'Presley Receives a City Polio Shot' proclaimed a 1956 *New York Times* article, describing a staged vaccination event of the rock n' roll star prior to his appearance on the Ed Sullivan Show. Reporters seized on this celebrity endorsement of public health, claiming it was 'an Example for Teen-Agers.' Months later, a national health charity offered to send a signed photograph of the event to any Elvis Presley fan club that could prove all its members were vaccinated. Despite public enthusiasm and celebrity spectacle, the charitable enticement and media coverage of this event laid bare a larger problem: although an effective polio vaccine was available, few teens were seeking its protection.

During the first half of the twentieth-century, polio epidemics periodically swept across America, causing widespread fear and affecting thousands of lives with a painful and often debilitating illness.³ Although the poliovirus could strike anyone, it harboured a particular affinity for children, inspiring the term 'infantile paralysis.' In 1938, polio survivor President Franklin D. Roosevelt and his law partner Basil O'Connor established a health charity, the National Foundation for Infantile Paralysis (NFIP), to help combat the disease.⁴ Financed by citizen donations to the March of Dimes (MOD) fundraising campaign, the NFIP waged war against polio by improving hospital treatment, health education, and medical research. By 1954, investment in medical research culminated in the discovery of a vaccine, which was declared safe and effective following a massive field trial.⁵ Although the vaccine promised to protect citizens and end epidemics, a range of political, social, and economic factors complicated the delivery of a uniform vaccination program.⁶ Teens, in particular, were a demographic that was difficult to reach with conventional public health efforts, necessitating the exploration of novel strategies and further investment.

This article speaks to scholarship at the juncture of polio vaccination and American Cold War culture. Most historians examining the polio vaccine have concentrated on the politics of medical research and the discord between scientists Drs Jonas Salk and Albert Sabin. While Cold War scholars have investigated the emergence of teenagers as a distinct group, their influence on American trends and styles, and public angst surrounding juvenile delinquency, there are few works that examine teen health activism. Public health researcher James Colgrove was among the first to explore polio vaccination setbacks and efforts to increase enrolment. This article extends his work by focusing on the experiences of teens, their relationship with the NFIP, and the strategies they employed in the polio crusade.

Between 1954 and 1957, the NFIP initiated a far-reaching partnership with a select group of American adolescents to fight polio. However, far from being passive recipients of institutional pressure, teens solicited by the NFIP joined for their own reasons. Many youths were eager to be recognized as responsible members of society and work with their peers in a charitable cause. ¹⁰ Others sought leadership experience and an opportunity to explore their growing power. ¹¹ Almost all were 'motivated by having lost people we loved or having seen the lasting effects [of polio] on others. ¹² By drawing on institutional records, interviews, and historical newspapers, this article asserts that teen health activism against polio grew out of a sociological experiment orchestrated by the NFIP, which offered hope at a time of anxiety over recurring epidemics and the spectre of juvenile delinquency. The reciprocal relationship that arose between adolescent Americans and the NFIP aided the charity to increase donations and influence, while providing teens with the structure to challenge negative stereotypes and assert their agency at a time of cultural upheaval. ¹³

There were many reasons why the NFIP reached out to adolescents in the fight against polio and economic priorities were initially among the most important. By the summer of 1954, the NFIP was facing serious financial strain due to its \$19 million investment in

gamma globulin for polio prevention, \$7.5 million sponsorship of the national polio vaccine field trials, and \$9 million purchase of commercial vaccine doses. He is NFIP county chapters were also paying for the acute and convalescent treatment costs of over 68,000 polio survivors. Moreover, the rising incidence of the disease with 35,000 cases in 1953 and 38,000 cases in 1954 posed a grave economic situation. To address the shortfall, NFIP officials launched an emergency summer fundraising drive with the goal of generating \$20 million. Children and teens had always played an important role in NFIP fundraising; indeed, the charity raised nearly twenty percent of its annual revenue from school-based MOD fundraising. Many of America's youth were familiar with the NFIP and considered it as a worthy charity. It was through this historical alliance that a more structured partnership emerged.

The visibility and influence of teens in post-war America made them an appealing ally for a cash-strapped charity. Growing consumerism combined with rising purchasing power and recreational time for middle-class youth spurred the emergence of an assertive teen culture. By 1954, many teens sought a level of autonomy and a separate identity from their parents' generation rooted in group-defined trends, styles, and codes of conduct. Status in youth culture was often linked to peer approval, which chaffed at tradition and conservative values. Due to this shift, many national organizations began to recognize teens as important consumers with cultural influence. By tapping this segment of society, the NFIP hoped to inspire a new generation of volunteers and generate additional revenue.

NFIP officials also imagined that teens might be useful to counter the expansion of federated fundraising. By the 1950s, many charities amalgamated fundraising through community chests or the United Way so that public donations were pooled and distributed amongst participating agencies.²⁰ NFIP president Basil O'Connor was opposed to this consolidation, believing it limited 'integrity and independence.'²¹ By championing free-

market fundraising, O'Connor placed the NFIP in opposition with powerful umbrella organizations that enjoyed wide geographical coverage, grassroots support, and enormous proceeds. NFIP officials reasoned that spirited and attractive teens could be deployed in public relations and marketing roles to create inroads in areas dominated by federated organizations. 'An attractive youngster is always newsworthy,' noted one NFIP representative, 'where federated fund raising pressure keeps our publicity to a minimum.' Teen polio crusaders were a Trojan horse in the battle for public support and donations.

Working with its network of over 3,000 county chapters, the NFIP established a youth division under the motto Teens Against Polio (TAP).²³ The philosophy of TAP followed Cold War notions of patriotism and conformity to unite against a common enemy.²⁴ Since NFIP chapter membership was drawn from predominantly white middle-class populations, TAP followed an analogous composition.²⁵ Each division was coordinated by an adult representative and staffed by teen volunteers experienced in community programs and amenable to adult direction. TAP bridged school, sporting, and agricultural clubs by allying with national youth organizations, such as the Boy and Girl Scouts of America, the 4-H Clubs of America, and the YMCA.²⁶ TAP enabled the NFIP to efficiently recruit and organise America's youth into a diverse national health program.

With NFIP encouragement and resources, TAP volunteers became important fundraisers in the 1954 emergency MOD drive. Some teens conducted door-to-door canvassing, while others organized car washes, ticketed parties, peanut sales, and bake sales. Eleanor Roosevelt, a supporter of the NFIP due to her husband's founding role, noted in her *My Day* syndicated newspaper column that teens were 'having as many as 1,000 block parties – one-day affairs where lemonade and home-made cookies are sold.' She reflected that it was 'heart-warming' and that 'it was good to know that many teenagers are so interested in the welfare of their contemporaries, among whom polio so frequently strikes, that they will take

time out of their holiday season to work for this good cause.'²⁷ As teens contributed to their communities they gained recognition and appreciation.

TAP volunteers and allied youth organizations also delivered social care to hospitalized polio survivors through the NFIP patient service program. The NFIP recognized that convalescence was not only a physical process, but a psychological and emotional one that benefitted from relationships with people outside of hospital settings. Through the patient service program, teens visited polio wards and rehabilitation centres where they met disabled youths and shared common interests. One Girl Scout troop from Houston, Texas, organized weekly 'entertainment and socialization' experiences for patients at the nearby Wolff Memorial Home.²⁸ The visits reportedly increased patient morale, speeded recovery, and smoothed the transition from hospital to home and school.²⁹ By expanding the TAP mandate beyond fundraising and into social care, NFIP officials provided a framework for teens to explore and demonstrate a range of competencies.

The NFIP partnership with teens also provided an opportunity to evaluate a new charitable mission. After the successful discovery of the polio vaccine, the NFIP began to reevaluate its long-term mission. While realignment to address the prevention of birth defects and the treatment of arthritis were under consideration, some officials were drawn to societal concerns over 'juvenile delinquency.' At the time, many Americans believed teens that tested conservative norms and challenged parental oversight were part of a growing social problem. Psychiatrist Frederic Wertham's *Seduction of the Innocent* (1954) warned readers that mass media and comic books had a dangerous effect on young minds and that delinquency among adolescents was 'different in both quantity and quality' such that it was 'a virtually new social phenomenon' J. Edgar Hoover fanned the fear by citing alarming reports that claimed adolescent defendants in court cases had increased by two hundred percent since 1941 and that youth gang violence was escalating. Although many of these

incidents were misdemeanours, such as driving infractions and curfew violations, many adult Americans considered 'juvenile delinquency' a serious concern.³² NFIP officials reasoned that organizing teens around an adult-guided mission was a constructive strategy to address delinquency and evaluate a new mandate.

The NFIP channeled additional resources into its TAP program in the aftermath of the emergency fundraising drive. New chapters were established to organize youth and solicit donations for the MOD.³³ 'I remember walking down Harrison Avenue asking for dimes,' recalled former volunteer, Sheila Scott. 'We made a lot of money collecting from friends and relatives and holding projects and events.'34 In Ellensburg, Washington, the youth division sold long cylindrical 'Polio Fighter Balloons.' Purchasers placed money into large replica 'test tubes' worn by female volunteers. ³⁶ Meanwhile, in Fayette County, Kentucky, teens held a peanut sale with a popular 'teenage girl' serving as Miss Peanut. 'We ran out of peanuts after two Saturdays,' recalled the chapter chairman, 'and had to sweat out an additional order of 5,600 bags. We ran out of them, too!' Since the stunt was highly profitable, it was soon adopted by other chapters and promoted in MOD fundraising manuals.³⁷ The creativity and audacity of teens was a cornerstone to the marketing strategy. 'The youngsters did have enterprise and nerve,' recalled the chairman, 'they went in offices, stores, restaurants, hotels – any place there was a person. They barged in on bank presidents, dentists, janitors, even the jail.' Although teen assertiveness was criticized in the media as an indication of delinquency, it was considered acceptable if used under adult supervision. 'The general attitude,' the chairman concluded, 'was that this peanut project furnished an antidote to delinquency by helping young people face up to citizenship.'38 Teen fundraising not only helped to fight polio, but tame anxieties surrounding the supposed threat of lawless youth.

As TAP expanded, NFIP officials instituted a leadership hierarchy composed of national and state youth chairpersons tasked with speaking 'both the language of the teenager

and the adult.'39 The role of national chairperson was especially coveted and usually granted to a teen celebrity or an individual from a notable family. Like their national counterparts, state TAP chairpersons were drawn from volunteer backgrounds and worked with the national chairperson to raise awareness of the program and broaden its impact.⁴⁰ TAP leaders helped to found new chapters, deliver public presentations, and adapt adult promotional materials to a teen audience. Gary Crosby, son of singer Bing Crosby, was selected as the 1954 national chairperson, bringing with him connections and youthful appeal.⁴¹ While the selection of Crosby showed that celebrity status was important for NFIP officials, evidence suggests they preferred photogenic women; indeed, one NFIP director invited staff to nominate candidates that could 'measure up' to 'pert,' 'cute,' 'clever,' 'ready smile,' and 'friendly.' Cold War notions of femininity as unthreatening and the cornerstone of family health provided the context for this rationale; such women would not only pacify anxious parents about delinquency and inspire female peers, but retain the interest of young men. Subsequent chairpersons included actress, dancer, and singer Debbie Reynolds followed by former Miss America contestant Celeste Hill Luckett. 43 NFIP officials hoped that young celebrities and photogenic women would resonate with teens and consolidate support.

TAP also assisted NFIP officials understand why vaccination failed to reach teens. When the polio vaccine was first licensed on 12 April 1955, immunization priorities focused on children. Once production shortages were resolved by 1956, most children had at least one protective inoculation. The overall incidence of polio declined, with 15,400 cases reported in 1956 and 5,400 cases the following year. However, teens were slow to seek protection. By 1957 only 19 percent of teens had obtained the recommended three inoculations, while 30 percent had no inoculations at all. Due to limited vaccine uptake, one-third of all new paralytic polio cases were occurring among those fifteen years or older.

For unimmunized teens, the consequences of polio could be devastating. 'The summer of 1956 was a very busy time for me. I was 15 years old and finishing my first year of high school,' remembered Janice Gradin. 'I didn't get vaccinated and on August eighth of that year, I came down with polio.' The physical and psychological challenges that Gradin faced tested her endurance and resilience. 'I wasn't ashamed of using a wheelchair or [Sister] Kenny sticks when I was in the hospital, but as a teenager I didn't want to be thought of as "different." I couldn't take P.E. because I might have fallen in the shower room. '47 In a nation discomforted with the physical reminders of polio disability, Gradin's experiences hint at the lasting challenges faced many teenage survivors. ⁴⁸

Several factors coalesced to undermine vaccination among teens. Once polio incidence rates declined after the introduction of the vaccine, many citizens began to believe that the disease was already conquered and that new threats needed attention. ⁴⁹ Journalists turned from coverage of polio epidemics to Cold War features, such as a missile gap with the Soviet Union and implications of the Sputnik satellite. Mistaken ideas about disease susceptibility also increased apathy. The NFIP's longstanding use of child-centric publicity and outmoded diagnostic terms, such as infantile paralysis, strengthened the link between polio and childhood. Most Americans assumed that once children were protected, there was 'no longer a need for vaccination.' ⁵⁰ A lack of public consciousness combined with disease misconceptions reduced the sense of urgency. ⁵¹

Trypanophobia – or fear of the needle – further reduced enthusiasm for polio vaccination. ⁵² According to a teen informant, inoculations were avoided because people were 'afraid it will hurt.' ⁵³ Echoing this sentiment, another teen explained that 'fright was a very real thing' and that he 'had seen kids faint long before they were near the nurse or physician.' ⁵⁴ Although some people were concerned by injection discomfort, exaggerated accounts of pain spread through peer networks and intensified anxiety. ⁵⁵ Trypanophobia

created a tension between parents' ability to influence adolescent behaviour and teens' desire for autonomy. As teens enjoyed more agency than children, they were more difficult to compel if they opposed a procedure.

The cost of polio vaccination was another obstacle. During the 1950s, most physicians charged between \$3 and \$5 per polio inoculation. Since three spaced injections were advised to confer durable immunity, the cost of the full immunization schedule was high for large families or those with limited means. 56 '\$5 a shot,' one teen exclaimed, was 'pretty steep for a family of several children.' As a cost-saving measure, families opted for only one or two inoculations, hoping that it was sufficient to ward off polio. Although one shot was better than none, it provided a false sense of security because the effects wore off over time. 57

Affordable alternatives to fee-based vaccination were stymied by a conflicted and transitory investment in subsidized clinics. Although the U.S. federal government allocated over \$53 million through the Polio Vaccine Assistance Act of 1955 to aid states with the purchase of vaccine, most state health departments were unprepared for the influx of capital and the strain on resources. Even where subsidized clinics were instituted, a shared cultural assumption that medicine was a private matter and would inevitably incur a fee limited clinic attendance. When federal vaccine appropriations ended in June 1957, states were forced to turn to their own coffers. Less affluent states abandoned subsidized clinics and turned the matter over to physicians to provide on a fee basis. As one NFIP official reflected the 'lapse of federal money for vaccine' limited who could afford the vaccine.

Even where subsidized clinics were established, enrolment was impaired by the opposition of some doctors.⁶¹ Concerned physicians believed that free or subsidized clinics undermined the doctor-patient relationship and were creeping evidence of government interference and 'socialized medicine.' Accusations of socialism at a time of McCarthyism and Communist smear campaigns restrained public debate.⁶² One Connecticut medical

society threatened to expel members who offered to administer polio inoculations without cost. According to a society spokesperson, doctors were angered, since they 'had sometimes found their private patients taking advantage of the free treatments.' Although the Connecticut clinics resumed after the society recanted its position, tensions between private practice physicians and public health officials limited vaccination opportunities for teens.

In an effort to understand the factors affecting teen vaccination, the NFIP organized a youth conference in August 1957.⁶⁴ The charity moved beyond its TAP chapters to include representatives from a range of youth organizations, including African-American agricultural groups and religious associations, to uphold its pledge of extending services irrespective of 'race, creed, or color.'65 Over the course of three days, officials and teens debated strategies to improve vaccination, as well as worked together to break down race, ethnicity, and gender stereotypes. Latino participant, Carlos Yturralde, was elected conference chairperson, while African American delegate Marcia Jean Beavers was chosen to be vice chairperson of the steering committee. 66 African American participant Marvin Rountree recalled how racial integration at the conference was important for collaboration. 'Everyone I saw was white,' he reflected, 'so I would look at myself as being white also. And that was the thing that stuck with me.' The emphasis on inclusion shaped delegate discussions. 'I was right at ease,' he continued, 'because we talked about several things and it was just things that normal people would talk about.'67 Such tactics mirrored the wider federal efforts to desegregate schools in the aftermath of the 1954 Brown v. Board of Education Supreme Court decision. By attempting to create an atmosphere of equality, NFIP officials helped delegates feel relaxed and facilitated an open dialogue on the many factors that undermined teen vaccination.

Conference delegates served as a market research group to assess the quality and suitability of NFIP educational materials. In one session, teens viewed *Unconditional Surrender*, a film designed to educate audiences about the vaccine, its development, and its

application. Since most teens enjoyed watching movies at cinemas or drive-in theatres, delegates saw great potential for the film; they concluded that it was compelling, helped to lessen fears about injection, and was 'good for high school groups.' By contrast, static educational slides were deemed less effective, since some were 'too elementary' while others 'too advanced.' Delegates revealed that educating teens required entertainment as much as evidence and that it was a matter of striking the right balance between information and 'shock value.' Assessments of conventional print materials and pamphlets fared the worst. Although teens acknowledged that printed matter complemented films and reached a wider audience, they explained that their peers rarely 'read pamphlets,' especially 'long pamphlets.' They advised that print material for teens needed to be concise and 'written by teens, for teens, with teen language.' To be attractive, they suggested pamphlets employ pictures and catchy slogans, such as 'Don't Balk at Salk. Roll up your sleeve, Steve. It's the most.'68 Slang phrases, including 'go ape' (excited), 'made in the shade' (success), and 'burn rubber' (acceleration) were common in teen culture as means to assert distinctness. It was claimed that vaccine catchphrases would be appealing to teens and help the message 'reach all intelligence levels.' Harnessing concepts of patriotism and conformity were also stressed; indeed, one delegate suggested that they 'play up the feeling that if you don't get vaccinated, you don't "belong". '69 Through several discussions, delegates helped the NFIP adapt its educational strategy to penetrate teen culture.

Educating teens through television was also put forward by delegates. By the late 1950s, over seventy percent of American households boasted a least one television set, drawing an adolescent audience interested in music and adventure shows. Delegates explained that although special television spots could be useful, they needed to be 'short and to the point,' as well as 'tailor-made to appeal to teenagers. They recommended recruiting teen presenters, since young people would be more interested in messages delivered by their

peers than by adult presenters. 'Put teen-agers on TV to talk about [the] vaccine and [to] give definite information [about] how to get it,' asserted one delegate.⁷² Delegates showed that the vaccination message could only penetrate teen culture if it came from within its ranks.

Delegates also advised using the social status of school athletes to influence peer behaviour. Sport was important to American culture and athleticism was frequently used in the ideological battle with the Soviet Union. Sporting competitions, such as the Olympics, became proxy wars to demonstrate power and prestige. Like adult sport stars, high school athletes were held in high esteem; whether a football quarterback or baseball pitcher, an athlete's interests, dating habits, and styles were observed and often mimicked. Recognizing the impact of these individuals, some delegates suggested vaccinating school athletes in a public venue. Delegates reasoned that immunized athletes would inspire greater awareness and participation in public health initiatives against polio.

When the conference concluded, NFIP officials reflected on its achievements. Public relations director, Dorothy Ducas, acknowledged her newfound understanding of teen perspectives. 'Believe it or not,' she stated, 'we have learned who you are!' She noted that the conference showed that teens 'were neither adults nor children' but rather 'the inbetween' group that needed special attention. To celebrate the partnership, NFIP officials invited journalists to a news conference where teens were interviewed. 'These young leaders,' a staff member gushed, 'provided us with many provocative ideas and suggested new approaches and fresh language to achieve the objective of 100% polio protection for teenagers.' Teen delegates were pleased to have aided the NFIP and enthusiastic to implement new strategies. A delegate from Future Homemakers vowed to 'take responsibility for putting up posters and literature in country stores and places where farm people congregate.' Similarly, TAP volunteers were eager to promote the vaccine at community events and at 'student council.' Delegate Don Riggin explained that 'teen-agers want

responsibility' and 'they want to decide for themselves what constructive things to do and then do them, on their own.'⁷⁹ The youth conference enabled delegates like Riggin to claim a measure of adult power and openly challenge stereotypes of teen negligence and wrongdoing.

With the support and encouragement of the NFIP, TAP volunteers and their teen allies imagined and implemented a range of new measures to increase youth vaccination. Some worked closely with their local public health departments to establish subsidized vaccination clinics for adolescents. 80 In 1957, TAP volunteers in Helena, Montana, assisted the health department to hold free polio vaccinations every third Saturday. 81 'Teenagers have been specifically invited to attend the immunization clinics sponsored by the health department,' the county health officer urged, 'if they do not obtain their shots from their family physician. '82 In urban areas, such as Phoenix, Arizona and East Lansing, Michigan, high school students coordinated 'citywide campaigns' for teen vaccination. 83 The program was so successful that 'several thousand' teens 'presented arms' for injection. 84 In rural North Carolina, Marvin Rountree assisted the state health department and remembered how clinics were opened 'not only during the weekdays but on weekends.' Weekend clinics assured that the program reached both school-enrolled and employed teens alike. In southern regions, mobile vaccination clinics were organized to reach rural teens. 86 By working with health departments, teen activists provided targeted public health for a previously marginalized demographic.

In parts of the Deep South, where legalized racial segregation and prejudice restrained the effectiveness of many public health programs, some white and black youth collaborated on health education and clinic organization. Rountree not only promoted vaccination among the black New Farmers of America, but also reached out its white counterpart, the Future Farmers of America, to educate members about the vaccine.⁸⁷ Rountree worked closely with his white counterpart, Jim Hunt of the Youth Grange organization, to publicize polio

vaccination. Employing the long-standing concept articulated by Tuskegee Institute founder Booker T. Washington that 'germs know no color line,' Rountree and Hunt drew attention to vaccination as a means to protect the health of all teens irrespective of race.⁸⁸ Rountree remembered, we 'joined together on a local basis to try to get the word out in the various communities . . . through the newspaper and radio' with the message that both black and white adolescents were at equal risk.'⁸⁹ Although injection clinics remained racially segregated, the joint publicity increased awareness of an important public health initiative.

Teens also collaborated with the NFIP on special youth publicity materials for the national media. Magazines were especially popular with teens at mid-century with *Seventeen Magazine* boasting a circulation of over one million young readers. The January 1956 edition of *Seventeen* ran a NFIP feature under the heading 'The Vital TAP,' which discussed the public relations efforts of 'pretty 19-year-old' Celeste Hill Luckett and her 'ability and charm' as national TAP chairperson. Cold War conceptions of youthful femininity were exploited by the publisher and the NFIP to present TAP as an exciting way to get involved with friends in a national cause.

At the local level, young volunteers worked with small newspapers to promote the vaccine. Montana teen DeeVon Miller offered insights to the *Big Timber Pioneer* into the challenges that lay ahead in polio eradication. 'We've got to see to it that everyone knows the facts about the vaccine so that it gets the widest possible use,' Miller explained. 'There's a lot of work to be done, even though we have Dr Salk's vaccine.' While encouraging teens to seek protection she also asked parents to take an active interest in supporting vaccination. Similarly, a staff a writer for the New Mexico *Albuquerque Journal* interviewed TAP chairperson Patty Hicks, noting she could 'talk your arm off explaining why everyone should get polio vaccine shots.' She sought to 'shame' those in the 'fraidy-cat class' who were scared of 'the needle pain' and urged vaccination as a responsible decision. 'Teenagers are in

the in-between group,' Hicks stated, 'which mamma won't take by the ear to the doctor.'

Through the newspaper interview, Hicks raised the issue of teens' duty to the community as a test of impending adulthood. She confronted the myth of juvenile delinquency by stating that she had met with 'thousands of good, decent, bright-eyed youngsters' who were keen to uphold their responsibility to the nation. ⁹³ By working with journalists, teen activists raised awareness of vaccination and legitimized their cultural space in society.

Complementing interviews, teens worked with local and schools newspapers on human interest stories about the need for vaccination. A teen writer for the Ashland High School's *Rogue News* presented an emotional account of how polio affected a young Oregon athlete. 'I remember excitedly watching Dale playing football,' the author recounted, 'in a huddle one moment, running swiftly across the field the next. But now Dale is lying quietly in bed.'94 Dale's story reminded readers that polio was a threat and that even strong athletic individuals needed protection. 'I know that agony,' the author noted, 'wondering "Can I ever walk again?"' Through fear, the article highlighted that polio could alter a young life in unpredictable and often painful ways. In Iowa, the patient service work of teen polio survivor Ronald Pauley was covered by the local *Globe Gazette*. Pauley was characterized as a 'farm boy' who had the 'highest recognitions for his Future Farmers of America activities,' but who came down with polio because he had 'no Salk vaccine shots.' The example showed that despite Pauley's leadership potential, his future was uncertain as a disabled teen in a society discomforted by disability.⁹⁵ Through human interest stories, young writers drew attention to the consequences of indifference towards vaccination and the need to seek protection.

TAP volunteers also aided the NFIP to develop an official newsletter for the youth wing of the charity. ⁹⁶ *Tap-A-Gram* was written by teens and distributed via NFIP county chapters to offer ideas for vaccination events and stunts. ⁹⁷ In one newsletter, TAP national chairperson Patty Hicks explained that 'teens are lagging way behind when it comes to

getting their Salk Shots.' Drawing on shared cultural icons she continued that 'you don't have to be a Professor Einstein or a Doctor Von Braun to figure out that situation is just plain silly.' The newsletter advised young readers to assist their NFIP chapter, print vaccination posters, contact local radio stations, and hold dances to encourage vaccination. ⁹⁸ In an accompanying cartoon series, teen character Lagging Lou asked Smart Sam 'Do polio shots hurt?' to which Sam assured 'You can't even feel them. I didn't even know when the doctor had finished.' The cartoon showed that everyone needed three spaced injections for lasting immunity and that the procedure should be elected without delay. Through *Tap-A-Gram*, teen writers and NFIP officials attempted to engage young readers with an activist public health message.

Teens experimented with a range of strategies to increase vaccination. Students from Newcastle, Oregon, organised a 'polio panel' at the school gymnasium to educate their peers about the need for vaccination. Panel members 'presented facts proving the safety and effectiveness of the Salk polio vaccine and urged everyone to take polio shots.' Employing a more dramatic approach, teens in Sausalito, California, wrote and presented a 'short skit' about polio to their peers. Other groups held viewings of the NFIP film, *Unconditional Surrender*, to educate audiences about the vaccine; indeed, teen volunteers in Freeport, Texas, showed the film at the local Methodist Church as part of their 'Vaccine Week' program. Presentations, skits, and films organized by teens for teens helped to raise awareness of the polio crusade and its applicability to adolescents.

To increase the impact of presentations and performances, NFIP publicists advised teen volunteers to incorporate drama. 'To prove it [vaccination] doesn't hurt a bit,' one manual counselled, 'have a popular doctor inoculate a little, pretty freshman at a high school assembly or at a basketball game.' This approach, linking gendered notions of femininity to a supposed heightened physical sensitivity, inferred that if such a person endured the sting of

the needle, then anyone could. Preference for a 'pretty' candidate further implied the marketing value of attractiveness and social popularity. NFIP officials further advised incorporating the testimony of teen polio survivors to inspire action. 'You can highlight this brief ceremony,' the NFIP manual explained, 'by following it with a short announcement from a teen who had polio, saying that this simple shot might save much pain next summer and urging vaccination now.' In Fresno, California, disabled teen James King offered his 'services to speak' about the disease and 'to tell them the polio story.' Likewise, Iowa TAP member Anne Walters partnered with young polio survivor Jean Gauger to urge 'all teenagers to get their three Salk vaccine shots.' Through staged performances, polio survivors served as both a focus for sympathy and the product of a disease that could be prevented.

Some teens volunteered their bodies in a public display to endorse vaccination. In 1956, Mississippi youth Marilyn Graves posed for journalists beside former polio poster child Terry Tullos as she was injected with the polio vaccine. Tullos served as a visible reminder of the consequences of polio, while the characterization of Graves a 'typical' teen aimed to normalize adolescent vaccination and challenge stereotypes of selfishness or recklessness. 'When we can get so much health insurance free,' Graves asserted, 'it is hard to believe that anyone could pass up the opportunity of warding off any possible chance of being crippled for life.' Staged public events coordinated by teen volunteers became a staple tactic to raise awareness of polio vaccination and lessen angst over needle pain.

Young volunteers also helped to distribute special buttons to promote vaccination and the polio crusade. NFIP staff appreciated how wearable emblems could publicize their public health message and released a series of teen buttons. Like the earlier Polio Pioneer buttons awarded to children participating in the vaccine field trials of 1954, the teen vaccination buttons featured memorable slogans, such as 'Get Salk Shots Now.' TAP volunteers, such

as those in Michigan, sold the NFIP blue crutch button, explaining that the public should 'cooperate with this project and wear a crutch.' Adult observers associated teen promotion of the blue crutch with their important contribution to society. This project has developed into a real juvenile decency demonstration,' noted the Oshkosh, Wisconsin, fire chief, rather than 'juvenile delinquency.' By selling pins and buttons, teens not only increased awareness of polio control efforts, but challenged the trope of delinquency.

Exploiting teen courtship practices allowed for creative strategies to inspire vaccination. Some teens advocated writing to 'lovelorn' newspaper columns under the topic 'my boyfriend hasn't been vaccinated, what should I do?' Others endorsed the 'no shots, no dates' policy, which asked young women to deny the dating requests of would-be suitors until they were vaccinated. Although aimed at teenage men, responsibility for the strategy was placed onto young women using enticement as the underlying 'trick.' When Patty Hicks visited Lincoln, Nebraska, she encouraged her female peers to ask their prospective suitors a 'real cool' question: 'Had your polio shots yet?' The newspaper published the rejoinder, asserting that if the answer was "no" then, buddy, you're out of luck. The gal turns thumbs down on you.' This tactic upheld the 1950s gendered female role concerned with managing family health, while also challenging masculine identity; young men were expected to not only embrace new scientific developments, but also be unflinching in the protection of themselves and those under their care. For heterosexual young men to salvage their Cold War identity, as well as their romantic interest, the 'no shots, no dates' policy transformed vaccination into a prerequisite for the nuclear family and modern parenthood.¹¹³

Complementing the dating tactics, TAP volunteers and allied youth groups organized themed school dances, transforming the popular sock hops, so-called because youth would shed their shoes before dancing, to 'Salk hops' – a dance referencing Dr Jonas Salk and his vaccine.¹¹⁴ To attract an eager throng of dancers, teen volunteers advertised the events as

'exclusive affairs' with a ball room, a popular disc jockey, and the election of a presiding king and queen. ¹¹⁵ In 1957, Diane Jarvis was crowned 'Miss Polio Vaccine' of Du Page County by organizers of a student dance held at the River Forest country club in Bensenville, Illinois. ¹¹⁶ Similarly, Wisconsin teens held a teen dance with a crime-solving theme and a live band; entrants were required to make a donation to the MOD or provide proof of vaccination by way of an immunization card. ¹¹⁷ By using exclusive dances as a tactic, young volunteers were able to exploit the fear of social exclusion to increase vaccine uptake among teens.

Most teen volunteers enjoyed the recognition they earned through grassroots health activism. Rountree found that his efforts made him a local celebrity. 'We had our chance to have our picture in the paper. It was great,' he remembered. Teens also used their newfound public roles to openly address and challenge perceptions of delinquency. There's always a lot of talk about juvenile delinquency and how bad the younger generation is,' one state TAP chairperson explained. The youth campaign, she continued, gave 'teens a chance to show that we like to do good.' In fact, most teens saw their volunteerism as evidence of their ascendency to adulthood. 'Give us the responsibility of campaigning against polio,' Don Riggin asserted. 'We want to grow up,' and 'when you give us responsibility, we usually do a good job.' Through the TAP program, volunteers weakened the myth of delinquency and showed an ambitious dimension to post-war teen culture.

Although TAP volunteers and the NFIP benefitted from their partnership, their efforts proved to be a mixed success. Teen health activism helped to close the gap in polio vaccination, but it could not solve the larger economic, educational, and regional disparities that undermined the eradication program. By the 1960s, it was evident to doctors and public health officers that polio remained a problem with over 2,500 new paralytic cases reported annually. ¹²¹ In 1961, the federal government authorized a transition from the killed-virus

vaccine developed by Salk to the live attenuated oral vaccine discovered by Sabin, since it was less expensive, easier to administer, and required only one dose to confer immunity.

Through the TAP program and its alliances, teen health activism against polio evolved out of a national experiment imagined by the NFIP to battle recurring epidemics, philanthropic competition, and the specter of juvenile delinquency. By investing in teen volunteerism, the NFIP furthered its humanitarian agenda and increased its influence in the face expanding federated fundraising. Although the NFIP at times dominated the relationship, young volunteers joined for their own reasons and shaped the program to suit their own aspirations, while acquiring the experience and resources to challenge negative stereotypes. Teen audacity and determination became socially acceptable within the boundaries of adult-guided philanthropic activity. Although many of the problems that stymied polio vaccination lingered beyond 1960, the creativity and commitment of teens made important inroads towards the goal of polio eradication. Even though the oral vaccine marked the dawn of a new era, promotion of the vaccine not only helped teens to fight polio, but assert their social and cultural legitimacy.

Notes:

¹ 'Presley Receives a City Polio Shot,' New York Times, October 29, 1956, p. 33.

² 'National Foundation for Infantile Paralysis News,' January 1957, March of Dimes Archives, White Plains, New York (henceforth MDA); James Colgrove, *State of Immunity:*The Politics of Vaccination in Twentieth-Century America (Berkeley and Los Angeles:
University of California Press, 2006), Chapter 4.

³ Naomi Rogers, *Dirt and Disease: Polio Before FDR* (New Brunswick: Rutgers University Press, 1992).

⁴ David M. Oshinsky, *Polio: An American Story: The Crusade that Mobilized the Nation Against the 20th Century's Most Feared Disease* (Oxford: Oxford University Press, 2005), p.

58.

⁵ 'Fanfare Ushers Verdict on Tests,' *New York Times*, April 13, 1955, p. 1.

⁶ American Institute of Public Opinion, 'A Study of the Public's Acceptance of the Salk Vaccine Program, February 1957,' MDA.

⁷ Jane S. Smith, *Patenting the Sun: Polio and the Salk Vaccine* (New York: William Morrow & Company, Inc., 1990); Oshinsky, *Polio: An American Story*, pp. 255-257.

⁸ Elaine Tyler May, *Homeward Bound: American Families in the Cold War Era* (New York: Basic Books, 1999); Babette Faehmel, *College Women in the Nuclear Age: Cultural Literacy and Female Identity, 1940-1960* (New Brunswick: Rutgers University Press, 2013); James Gilbert, *A Cycle of Outrage* (New York: Oxford University Press, 1996); Heather Munro Prescott, *A Doctor of Their Own: The History of Adolescent Medicine* (Cambridge: Harvard University Press, 1998); Janet Golden, Richard A. Meckel, Heather Munro Prescott, *Children and Youth in Sickness and in Health: A Historical Handbook and Guide* (Greenwood Press, 2004).

⁹ Colgrove, *State of Immunity*, Chapter 4.

¹⁰ 'Joanne Schafer to Head State Teens Against Polio,' *The Billings County Pioneer*, December 25, 1958, p. 2.

¹¹ Dorothy Ducas, 'What We've Learned From You,' August 28, 1975, Box 4, SSVR, MDA, p. 3.

¹² Sheila Leto Scott, 'Coming Home: Memories of Polio,' *The News Herald*, December 2, 2012.

¹³ Although 'teen,' 'youth,' and 'adolescent' are imprecise terms, I have used them as synonyms in this article to refer to individuals aged thirteen to eighteen.

¹⁴ Smith, *Patenting the Sun*, p. 247; Marcia Lynn Meldrum, 'Departures from the Design: The Randomized Clinical Trial in Historical Context, 1946-1970' (PhD thesis, State University of New York, 1994), p. 96; Stephen Mawdsley, 'Fighting Polio: Selling the Gamma Globulin Field Trials, 1950-1953' (PhD thesis, University of Cambridge, 2012).

¹⁵ Turner to Club Leaders, November 10, 1955, Box 2, Fundraising Records, MDA.

¹⁶ David W. Rose, *Images of America: March of Dimes* (Charleston: Arcadia Publishing, 2003), p. 51.

¹⁷ Thomas Hine, *The Rise and Fall of the American Teenager* (New York: Avon Books, 1999), p. 237.

¹⁸ Bradford W. Wright, *Comic Book Nation: The Transformation of Youth Culture in America* (Baltimore: The Johns Hopkins University Press, 2001); Grace Palladino, *Teenagers: An American History* (New York: Basic Books, 1996), p. xiv.

¹⁹ Palladino, *Teen-agers*, p. 131.

²⁰ Dwight Burlingame, *Philanthropy in America: A Comprehensive Historical Encyclopedia, Volume 1* (Santa Barbara: ABC-CLIO Ltd., 2004), p. 149.

²¹ Naomi Rogers, *Polio Wars: Sister Kenny and the Golden Age of American Medicine* (New York: Oxford University Press, 2014), pp. 309-310.

²² Voss to State Representatives, April 16, 1958, Box 2, Fundraising Records, MDA.

²³ Eleanor Roosevelt, 'My Day,' August 13, 1954, Eleanor Roosevelt Papers Project, the George Washington University.

²⁴ Celeste Hill Luckett, 'A Message to the Young People of America,' January 1956, Box 2, Fundraising Records, MDA.

²⁵ 'Kingsbury, Warren – November 13, 1987,' Box 1, Oral History Records, MDA, pp. 29-30; Bynum to Van Riper, May 21, 1946, Box 13, Medical Program Records, MDA.

²⁶ Turner to Club Leaders, November 10, 1955, Box 2, Fundraising Records, MDA.

²⁷ Roosevelt, 'My Day,' August 13, 1954.

²⁸ Rose, *March of Dimes*, p. 33.

²⁹ NFIP Report of Youth Conference on Polio Vaccination, September 24, 1957, Box 4, SSVR, MDA; '2 OHS Students to Head 'Teens Against Polio' Drive,' *Ocala Star-Banner*, November 5, 1957, p. 5.

 ³⁰ Gilbert, A Cycle of Outrage; Celeste Delgado, 'Teens Rebel Against Authority,'
 Borderlands, 15 (Spring 1997): 14; Eric C. Schneider, Vampires, Dragons, and Egyptian
 Kings: Youth Gangs in Postwar New York (Princeton: Princeton University Press, 1999).
 ³¹ Gilbert, A Cycle of Outrage, p. 8.

^{Jason Barnosky, 'The Violent Years: Responses to Juvenile Crime in the 1950s,'} *Polity*,
38, 3 (July 2006): 314-344; 'Why The Young Kill: Prowling the Juvenile Jungles of the Big
Cities,' *Newsweek*, August 19, 1957, p. 25.

³³ Rose, *March of Dimes*, p. 70.

³⁴ Sheila Leto Scott, 'Coming Home: Memories of Polio,' *The News Herald*, December 2, 2012.

³⁵ 'Teens Against Polio Group Organized Here,' *Ellensburg Daily Record*, January 12, 1955,p. 1.

³⁶ 'Teens Against Polio,' *Ellensburg Daily Record*, January 15, 1955, p. 1.

³⁷ "Teens Against Polio: 1956 March of Dimes," January 1956, Box 2, Fundraising Records, MDA.

³⁸ James M. Molloy, 'How We Fight Polio With Peanuts in Fayette County, Kentucky' in *Teens Against Polio*, December 1956, Box 2, Fundraising Records, MDA.

³⁹ Corbin to Nee, December 18, 1956, Box 2, Fundraising Records, MDA.

⁴⁰ 'Chairman of Teens Against Polio Will Speak at Albuquerque Luncheon,' *Albuquerque Journal*, November 30, 1956, p. 2; 'Teen Polio Head Speaks,' *Albuquerque Tribune*, November 30, 1956, p. 36.

- ⁴⁵ American Institute of Public Opinion, 'A Study of the Public Acceptance of the Salk Vaccine Program,' Box 5, SSVR, June 17, 1957, p. 1; William Laurence, 'Science in Review,' *New York Times*, March 10, 1957, p. E9.
- 46 '19 Per Cent of Teenagers Have Three Polio Shots,' *The Troy Record*, September 9, 1957,p. 2.
- ⁴⁷ Janice Gradin in Edmund J. Sass, *Polio's Legacy: An Oral History* (Lanham: University Press of America, 1996), p. 256.
- ⁴⁸ Marc Shell, *Polio and Its Aftermath: The Paralysis of Culture* (Cambridge: Harvard University Press, 2005); Daniel J. Wilson, *Living with Polio: The Epidemic and Its Survivors* (Chicago: University of Chicago, 2005).
- ⁴⁹ Colgrove, *State of Immunity*, pp. 124-130; John A. Osmundsen, 'Change in Virus Suspected but Big Factor Is Lack of Vaccination,' *New York Times*, April 24, 1960, p. E7; 'Rise in Paralytic Polio Tied to Public Apathy,' *New York Times*, March 13, 1959, p. 33.

 ⁵⁰ Vickery to Ducas, August 27, 1957, Box 4, SSVR, MDA, p. 1.
- ⁵¹ American Institute of Public Opinion, 'A Study of the Public Acceptance of the Salk Vaccine Program,' June 17, 1957, Box 5, SSVR, MDA, p. 2.

⁴¹ 'Boy, Girl Will Lead Teens Against Polio,' *The Milwaukee Sentinel*, January 6, 1955, p. 3.

⁴² Nee to State Representatives, February 10, 1958, Box 2, Fundraising Records, MDA.

⁴³ 'Will Aid in Polio Campaign,' *Daytona Beach Morning Journal*, September 18, 1955, p. 3.

⁴⁴ Damon Stetson, 'Supply to Be Low for Time, But Output Will Be Rushed,' *New York Times*, April 13, 1955, p. 1.

- ⁵² U.S. Congress, Polio Vaccine Activities of HEW, March 21, 1957, Box 10, Gov. Relations Records, MDA, p. 26.
- ⁵³ 'Youth Conference Workshop A,' August 26, 1957, Box 4, SSVR, MDA, p. 4.
- ⁵⁴ 'Youth Conference Workshop D,' August 26, 1957, Box 4, SSVR, MDA, p. 2.
- ⁵⁵ J. G. Hamilton, 'Needle Phobia: A Neglected Diagnosis,' *Journal of Family Practice*, 41, 2 (August 1995): 169-175.
- Damon Stetson, 'Vaccine Held Major Polio Need,' New York Times, January 7, 1959, p.66.
- ⁵⁷ "3 Polio Shots Ruled Enough by Experts," *New York Times*, March 22, 1958, p. 8; '2D Salk Shot Urged for 500,000 Pupils,' *New York Times*, August 6, 1956, p. 20.
- ⁵⁸ U.S. Congress, Polio Vaccine Activities of HEW, March 21, 1957, Box 10, Government Relations Records, MDA, p. 13.
- ⁵⁹ Ibid., p. 29.
- ⁶⁰ Youth Conference Workshop A, August 26, 1957, Box 4, SSVR, MDA, p. 2.
- ⁶¹ Vickery to Ducas, August 27, 1957, Box 4, SSVR, MDA, p. 1.
- ⁶² Ellen Schrecker, *Many Are the Crimes: McCarthyism in America* (Boston: Little, Brown and Company, 1998).
- ⁶³ Richard H. Parke, 'Polio Shots Bring Stratford Fight,' *New York Times*, June 6, 1959, p.23.
- ⁶⁴ Turner to Crawford, Glasser, Vickery, Whitelaw, Blood, and Massey, 'The Informal Committee Concerned with the Immunization of Youth,' June 25, 1957, Box 4, SSVR Records, MDA.
- ⁶⁵ 'Youth Conference on Polio Vaccination, Conference Organization and Attendees List,' August 1957, Box 4, SSVR, MDA; "1952: Campaign Guide," Box 2, Fundraising Records, MDA, p. 78.

⁶⁶ 'Steering Committee,' August 1957, Box 4, SSVR, MDA; 'Who's Who,' August 1957, Box 4, SSVR, MDA.

- ⁶⁹ 'Summary of Remarks at Meeting of Workshop D,' August 26, 1957, Box 4, SSVR, MDA, p. 3.
- ⁷⁰ C. Steinberg, "TV Facts," 2001 World Almanac, 1980.
- ⁷¹ 'Summary of Remarks at Meeting of Workshop D,' August 26, 1957, Box 4, SSVR, MDA, p. 4.
- ⁷² Vickery to Ducas, 'Workshop B,' August 27, 1957, Box 4, SSVR, MDA, p. 3.
- ⁷³ Damion L. Thomas, *Globetrotting: African American Athletes and Cold War Politics* (University of Illinois Press, 2012).
- ⁷⁴ Thorner to Ducas, 'Polio Youth Conference Workshop C,' August 27, 1957, Box 4, SSVR, MDA, p. 1.
- 75 Vickery to Ducas, 'Workshop B,' August 27, 1957, Box 4, SSVR, MDA, p. 3.
- ⁷⁶ Dorothy Ducas, 'What We've Learned From You,' August 28, 1957, Box 4, SSVR, MDA, p. 1.

⁶⁷ Marvin J. Rountree, telephone interview with author, May 14, 2009.

⁶⁸ 'Session III, Workshop A,' August, 27, 1957, Box 4, SSVR Records, MDA, p. 1.

⁷⁷ Barrows to Staff, September 24, 1957, Box 4, SSVR, MDA.

⁷⁸ Vickery to Ducas, 'Workshop B,' August 27, 1957, Box 4, SSVR, MDA, p. 3.

 $^{^{79}}$ Ducas, 'What We've Learned From You,' August 28, 1975, Box 4, SSVR, MDA, p. 3.

⁸⁰ Joan Daly, 'Pupils Working for March of Dimes,' *The Portsmouth Herald*, February 1,
1956, p. 26; '19 Per Cent of Teenagers Have Three Polio Shots,' *The Troy Record*,
September 9, 1957, p. 2.

⁸¹ 'Teenagers Urged to Take Salk Inoculations,' *The Independent Record*, January 16, 1957, p. 2.

- 82 'Health Officer Urges All to Get Polio Shots,' $\it The\ Independent\ Record, January\ 14,\ 1957,$
- p. 5.
- 83 '19 Per Cent of Teenagers Have Three Polio Shots,' *The Troy Record*, September 9, 1957,
- p. 2.
- 84 "Teen-Agers Can be Mobilized to Help in Fight Against Polio," *The Carolina Times*,

January 12, 1957, p. 3.

- ⁸⁵ Rountree interview.
- ⁸⁶ Janice Nichols, Twin Voices: A Memoir of Polio, the Forgotten Killer, p. 135.
- ⁸⁷ Rountree interview.
- ⁸⁸ Stuart Galishoff, 'Germs Know No Color Line: Black Health and Public Policy in Atlanta, 1900-1918,' *Journal of History of Medicine and Allied Sciences* 40 (1985): 22-41.
- ⁸⁹ Rountree interview.
- ⁹⁰ Ducas to Staff, December 9, 1955, Box 2, Fundraising Records, MDA.
- 91 'The Vital TAP,' January 1956, Seventeen Magazine, p. 38
- 92 'Dee Von Miller To Head Drive,' $\it The\ Big\ Timber\ Pioneer,$ January 5, 1956, p. 1.
- 93 'Teens Against Polio National Chairman Here,' *Albuquerque Journal*, April 25, 1958, p. 2.
- ⁹⁴ 'The Teens Against Polio Drive Starts in AHS,' Rogue News, January 27, 1956, p. 1.
- 95 'Urge Salk Vaccine Shots,' Globe Gazette (Iowa), May 21, 1958, p. 16.
- ⁹⁶ 'High School Press Sheet,' 1957, Box 2, Fundraising Records, MDA.
- 97 Voss to State Representatives, April 1, 1958, Box 2, Fundraising Records, MDA.
- 98 Patty Hicks, *Tap-A-Gram*, 1958, Box 2, Fundraising Records, MDA.
- 99 'Teen Agers Give Polio Program' *The News Letter Journal*, November 1, 1956, p. 3.
- ¹⁰⁰ 'March of Dimes Starts 2 Jan.,' Sausalito News, December 28, 1956, p. 2.
- ¹⁰¹ 'Teen Agers Map Polio Drive Plans,' *The Gilmer (Texas) Mirror*, December 3, 1959, p. 3;
- 'TAP to Sponsor Film on Polio,' The Brazosport Facts, December 3, 1956, p 1.

- ¹⁰² 'High School Press Sheet,' 1957, Box 2, Fundraising Records, MDA.
- 'March of Dimes Group Pledges Success Effort,' *The Fresno Bee*, December 9, 1959, p.2C.
- ¹⁰⁴ 'Chairmen Chat with Victim,' Globe Gazette (Iowa), January 16, 1959, p. 12.
- ¹⁰⁵ Caroline C. Wang, 'Portraying Stigmatized Conditions: Disabling Images in Public Health,' *Journal of Health Communication*, 3, 2 (May 1998): 149 159.
- ¹⁰⁶ 'Mississippi's 'Typical Teen' Urges Vaccine For Teenagers,' *Delta Democrat-Times*, October 18, 1956, p. 30.
- 107 'Polio Drive Queen Told: Miss TAP Reigns at Annual OHS Blue Crutch Ball,' Oshkosh Northwestern, January 13, 1953, p. 8; Thorner to Ducas, August 27, 1957, Box 4, SSVR, MDA, p. 1.
- ¹⁰⁸ 'Blue Crutch Day Thursday,' *Ironwood Daily Globe*, January 30, 1957, p. 10.
- ¹⁰⁹ 'Teen-Agers to Rally Strength for Drive,' *Oshkosh Northwestern*, December 26, 1957, p. 4.
- ¹¹⁰ 'Teens Get Polio Protected Now,' Box 2, Fundraising Records, MDA.
- ¹¹¹ Thorner to Ducas, 'Workshop C,' August 27, 1957, Box 4, SSVR, MDA, p. 3.
- "No Polio Shot? Well No Date Either, Buddy," *Lincoln Evening Journal*, June 13, 1958,p. 1.
- ¹¹³ Rima Apple, *Perfect Motherhood: Science and Childrearing in America*. (New Brunswick, New Jersey, Rutgers University Press, 2006).
- ¹¹⁴ Lisa Jo Sagolla, *Rock 'n' Roll Dances of the 1950s* (Santa Barbara: ABC-CLIO, 2011), p. 39.
- ¹¹⁵ 'High School Press Sheet,' 1957, Box 2, Fundraising Records, MDA.
- ¹¹⁶ 'Diane Jarvis,' *Bensenville Register*, March 14, 1957, p. 1.
- ¹¹⁷ Youth Conference Workshop A, August, 26 1957, Box 4, SSVR, MDA, p. 3.

- 120 '19 Per Cent of Teenagers Have Three Polio Shots,' *The Troy Record*, September 9, 1957,p. 2.
- ¹²¹ Bess Furman, 'U.S. Is Standing Pat on Salk Vaccine for Polio,' *New York Times*, June 10, 1960, p. 64; Tom Wickers, 'Salk Vaccine Hit At Polio Meeting,' *New York Times*, June 12, 1960, p. 82.

¹¹⁸ Rountree interview.

¹¹⁹ 'Joanne Schafer to Head State Teens Against Polio,' *The Billings County Pioneer*, December 25, 1958, p. 2.