

Contagious Rhythm: Infectious Diseases of 20th Century Musicians

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Infectious diseases have led to illness and death for many famous musicians, from the classical period to the rock 'n' roll era. By the 20th century, as public health improved and orchestral composers began living more settled lives, infections among American and European musicians became less prominent. By mid-century, however, seminal jazz musicians famously pursued lifestyles characterized by drug and alcohol abuse. Among the consequences of this risky lifestyle were tuberculosis, syphilis, and chronic viral hepatitis. More contemporary rock musicians have experienced an epidemic of hepatitis C infection and HIV/AIDS related to intravenous drug use and promiscuity. Musical innovation is thus often accompanied by diseases of neglect and overindulgence, particularly infectious illnesses, although risky behavior and associated infectious illnesses tend to decrease as the style matures.

Keywords: Infectious disease, Musicians, Twentieth century

On February 4, 1987, the flamboyant pianist Liberace died at age 68 of cytomegalovirus infection associated with acquired immune deficiency syndrome (AIDS).^{1,2} His death, along with the demise two years earlier of film star Rock Hudson, focused public attention on the growing human immunodeficiency virus (HIV) epidemic in a way that mere statistics and scientific reports could never have done. Moreover, these deaths, along with those of other well-known artists, raised provocative questions about the relationship between art and illness.

The interplay between music and infectious diseases is long and complex. Baroque and classical musicians often died of infection, at a rate similar to that of their peers. Indeed, the toll of contagious illnesses on the health of such luminaries as Bach, Mozart and Beethoven is well known.³ Beginning in the mid-1800's, improved sanitation, vaccinations, and eventually antibiotics led to a steady decline in the incidence of life-threatening infections among the public at large,⁴ and the average life expectancy increased 28 years over the next century. Coincidentally, during this time the financial

insecurity and chaotic lifestyle often experienced by earlier composers evolved into a more bourgeois predictability. Thus, by the middle of the 20th century the titans of modern orchestral music, among them Copland, Stravinsky, Shostakovich and Bernstein, lived comfortably and succumbed to diseases of old age, such as emphysema and cancer.

However, infectious risks did not disappear, but instead reappeared several times since 1900 as waves of mini-epidemics linked to cycles of substance abuse and other risky behavior. Again and again, as new musical forms have surfaced, innovative artists have pursued unorthodox lifestyles that put them at risk for lethal pathogens. In reviewing this phenomenon, I have chosen primarily to focus on Western-based musicians and composers (while recognizing the importance of these issues, particularly HIV/AIDS, among musicians in the developing world). Moreover, though a highly objective statistical analysis would be ideal, the ambiguity of medical diagnoses in the historical record, and the difficulty of defining appropriate cohorts for study

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and comparison make a quantitative study of these infectious cycles virtually impossible. Nevertheless, I feel that important conclusions can be drawn based upon anecdotes and observation.

To illustrate the evolution of infectious diseases among musicians of the 20th century, I have arbitrarily chosen musicians from four distinct periods: classical musicians who died before 1900, classical composers of the 20th century, mid-century jazz innovators and rock 'n' roll mavericks of the late 20th century. Comparison of the first two groups will illustrate how the infectious risk declined as orchestral music reached maturity in the last century, while an examination of jazz and rock musicians will show how new forms of artistic expression have engendered new risks.

The Hectic Lives and Early Deaths of Classical Icons

The medical histories of famous musicians have long been fodder for scrutiny and discussion, with the unorthodox nature of the artistic life often the focus. For instance, speculation about the death of Mozart, who may have died young from the consequences of rheumatic fever, and of Beethoven, a possible victim of syphilis, have led to a virtual cottage industry of medical detective writing.⁵⁻⁷ In truth,

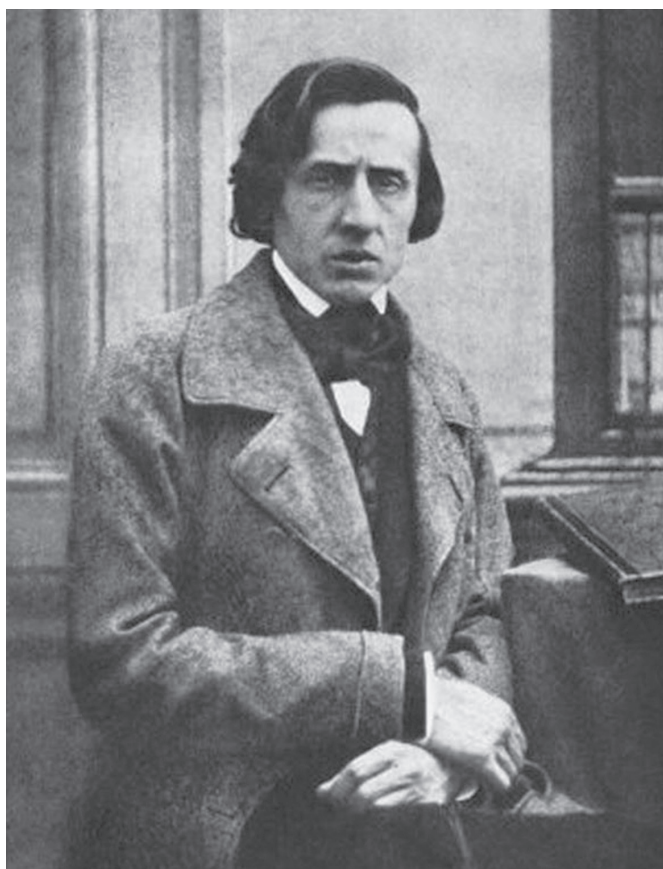


Figure 1. This photograph of Frederic Chopin was taken in 1849, shortly before his death at age 39. His facial features and posture suggest a long-standing pulmonary illness. (Photo by Louis-Auguste Bisson, 1849)

many prominent composers of the 18th and 19th centuries led disordered lives punctuated by financial instability, romantic turmoil, and alcohol overuse, often leading to health crises.

Tuberculosis, the condition of poets and heroines of Italian opera, was associated in the public mind with penury and artistic sensitivity, both of which musicians and poets (such as Keats and Shelley) typically possessed in spades.⁸ Frederic Chopin's (1810-1849) (figure 1) prolonged illness and death has generally been attributed to tuberculosis (though some modern writers suggest cystic fibrosis or another congenital bronchiectatic disorder).⁹ Many critics have seen his health troubles reflected in the delicacy and turbulence of his piano works.

A contagion similarly weighted with symbolic significance, syphilis afflicted a number of composers, including Donizetti, Schubert, Schumann, Smetana and Joplin.⁴ Many observers equated this disease with a Faustian bargain embraced by musical savants: a life of intense emotion and experience, followed by dissolution and death. This association was all the more striking, as common lore held that early syphilitic brain disease produced an intensification of the senses and an altered sensorium, the so-called "expansive stage," conducive to creative genius.¹⁰

While syphilis and tuberculosis were associated in the public mind with suffering for art, we have no evidence that composers were more susceptible to these germs than the general public. Moreover, the stereotype of the self-indulgent artist (eg, as depicted in the play and movie *Amadeus*) was not true of all composers; Haydn, Bach, Wagner and Brahms lived relatively long and productive lives mostly unhindered by disease until their later years. However, many of their less fortunate colleagues suffered the tribulations of catastrophic illness, often of their own making, at a young age.

The Golden Years of Classical Musicians

As the 19th century passed into the 20th, the burden of musical mortality shifted away from infectious diseases (often linked to deprivation and risky behavior) toward diseases of affluence and old age (table 1). Paradoxically, this shift occurred as composers like Scriabin, Stravinsky and Schoenberg moved toward much more unrestrained musical forms, perhaps signaling that external concerns about revolution and world war were more relevant to their art than were introverted issues of disease and personal mortality.

With the caveat that any retrospective analysis is bound to be biased, a study of the "Top 50 Classical Composers" as described by All Music Guide (www.allmusic.com) shows the average age of death of 16 classical/romantic composers to be 57.4 \pm 18.8 years, while that for 17 post-romantic/modern composers is 72 \pm 12.8 years. By comparison, the average life expectancy for an American man born in 1850 surviving to age 20 was 60.1, and that of a man born in 1950 was 69.5.¹¹ Of the former group, 43.8% died of infectious causes, vs.

Table 1. Age and cause of death for selected classical composers.

Composer	Age at death (y)	Cause of death
<i>Died before 1900</i>		
Johann S. Bach	65	Pneumonia, following eye surgery and a stroke
Josef Haydn	77	Cardiovascular disease – hypertension*
Wolfgang Mozart	29	Rheumatic fever*
		Endocarditis*
Ludwig von Beethoven	57	Typhoid fever*
		Cirrhosis*
		Renal disease*
Franz Schubert	31	Typhoid fever
Robert Schumann	46	Probable neurosyphilis
Frederic Chopin	39	Probable TB or chronic bronchiectasis
Peter Tchaikovsky	53	Cholera
<i>Died after 1900</i>		
Gustav Mahler	51	Streptococcal endocarditis
Antonin Dvorak	63	Heart failure
Edvard Grieg	64	Heart failure
Giacomo Puccini	66	Throat cancer
Claude Debussy	56	Colon cancer
Bela Bartok	64	Polycythemia/Leukemia
Igor Stravinsky	89	Heart failure; treated for TB in past
Sergei Prokofiev	62	Cerebral hemorrhage – hypertension*
Aaron Copland	90	Alzheimer's, respiratory failure
Dmitri Shostakovich	69	Lung cancer
Leonard Bernstein	72	COPD, heart failure

TB, tuberculosis; COPD, chronic obstructive pulmonary disease.

*, presumed cause of death

11.8% of the latter. Approximately half of contemporary post-romantic/modern composers died of the effects of cardiovascular disease or stroke, including composers Dvorak, Faure, Grieg, Rimsky-Korsakov, Prokofiev, Weill, Copland and Bernstein while Puccini, Debussy, Bartok, Rachmaninov and Shostakovich died of cancer.

Thus, mortality for classical composers (that is, composers of traditional orchestral and instrumental music) closely tracked that of the general population, with a decline in infectious deaths heading into the 1900's. Despite this general trend in improved longevity, a few 20th century composers fell victim to acute infection in the prime of life. The idiosyncratic and mystical Russian composer and pianist Alexander Scriabin (1872-1915) died of sepsis that began as a "modest pimple on the mouth."¹² He was in the middle of composing his magnum opus *Mysterium*, "a grandiose religious synthesis of all arts which would herald the birth of a new world."¹³ The Viennese composer Alban Berg (1885-1935) died, similarly, of bacteremia from a trivial source, a "gnat bite" on the lower part of his spine,³ just months after completing his famous violin concerto and while working on the groundbreaking opera *Lulu*.

The final illness of Gustav Mahler (1860-1911) (figure 2) was painful and well-documented. His condition began as a simple sore throat in February 1911, at which time he was visiting the United States and conducting for the New York

Philharmonic. As the illness progressed, prominent physician Dr. Emanuel Libman was consulted and used the culture techniques he had perfected to diagnose streptococcal endocarditis. Thus, Mahler was perhaps the first well known musician to receive an accurate microbiological diagnosis for his fatal illness.¹⁴ Mahler was given a variety of treatments, including an experimental antistreptococcal immune preparation, and briefly rallied. He was able to return to Europe, but experienced a rapid decline and died in Vienna on May 11, 1911.

Meanwhile, a new mode of musical expression was brewing in the speakeasies and slums of Harlem, New Orleans, Chicago and St. Louis, and the disease cycle would reflect acute illnesses associated with risky behavior and neglect.

A Tragic Jazz Minuet

In turn-of-the-century Davenport, Iowa, Leon Bismarck "Bix" Beiderbecke (figure 3) grew up listening to music drifting ashore from the riverboats. To his parents' chagrin, he put much more effort into studying cornet and piano than he did into Shakespeare. An effort to straighten him out by sending him to boarding school in Chicago resulted in only more exposure to ragtime and other desultory delights in the city's speakeasies, and thus a legendary jazz musician was born. Beiderbecke at his peak was known for his sensitive phrasing and intelligent improvisation on the cornet. Along with his contemporary, Louis Armstrong, he influenced

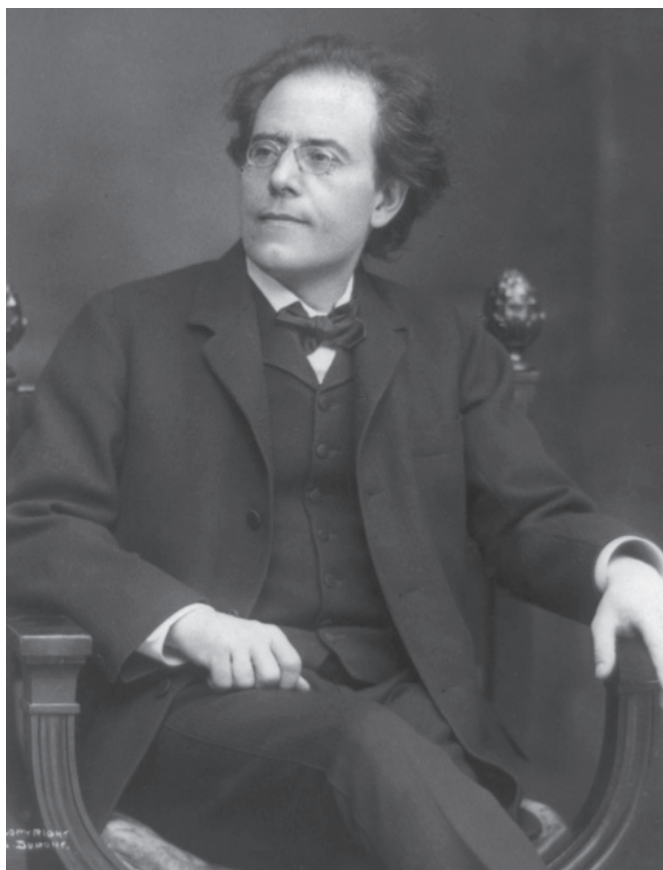


Figure 2. In this photograph of Mahler from 1909, taken two years before his death, the composer shows no sign of chronic illness. (Photo by A. Dupont, NY, 1909; provided courtesy of the US Library of Congress.)

generations of musicians, among them Jimmy McPartland, Bobby Hackett, Tommy Dorsey and Miles Davis. Unfortunately, he established another less desirable template for future jazz disciples – a tendency toward heavy alcohol consumption. During his last years of life he played little and suffered through cycles of bingeing followed by withdrawal and delirium tremens, finally succumbing to lobar pneumonia on August 6, 1931, at age 28.¹⁵

Stride pianist Fats Waller (1904-1933) and trombonist Jack Teagarden (1905-1964) were groundbreaking contemporaries of Beiderbecke whose bacchanalian tendencies also culminated in pneumonia and premature death. Though tuberculosis was declining among the public at large in the United States, cornet player Freddie Keppard (1890-1933), bassist Jimmy Blanton (1918-1942), trumpeter Fats Navarro (1923-1950), bebop keyboard virtuoso Bud Powell (1924-1966) and bassist Paul Chambers (1935-1969) all succumbed to it after a lifetime of alcohol and substance abuse.^{16,17} Tuberculosis also felled influential guitarist Charlie Christian (1916-1942) and drummer Chick Webb (1905-1939), neither of whom were known as addicts or heavy drinkers.¹⁷ Webb suffered from a marked gibbous deformity of the spine related to childhood tuberculosis, which fortunately did not

interfere with his personal and professional accomplishments (which included introducing a very young Ella Fitzgerald to the music world).

Syphilis afflicted several famous jazz musicians but, with few exceptions, was not the cause of disability or death. Scott Joplin (1867-1917), the “King of Ragtime,” bridged the worlds of classical and popular music and died of the effects of neurosyphilis after a prolonged illness.¹⁸ Saxophonists Lester Young (1909-1959) and Charlie Parker (1920-1955) were diagnosed and treated for syphilis as young men, both later dying from the chronic effects of alcohol and drug abuse.¹⁷ In fact, during Young’s tenure with Count Basie’s band in 1937 a syphilis outbreak was identified involving four musicians, one of them possibly Young.¹⁸

One other infection of note related to dissolute behavior plagued jazz musicians, though its effects were delayed for many years. Chronic viral hepatitis was implicated in the illnesses and deaths of several seminal jazz artists, including



Figure 3. Bix Beiderbecke’s clean-cut appearance belied the fact that he was an alcoholic who slowly drank his way to an early death from pneumonia at age 29. (Photograph is believed to have been taken in early 1924; the photographer is unknown.)



Figure 4. Charlie Parker set the mold for bebop artists in the post-World War period, with his quicksilver saxophone solos and frantic lifestyle. He died of pneumonia at age 35 after two decades of alcohol and drug abuse. (Photo by James J. Kriegsmann (taken between 1940-1955); provided courtesy of the US Library of Congress. Reproduced with permission from James J. Kriegsmann, Jr.)

saxophonists John Coltrane (1926-1967), Stan Getz (1927-1991) and Gerry Mulligan (1927-1996), pianist Bill Evans (1929-1980), soul icon Ray Charles (1930-2004) and trumpeter Don Cherry (1936-1995),¹⁹ all of whom died of complications of hepatitis attributed to intravenous drug use early in their careers.¹⁷ However, it should be noted that, in many such cases, available medical records are incomplete, and the effects of chronic alcohol abuse cannot easily be disentangled from those of chronic viral hepatitis.

Many jazz musicians lived and died by Charlie Parker's (figure 4) dictum that "If you don't live it, it won't come out of your horn."²⁰ Early jazz musicians imbibed alcohol and marijuana freely, but the introduction of heroin into the music scene in the 1940s was devastating and the major factor in spreading viral hepatitis. Sociologist Charles Winick's groundbreaking 1957 survey found that 53% of jazz musicians had used heroin at least once, 24% were occasional users, and 16% were habitual users.²¹ By comparison, contemporaneous surveys of narcotic addiction among physicians, another prominent at-risk group, ranged from 0.5% to 2%. Parker himself succumbed to pneumonia in 1955, at age 35, while 'drying out' at the apartment of jazz patroness Baroness

"Nica" de Koenigswarter, following years of alcohol and drug abuse.²⁰

While it is difficult to separate out the influence of lifestyle from the social effects of poverty and a nomadic existence (among other factors), the ubiquitous nature of drug and alcohol abuse among bebop musicians is undeniable, and the casualty rate from these agents was truly staggering. Only a lucky few, like Dizzy Gillespie, Miles Davis, Roy Haynes and Max Roach, survived the excesses of the bebop era to entertain audiences into the later years of the century.

Death by Rock 'N' Roll

The birth of rock 'n' roll was said to have occurred in 1954 when Big Bill Turner's "Shake, Rattle and Roll," Bill Haley's "Rock around the Clock" and "It's Alright Mama" by Elvis Presley debuted. Rock music injected a new energy into popular music of the mid-century and with it, risky behavior. In fact, Bill Haley was a lifelong alcoholic, and Elvis died of a heart attack after years of drug abuse. The rock lifestyle carried many insidious dangers, among them the twin scourges of hepatitis and HIV.

Intravenous drug use was a notorious *bête noire* for rock musicians. As *Time* magazine noted in 1969:

Its signature is everywhere. Rock musicians use drugs frequently and openly, and their compositions are riddled with references to drugs, from the Beatles' "I get high with a little help from my friends" to the Jefferson Airplane's White Rabbit ("Remember what the dormouse said: Feed your head"). The culture has its own in-group argot: "bummers" (bad trips) and "straights" (everyone else), "heat" (the police) and "narks" (narcotics agents), and being "spaced out" (in a drug daze).²²

It seemed that the lesson jazz musicians finally learned after years of tragedy had to be relearned by young rockers. The list of casualties from drug and alcohol intoxication is long and depressing: Jimi Hendrix, Janis Joplin, guitarist Michael Bloomfield, drummers John Bonham and Keith Moon, brilliant singer-songwriters Gram Parsons and Townes van Zandt, among others.

For many unfortunate performers, coming clean from drugs was not enough, given the chronic viral hepatitis picked up (in most cases) from contaminated needles. Steven Tyler (figure 5), the hyperactive lead singer for rock band Aerosmith, is one famous sufferer who went public with his addiction and hepatitis C infection; "I've had hepatitis C for a long time, asymptomatic. And I talked to my doctor . . . and he said now is the time and it's 11 months of chemotherapy. So I went on that and it about killed me. . . . It is nonexistent in my bloodstream as we speak, so it's one of those few miracles in doctoring where it's like a complete cure. It's gone."²³ Well-known musicians who have undergone treatment for hepatitis



Figure 5. Steven Tyler is a prototypical rock ‘n’ roll singer whose drug addiction led to chronic viral infection. He has publicly discussed his successful treatment for hepatitis C. (Photo by DaigoOliva. Reproduced under the Creative Commons Attribution-Share Alike 2.0 Generic license.)

C include Tex-Mex singer Freddy Fender, Grateful Dead bassist Phil Lesh, Beach Boy David Marks, ZZ Top bassist Dusty Hill, Three Dog Night singer Chuck Negron, Allman Brother Gregg Allman, singer-songwriter David Crosby, and songstress Natalie Cole.²⁴ Fender, Lesh, and Crosby successfully underwent liver transplants, though Fender died a short time afterward from other medical conditions.²⁵ Cole recently underwent a kidney transplant for hepatitis C-related nephropathy.

If drug use was one of the unsavory pillars of rock ‘n’ roll, the other was sexual promiscuity. “Sex and drugs and rock ‘n’ roll/Is all my brain and body need,” sang Ian Dury (a polio survivor) in the 1970s, and he might well have been describing most rock musicians. Given the emphasis on sexual themes in modern pop music and the reputation of rock musicians for promiscuity, it is perhaps surprising that so few rock musicians are known to have died from AIDS. Various websites list about a dozen or so well-known performers, the most prominent of whom are the Israeli chanteuse Ofra Haza,²⁶ the riveting Nigerian singer Fela Anikulapo Kuti,²⁷ Creedence Clearwater Revival cofounder Tom Fogerty (who reportedly acquired HIV from a blood transfusion), NWA rapper Easy-E and Queen frontman Freddie Mercury.

Fela (1938-1997), generally known by only his first name, was an extremely influential singer and songwriter who was as famous worldwide for his political activism as he was for his music. A vigorous supporter of African-style polygamy, he boasted about his sexual exploits: “Sex is one of the most important things in life, man. It’s Christianity and Islam that have made sex immoral. People should be proud to say, ‘I had a fantastic **** last night.’”²⁷ Ironically, the last song he wrote, “Condom Scurry and Scalawag,” was a polemic against condoms as “anti-African.” Fela refused to be tested

for HIV during his terminal illness, but after his death, and in a belated effort to bring Nigerian AIDS awareness “out of the Dark Ages,” his brother revealed that Fela had died of AIDS-related Kaposi sarcoma.

Freddie Mercury (figure 6) and the rock group Queen fused heavy metal, rockabilly, glam, and cabaret into a heady pastiche that caught the fancy of 1980s rock fans. Mercury claimed Liza Minnelli as a primary inspiration, and elements of Liberace, David Bowie, Elton John and the Beatles found their way into his music. His group sold as many as 300 million albums worldwide and performed before packed stadium audiences. His theatrical presentation, which included skin-tight suits, heavy rouge, lipstick and eyeliner, belied the fact that Mercury was a particularly private person who did not publicly identify himself as gay prior to his death. Despite



Figure 6. Freddie Mercury’s outsized stage persona was in contrast to his closeted private life. He was one of the early rock casualties of the HIV epidemic. (Statue by Irena Sedlecka. Photo by Bernd Brägelmann. Reproduced under the GNU Free Documentation License.)

a long-term relationship with a woman he considered his common-law wife,²⁸ by the early 1980s Mercury was frequenting bathhouses in search of casual male partners and is well documented in a 2004 British Channel 5 documentary.²⁹ When his progressing illness became the subject of much rumor in 1991, he was hounded relentlessly by the paparazzi. He died at age 45 on November 24, 1991, issuing the following statement one day prior to his death:

Following the enormous conjecture in the press over the last two weeks, I wish to confirm that I have been tested HIV positive and have AIDS. I felt it correct to keep this information private to date to protect the privacy of those around me. However, the time has come now for my friends and fans around the world to know the truth and I hope that everyone will join with my doctors and all those worldwide in the fight against this terrible disease. My privacy has always been very special to me and I am famous for my lack of interviews. Please understand this policy will continue.³⁰

Although this article focuses on well-known rock musicians who contracted HIV, the illness took an increasingly heavy toll on all the musical arts during the 1980s and 1990s, especially musical theater. Indeed, the ranks of Broadway were dramatically thinned; a listing on the Website “The Estate Project” (www.artistswithaids.org/index4b.html) notes over 120 well-known artists associated with musical theater who died from AIDS. When one factors in singers, dancers, set and costume designers, and other supporting workers, the number is overwhelming.

While there has certainly been an underground campaign throughout the music industry to minimize risks for HIV and hepatitis through safe sex, clean needles and abstinence, a more public response has generally been lacking. A few rock songs have advised using condoms, among them Kid Rock’s “Rain Check” and Sean Paul’s “Safe Sex” (Such explicit songs are hardly odes to virginity, however). The Elton John AIDS Foundation (www.ejaf.org) is perhaps the best-known HIV/AIDS organization associated with a major musician and focuses both on treatment and prevention issues. Another group, ONE (originally known as DATA - Debt, AIDS, Trade, Africa), is a non-profit organization cofounded by U2’s Bono, whose goal is to improve living conditions in Africa, with a specific focus on HIV education and access to treatment (www.one.org).

Coda

The creative impulse stems from a muse both mysterious and fickle. Some geniuses like Charlie Parker and Jimi Hendrix flame out after a few years, while others like Dave Brubeck and Neil Young (who ironically sang “It’s better to burn out, than to fade away”) keep the fire going year after year. In his book *Old Masters and Young Geniuses*, economist David Galenson provides insight into this dichotomy, describing two

diametrical approaches to art, one radical and one methodical, or put another way, revolutionary vs. evolutionary.³¹ The pioneers tend to be young artists who eschew constraints, a tendency that inevitably spills over from their art to their personal lives. Conversely, mature artists build on previous forms, aware of the pitfalls of others and confident in their own techniques.

New artistic forms start out with a flourish but inevitably settle into middle age. As they do, the risk-takers either die off or leave their risky behavior behind. A recent *New York Times* article on the health problems of jazz musicians brings up this point with its focus on cancer, chronic kidney and liver disease, and the like.³² Similarly, rock music no longer throbs with a steady drumbeat of casualties from drugs and alcohol. Instead, rockers and their fans now confront the insults of old age: Prince’s osteoarthritic hip,³³ John Mellencamp’s coronary artery disease,³⁴ Charlie Watts’ throat cancer,³⁵ and so on.

Let us admit to a little nostalgia for bygone eras when new musical styles were brewing and musicians lived fast and burned out. After all, popular movies were made about Mozart, Charlie Parker and Kurt Cobain, not about Aaron Copland (died age 90) or Eubie Blake (died age 96). The musical progenitors we venerate, like Prometheus, took the fire of the gods and gave it to us mortals in the form of song. It is no surprise that many were burned in the process.

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