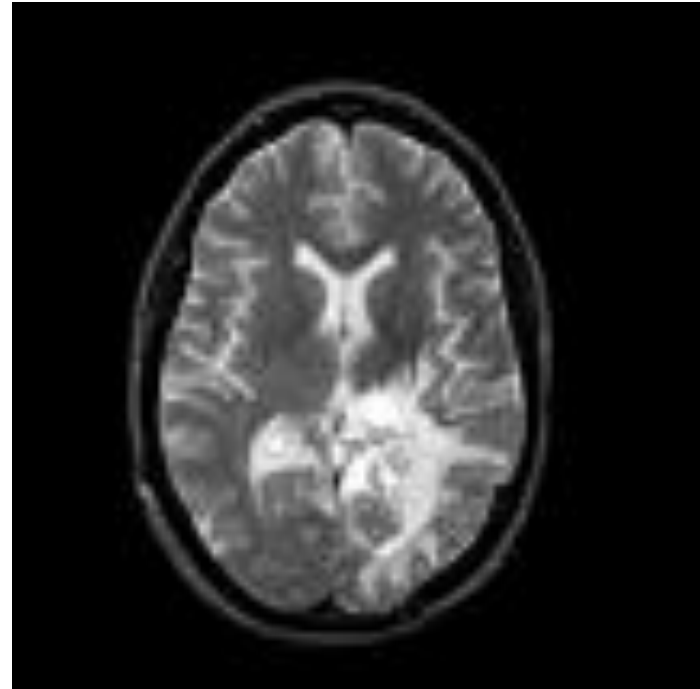
- More isolated viewing
  - Increased number of channels/programs
  - Less of a “family time” experience
  - 54% of kids have TV’s in their room
  - Presence of TV in child’s room increases likelihood of sleep disturbances
- V-chip:
  - All sets built after 1998 required to have this technology
  - Enable parents to block violent programs

# TV

- News broadcasts
  - Live events, with detailed coverage of violence
  - Increased reporting of private, personal details
  - Not rated
  - Although incidence of crime decreasing, reporting has increased 240%
  - As much as 30% of broadcast allotted to crime

# Stuff with magnets

- John P. McMurray, M.D. via MRI imaging showed that memories are stored in same part of brain for:
  - children that had viewed violent entertainment images
  - veterans with PTSD
  - women that had been raped



# TV

- Introduction into new societies (Canada, South Africa):
  - Homicide rates more than doubled within 8-15 years of introduction of TV
  - Violent incidents increased by 160% within 2 years
  - Fights and black eyes among children increased within 4 years
- These studies was not randomized, and all confounding variables were not accounted for

Centerwall BS. Exposure to television as a risk factor for violence. Am J Epidemiol 1989 Apr;129(4):643-52

Centerwall BS. Television and violence. The scale of the problem and where to go from here. SOJAMA 1992 Jun 10;267(22):3059-63

# Music

- Between 7<sup>th</sup>-12<sup>th</sup> grades, kids listen to over 10,500 hours of music (just 500 less hours than they sleep)
- mp3 players are omnipresent
  - In 2005 11% of Americans owned one
  - In 2008 37%



# Music

- 2003 study
  - Violent lyrics increased aggressive thoughts and hostile feelings among 500 college students



# Video games

- Current platforms
  - Nintendo
    - Wii
    - Wii U
    - DS
    - 3DS
  - Sony
    - PS3
    - Vita
  - Microsoft
    - Xbox 360
  - PC and Mac, iPod/iPhone, Android...





## What is the top selling videogame system of all time?

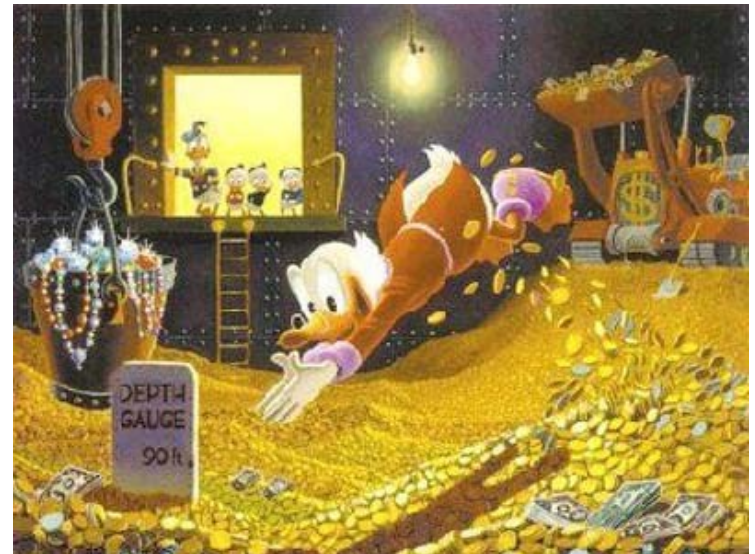
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|------------------------------|---------|
| 1) Nintendo DS (2004)        | 153.67M |
| 2) Sony PlayStation 2 (2000) | 153.6M  |
| 3) Nintendo Game Boy (1989)  | 118.69M |
| 4) Sony PlayStation (1994)   | 102.49M |
| 5) Nintendo Wii (2006)       | 99.38M  |

# Video games

- Most games are designed for boys
- The average age of video game player (30-35)
- Increasing adoption on mobile platforms

# Big business

- 2012 was still a lucrative year for gaming despite a 22% drop in sales
  - Total sales: \$13.3 billion



# Top selling video games of 2012

- 1) Call of Duty: Black Ops II
- 2) Madden NFL 13
- 3) Halo 4
- 4) Assassin's Creed III
- 5) Just Dance 4
- 6) NBA 2K13
- 7) Borderlands 2
- 8) Call of Duty: Modern Warfare 3
- 9) Lego Batman 2: DC Super Heroes
- 10) FIFA 13

# What types of games are more popular?

- Children 4-8 years preferentially choose games that award points for violence against others
- 7<sup>th</sup>-8<sup>th</sup> graders chose:
  - 32% fantasy violence
  - 29% sports
  - 20% general entertainment
  - 17% human violence
  - 2% educational



# Retailers' willingness to sell to underage consumers

FTC's 2010 report to Congress using 'undercover' underage shoppers

Media	2009	2010
Parental Advisory Label CD	72%	64%
R Rated movie ticket	28%	33%
R Rated DVD	54%	38%
Unrated DVD	58%	47%
M Rated Video Game	20%	13%

<http://www.ftc.gov/opa/2011/04/violentkidsent.shtm>

# Online gaming

- Online games - often require a monthly subscription fee
  - Who's paying and watching out for children?
- Popular categories
  - MMOs – World of Warcraft
  - FPS – Call of Duty, Battlefield
- Not rated
  - Swearing 12 year olds abound – I've heard 'em

# The state of video game violence research

- There appears to be a link between exposure and increased aggressive behavior
- There are no documented specific links between video games and criminal violence
- The first study of violent video games took place in 1984
- There have been over 100 since then





"Kids who play more violent video games—it changes their attitudes and their beliefs about aggression. It does desensitize them. It certainly hypes up aggressive feeling in the short-term. In the long-term it probably links aggression with fun, which is a really weird idea. Or aggression and relaxation, another weird idea."

- Doug Gentile, PhD

# The state of video game violence research

- Two major meta analyses
  - Bushman 2001
    - “Exposure is positively associated with heightened levels of aggression in young adults and children, in experimental and nonexperimental designs, and in males and females”
    - Increased psychosocial arousal (incr HR and BP)

# The state of video game violence research

- Two major meta analyses
  - Anderson 2010
    - “Video game violence exposure was positively associated with aggressive behavior, aggressive cognition, and aggressive affect”
    - Baseline heart rates, excitement, skin conductivity (sweatiness) and various psychological factors
    - Cases play violent game, controls play a non-violent game
    - Post test
      - Measure EEG or MRI response to violent stimuli
      - Willingness to expose peers to noxious stimuli
      - Surveys

# Limitations of existing research

- How do you quantify aggression
  - Usual effect size is <2% increase
- It is unethical to give participants knives and guns and see what they do with them
- It is difficult to study rare events like assaults, murder and rape
- Many recent studies use college students – who are potentially aware of existing research
- Methodologically ‘flexible’ study design
- Many studies that show null-effect remain unpublished

# Further questions

- What about the 2011 Supreme Court Decision?
  - Struck down the law that would make it illegal to sell violent games to kids
  - “Most of the [violent game] studies suffer from significant, admitted flaws in methodology”
- Now the President is calling for more research



# AAP recommendations

- Be aware of the effects of violent media
- Ask at least 2 media-related questions at well visits
  - How much entertainment media is being watched per day?
  - Is there a TV and/or internet connection in the child's bedroom?
- Discourage television viewing for children younger than two years
- Remove TVs from bedrooms
- Limit to 1-2 hours per day

# AAP recommendations

- View programs and discuss the content with children
  - Is this real or pretend?
  - Is this how we do things at home?
  - What do you think would happen if you did that?
- Use controversial programming to initiate discussions about family values, violence, sexuality, and drugs
- Encourage alternative entertainment for children (eg, reading, athletics, hobbies, and creative play)
- Use devices to block unauthorized television viewing if necessary (eg, V chip, a lock for the television's electrical plug)

# What you can do in your clinic

- Incorporate a media history into well child visits
- If heavy media use, screen for:
  - Aggressive behaviors
  - Fears
  - Sleep disturbances
- Offer only nonviolent media choices in office waiting areas



# Online Safety

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# Objectives

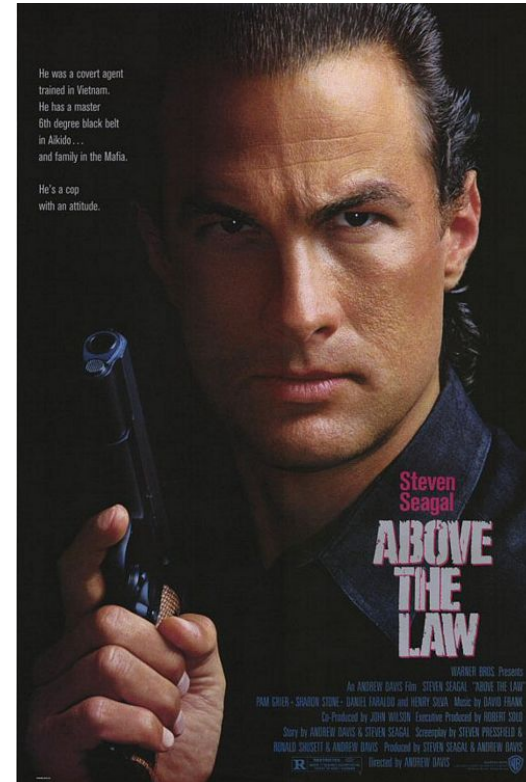
- Review and discuss...
  - A brief overview of online safety
  - Social media for kids
  - What you can do to encourage safe internet use for your patients and their families

For some teens and tweens, social media is the primary way they interact socially, rather than at the mall or a friend's house. ... A large part of this generation's social and emotional development is occurring while on the Internet and on cellphones. Parents need to understand these technologies so they can relate to their children's online world — and comfortably parent in that world.

- Gwenn O'Keefe, MD

# The law

- 1998: Children's Online Privacy Protection Act
  - Websites can't collect info on children <13 without parental permission
  - Thus, many sites limit participation to users >13



## What are the top 10 most visited websites in the US?

- 1) Google
- 2) Facebook
- 3) YouTube
- 4) Yahoo
- 5) Amazon.com
- 6) eBay
- 7) Wikipedia
- 8) Craigslist.org
- 9) Windows Live
- 10) Twitter



# Social media in the USA

- You may be familiar with...
  - Facebook > 1 billion users
  - Twitter > 500 million users



# Background

- 22% of teens log into social media sites 10+ times a day
- 75% of teens use cell phones –  $\frac{3}{4}$  use them for texting and IM
- Why do kids use social media?
  - Socialization and communication
  - Learning opportunities
  - Accessing health information

# Social media: kindergarten and early school age

- Webkinz
  - 'Free' (with toy purchase)
  - Games and rewards for time spent on the site
  - Safety: kids can only enter pre-determined phrases in chat unless parent approves access to 'KidzChatPlus' area for kids 10+





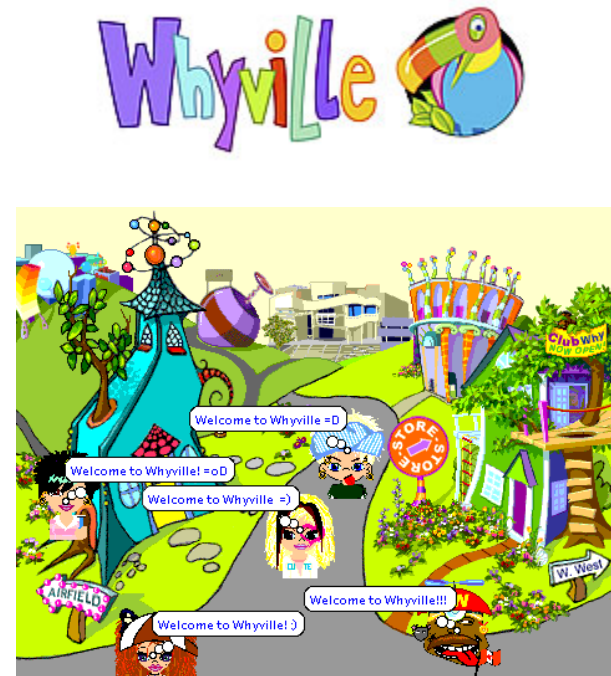
# Social media: kindergarten and early school age

- Club Penguin (Disney)
  - Membership fee
  - Customize a penguin avatar, and interact with friends
  - Chat uses pre-determined phrases



# Social media: elementary and middle school

- Whyville (ages 8-15)
  - Free
  - Earn virtual \$ (clams)
  - Must pass a 'chat license test' before sending personal messages
  - More educational than most



# Social media: elementary and middle school

- Dgamer (Disney XD)
  - Free with purchase of Disney video games
  - Gaming via Nintendo DS networking
  - Parental approval for advanced chatting



# Social media: young teens and beyond

- Facebook
  - Open to 13+
  - Require parental involvement to protect privacy
- Google +
  - Trying but failing
- Myspace
  - The abandoned amusement park of the internet

# Sexting

- The practice of ‘sending a text message with pictures of children or teens that are inappropriate, naked or engaged in sex acts’
  - Recent studies indicate that 2.5% of teens have sent/received
  - Peer pressure plays a major role
- Encourage parents to talk to their kids about it
  - What is an appropriate picture
  - That it is considered a crime in certain jurisdictions
  - Talk about incidents in the media

# Cyberbullying

- Includes
  - Sending of mean messages
  - Exclusion of someone from a group
  - Duping someone into revealing personal information
- Leads to
  - Depression
  - Isolation
  - Anxiety
  - Suicide

# L33T H@CK0RZ

- Personal information (including credit card numbers) are the target of hackers
  - 90% of US companies noted that they had been breached at least once in a recent 12 month period
  - 50% two or more
- Recent examples
  - Sony – personal details of 100M + PSN users
  - Wall Street Journal
  - Lockheed Martin
  - Federal Reserve

# Additional risks

- The 'digital footprint'
  - Sharing too much, and leaving behind evidence
- Advertisers
  - Targeted ads
- Facebook depression
  - Intensity of spending a lot of time online leads to similar symptoms as traditional depression



# AAP recommendations

- Encourage/advise parents to
  - Learn about social media
  - Talk to their kids about social media
  - Keep the computer in a public part of the home
  - ‘Friend’ or ‘follow’ your child online
  - Use formal monitoring systems from your IP or online apps

# AAP recommendations

- Encourage/advise parents to
  - Check email and chat logs for inappropriate content
  - Make sure their kids aren't multitasking while driving
  - Emphasize that things posted online are public
  - Use privacy features
  - Discuss what the concept of 'good judgment' means
  - Discourage spreading gossip and rumors

## What you can do in your clinic

- Have you used a computer and the internet today?
- Are you on social media sites?
- Involve the parent in the discussion

# the big 5

- **Take home points about media violence and online safety...**
  - Exposure to media violence can lead to aggressive behavior, desensitization to violence, sleep disturbances, fear, and psychiatric problems
  - Limit exposure to media in children under two
  - Limit exposure to less than 2 hours a day for older children
  - Ask patients and parents about exposure to violent media and social networking
  - Take TVs and internet connections out of bedrooms

# Resources

- [www.aap.org](http://www.aap.org)
- [www.esrb.org](http://www.esrb.org)
- [www.mpaa.org](http://www.mpaa.org)
- <http://www.whattheyplay.com/>
  - Parents guide to video games
- [www.media-awareness.ca](http://www.media-awareness.ca)
  - Canadian internet site dedicated to “media and information literacy for children”
  - Web Awareness – program to give kids “cybersmarts”
- [www.parentstv.org](http://www.parentstv.org)
  - Parents Television Council – a watchdog group
  - Uses a stop light system to rate TV
- ESRB iPhone and Android apps

# Resources

- [AAP Internet and Media Use](#)
- PBS Frontline – [Growing Up Online](#)
- FTC – [Social networking Sites: A Parents' Guide](#)