

Capturing Parents' Attention to Inform of New Immunizations

StartwithFour.org – Parent Flyer Development

Introduction – The increase in vaccine-preventable disease in adolescents and the recent surge in the number of pediatric vaccinations leave many adolescents under vaccinated. The goal of the Missouri Adolescent Immunization Outreach Initiative was to increase compliance with the current immunization schedule for adolescents through outreach and education of adolescents and parents.

Campaign Intent –

- > Encouraging compliance with the recommended well-adolescent doctor visits
- > Raising awareness of recommended adolescent immunizations
- > Promoting provider/parent discussion about immunizations

The campaign worked with schools as a primary location for reaching the target audience and disseminating the campaign messages.

Objectives – In order to design appropriate and effective campaign materials, members of the initiative sought to:

- > To determine parent knowledge of adolescent immunizations
- > To establish how parents access health information
- > To ascertain from whom parents like to receive health information

Methods – Two primary methods were used to determine parents' knowledge of adolescent immunizations and from whom and how

parents access health information. Those methods included a limited literature review and a parent survey.

Limited Literature Review – Eight parental studies were reviewed. The studies participation ranged from 24 parents to 320 parents.

Parental views of STI vaccinations were used as a proxy for views of vaccinations in general. It was thought that if parents approved of the somewhat controversial immunization, they probably would accept other adolescent immunizations.

- > All of the studies reviewed found that parents generally approved of immunizations including those related to STI's.
- > Factors that influenced willingness to vaccinate included:
 - the severity of the potential disease
 - the effectiveness of the vaccine
 - if no behavioral prevention was available for the disease

What's it all about?
Teens need immunizations. Many people don't know that immunizations are just as important for teens as they are for babies and young children. Immunizations keep teens and their friends and family healthy by:

- Increasing their bodies' ability to fight diseases.
- Preventing the spread of disease to close contacts, like family members, who may not be fully protected.

What can I do?
As parents and adults who care about teens:

- Make sure teens get regular health checkups that include immunizations. The American Academies of Pediatrics and Family Physicians recommend a health checkup for all youth 11–12 years. This visit is a good time to make sure immunizations are up-to-date or to get any that are needed.
- Ask about immunizations any time teens see their doctor or nurse, like during sports physicals and other checkups.
- Get teens any missed immunizations before they graduate from high school.
- Make sure teens have a complete record of all immunizations. They may need it to show proof of immunization for college, travel, employment, or the military.

Which immunizations do teens need?

Adolescent Immunizations	How many?	Notes
Recommended for most teens. Tetanus, diphtheria, and pertussis (Tdap) and Tetanus – diphtheria (Td)	1 dose	Tdap should replace one Td booster for all teens 11 and older. Teens who had a Td booster need to wait at least two years before they get Tdap.
Human Papillomavirus (HPV)	3 doses	For females 11–12 years and up to 26 who have not been vaccinated.
Meningococcal (MCV4)	1 dose	For teens 11–12 years, teens starting high school, young adults in college who live in a dorm, and teens with certain medical conditions.
Catch-Up Immunizations Recommended for teens who didn't get these childhood vaccines.		
Hepatitis A	2 doses	
Hepatitis B	3 doses	
Measles, Mumps, and Rubella (MMR)	2 doses	Only for teens younger than 18 years.
Polio	3 doses	
Varicella (Chickenpox)	2 doses	Teens who had chickenpox don't need to be vaccinated, but record date of disease in their immunization record.
Immunizations for At-Risk Teens Recommended for teens with certain health conditions or weakened immune systems.		
Influenza (flu)	1 dose/year	For teens with chronic conditions such as asthma or diabetes, teens with weakened immune systems, teens who are pregnant, and teens who are family members or caregivers of high-risk people.
Pneumococcal (PPV)	1 or 2 doses	For teens with chronic conditions or weakened immune systems.

Parent Survey Results – Of the 337 parents surveyed:

- > 94% understood the importance and purpose of immunizations
- > 78.9% would like to receive information about adolescent immunizations from their doctor
- > 40% would like to receive information from the school nurse
- > 70.6% of parents would like to receive information about adolescent immunizations in written form
- > 41.5% would like to receive the information orally

Flyer design process – As a result of the surveys, the MO Adolescent Immunization Outreach Committee was able to find a pre-existing flyer to borrow. The Washington State Department of Health created a parent-friendly flyer that was adapted for the Missouri efforts.

SUMMARY –

1. Parents believe adolescent immunizations are 'very important.'
2. Parents like to receive information about adolescent immunizations from their doctor and from the school nurse
3. Parents would like to receive their information about those immunizations in written form and orally

CONCLUSIONS –

1. Providers and school nurses play an important role in conveying health information including adolescent immunizations
2. Parents trust doctors and school nurses for immunization information
3. Distributing a parent flyer about adolescent immunizations through school nurses is a viable strategy to increasing parent knowledge

SOURCES:

1. Waller J, Marlow LAV, Wardle J. Mothers' attitudes towards preventing cervical cancer through human papillomavirus vaccination: a qualitative study. *Cancer Epidemiology Biomarkers & Prevention* Vol 15, 1257-1261, July 2006. American Association for Cancer Research.
2. Zimet GD, Mays RM, Sturm LA, Ravert AA, Perkins SM, Juliar BE. Parental attitudes about sexually transmitted infection vaccination for their adolescent children. *Arch Pediatric Adolescent Medicine* Vol 159, February 2005. American Medical Association.
3. Short MB, Rupp R, Stanberry LR, Rosenthal SL. Parental acceptance of adolescent vaccines within school-based health centres. *Herpes Journal, The Journal of the IHMF*. Vol. 12, Issue 1:23-27. Received for publication 27 November 2004. Accepted for publication: 1 March 2005.
4. Liddon N, Pulley I, Cockerham WC, Lueschen G, Vermund SH, Hook EW. Parents/guardians' willingness to vaccinate their children against genital herpes. *Journal of Adolescent Health* 37 (2005) 187-193. Manuscript received February 14, 2005; manuscript accepted May 18, 2005.
5. Zimet GD, Perkins SM, Sturm LA, Bair RM, Juliar BE, Mays RM. Predictors of STI vaccine acceptability among parents and their adolescent children. *Journal of Adolescent Health* 37 (2005) 179-186. Manuscript received April 28, 2005; manuscript accepted June 7, 2005.
6. Mays RM, Sturm LA, Zimet GD. Parental perspectives on vaccinating children against sexually transmitted infections. *Social Science & Medicine* 58 (2004) 1405-1413.
7. Dempsey AF, Zimet GD, Davis RL, Koutsky L. Factors that are associated with parental acceptance of human papillomavirus vaccines: a randomized intervention study of written information about HPV. *Pediatrics* Vol. 117 No.5 May 2006, pp. 1486-1493 (doi:10.1542/peds.2005-1381). Accepted Oct 18, 2005.
8. O'Leary E, Woods ER, Austin SB, Lusk M, Bauchner H. Parental acceptance of the human papillomavirus vaccine. *Journal of Adolescent Health* 37 (2005) 248-251. Society for Adolescent Medicine, 2005. Manuscript received January 3, 2005; manuscript accepted May 13, 2005.



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Capturing Adolescents' Attention to Inform of New Immunizations

StartwithFour.org – Teen Flyer Development

Introduction – The increase in vaccine-preventable disease in adolescents and the recent surge in the number of pediatric vaccinations leave many adolescents under vaccinated. The goal of the Missouri Adolescent Immunization Outreach Initiative was to increase compliance with the current immunization schedule for adolescents through outreach and education of adolescents and parents.

Campaign Intent –

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- > Promoting provider/parent discussion about immunizations

The campaign worked with schools as a primary location for reaching the target audience and disseminating the campaign messages.

Objectives – In order to design appropriate and effective campaign materials, members of the initiative sought to:

- > To determine adolescent knowledge of adolescent immunizations
- > To establish how adolescents access health information
- > To ascertain from whom adolescents like to receive health information
- > To determine adolescent response to proposed flyer

Methods – Three primary methods were used to determine adolescent knowledge of adolescent immunizations and from whom and how adolescents access health information. Those methods included a limited literature review, a focus group and an adolescent survey.

Limited Literature Review – In one small study of 14 students' searching methods for accessing health information, the majority reviewed only one page of the majority of sites visited. The study indicated they skipped around and did not use a systematic method to review the information. They scanned pages quickly and jumped from place to place. They indicated that they avoided sponsored links and gave little consideration to the source of an answer.



< 50% of 308 College Students **DID NOT KNOW** Difference between Primary/Secondary Web Sources

67% **DID NOT KNOW** How to Use Advance Searches

49% of 412 10th Graders **DO** Access Health Information on the Internet

49%
of 10th graders
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Information on
the internet

Adolescent Survey & Focus Group Results –

One hundred and eight students ranging in age from 11 to 19 completed a survey which had similar results as the focus group (12 participants). The results showed that teens:

- > Understood the importance and purpose of immunizations
- > Thought any needle stick was an immunization
- > Liked to receive health information from a variety of resources
- > Wanted eye-catching materials

What's going ON or SHOULD we say AROUND

YOU DON'T HAVE TO CHOOSE BETWEEN SMART & SEXY

Tdap:
Common names: Lockjaw, whooping cough and diphtheria
> These diseases can lead to muscle spasms, breathing and heart problems, pneumonia, seizures, brain damage, coma, paralysis and death
What to do: Get your shots!
> 1 dose
> For all teens 11 and older
> Ask your doctor, school nurse or parent for more information!!

Meningitis:
Meningococcal
> Bacteria spread through coughing, sneezing, kissing, or sharing anything by mouth, like utensils, cups/glasses, toothbrushes, sports mouthpieces, musical mouthpieces
> Can cause pneumonia, blood infections, swelling of the brain and spinal cord, high fever, brain damage, loss of hearing or loss of limbs
What to do: Get your shots!
> 1 dose
> For all teens 11-12 year olds through college age
> Ask your doctor, school nurse or parent for more information!!

Flu:
Influenza
> Virus spreads through coughing or sneezing
> Can be very serious for other family members that are either younger or older or have other chronic conditions like asthma, heart disease, or diabetes
What to do: Get your shots!
> 1 dose every year
> Especially for those with chronic conditions or those who are pregnant or who have family members with chronic conditions
> Ask your doctor, school nurse or parent for more information!!

HPV:
Human Papillomavirus
> Very common virus spread through sexual contact
> Leads to certain forms of cervical cancer and genital warts
What to do: Get your shots!
> 3 doses
> For females 11 through 26 years old
> Ask your doctor, school nurse or parent for more information!!

A Million Ways to Save the World - Let's start with four.

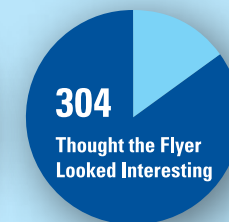
a second of pain or a world of hurt?

www.StartwithFour.org This design was created by teens for teens.

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Developed with grant support from the Centers for Disease Control and Prevention through the Missouri Department of Health and Senior Services.

Flyer design process – Three teens volunteered to design the adolescent flyer. After conducting a "gallery walk" where the teens reviewed existing adolescent immunization materials, rating them for their effectiveness and a brief education session on adolescent immunizations, the adolescents designed a flyer. Their comments and discussion of both the gallery walk items and their design were recorded. Both the design and the recording was turned over to a professional graphic designer to refine. A meeting was held between the graphic designer and the adolescents to see the refinement of their product and to make final changes.

Test Results – The flyer was then tested at several high schools and one middle school. Over 370 pre and post surveys were collected.



Teens who tested the flyer –

- > Increased in knowledge of adolescent immunizations
- > Increased adolescents' intention to discuss immunizations with adults
- > Found the flyer easy to understand
- > Felt it looked interesting

SUMMARY –

1. Adolescents receive their health information predominately from parents, physicians, school nurses and increasingly from web sites
2. Adolescents want to receive health information from a variety of sources – internet, people (parents, physicians, nurses), books
3. Adolescents will search web sites on a limited basis
4. Flyer increased adolescents' knowledge of adolescent immunizations and intention to discuss immunizations with parents, providers and nurses

CONCLUSIONS –

1. Information on web site should be complete on the home page and one additional page to convey the bulk of the information and key messages
2. Educating parents, providers and school nurses on their role in conveying health information including adolescent immunizations is important
3. The flyer designed by teens for teens successfully increased intention to discuss immunizations with significant adults in their lives and increased their knowledge of adolescent immunizations

SOURCES:

1. Hansen DL, Derry HA, Resnick PJ, Richardson CR. Adolescents searching for health information on the internet: an observational study. *Journal of Medical Internet Research*, 2003;5(4):e25 <URL: <http://www.jmir.org/2003/4/e25/>>
2. Ivanitskaya L, O'Boyle I, Casey AM. Health information literacy and competencies of information age students: results from the interactive online research readiness self-assessment (RRSA). *Journal of Medical Internet Research* (<http://www.jmir.org/2006/2/e6/>), 21.4, 2006.
3. Borzekowski DLG, Rickert VI. Adolescent cybersurfing for health information. *ARCH Pediatric Adolescent Medicine* Vol 155, July 2001. American Medical Association. Accepted for publication March 2, 2001.

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