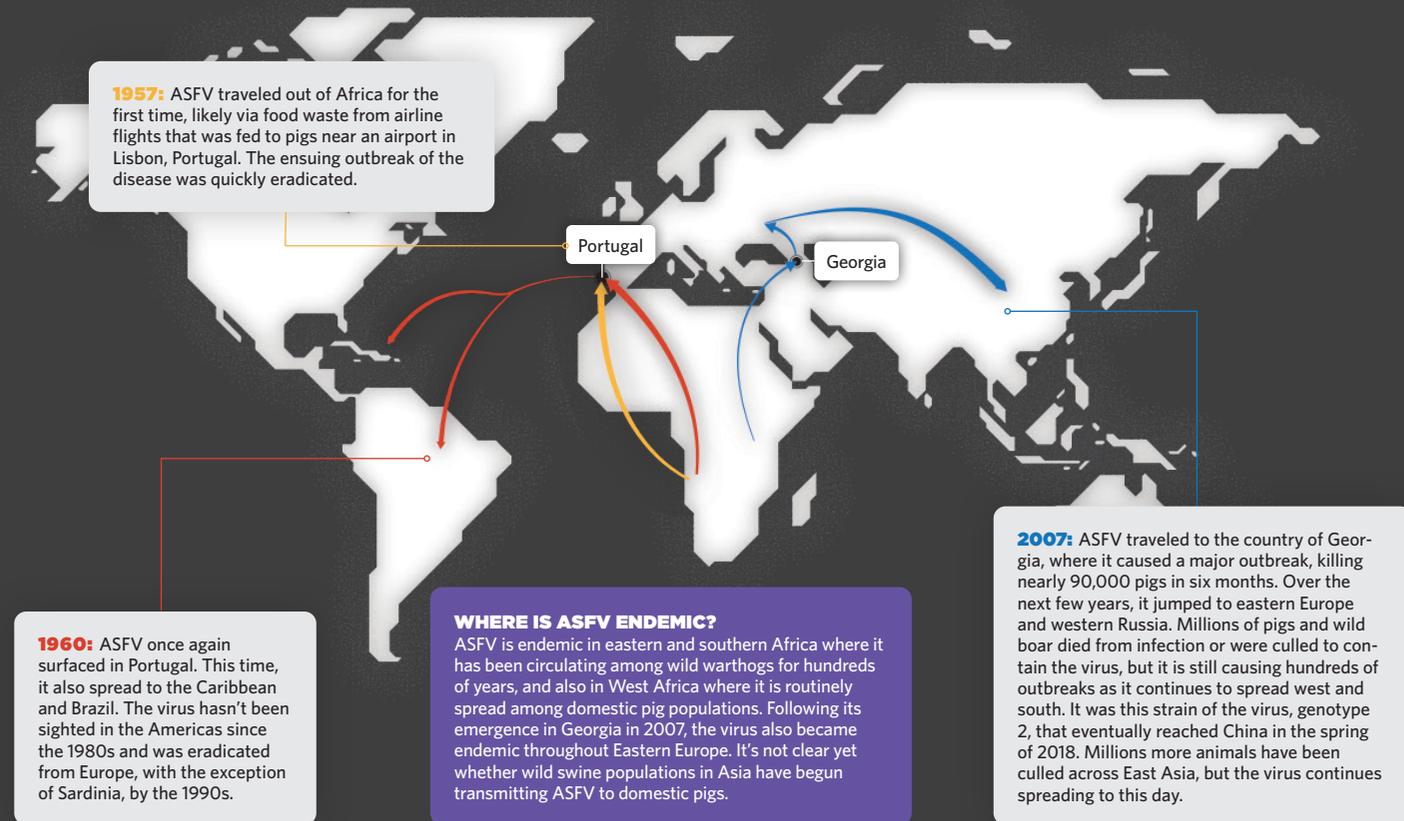


# ASFV'S DEADLY ESCAPES FROM AFRICA

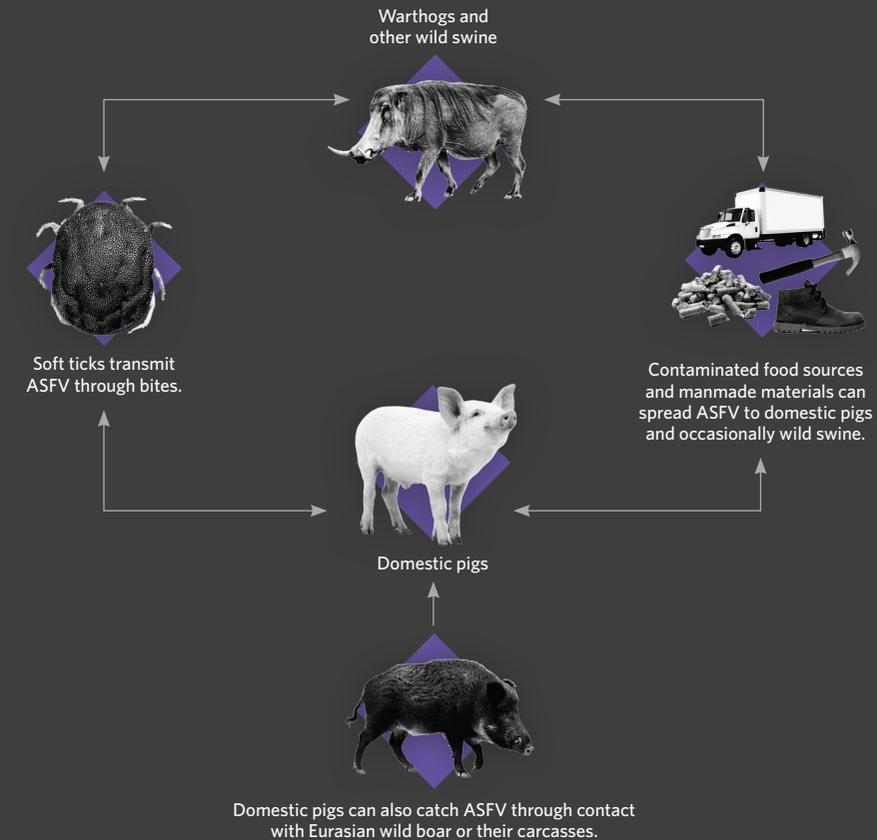
For centuries, African swine fever virus (ASFV) has circulated between ticks and warthogs in Africa as part of a natural lifecycle, occasionally spilling over to domestic pigs. (See graphic on opposite page.) The virus became a global concern when it left the continent and spread to the Iberian Peninsula—twice in the mid-20th century. The second time, it traveled across the Atlantic to the Americas. These outbreaks were successfully quelled through strict eradication programs, but a devastating epidemic now spreading across Asia has intensified global research into understanding ASFV and finding a way to stop it.



# ASFV'S LIFECYCLE

ASFV is transmitted by ticks of the genus *Ornithodoros* to common warthogs (*Phacochoerus* spp.) when they feed on the wild animals' blood. Domestic pigs (*Sus scrofa domestica*) can catch the virus through tick bites in areas of Africa where warthogs exist, as well as through contact with contaminated food or materials. In Eastern Europe, where the disease is also endemic, pigs can contract ASFV by coming into contact with bodily fluids or carcasses of infected wild boar (also *Sus scrofa*).

Since the late 2000s, ASFV is thought to have gained a foothold in Europe, especially the eastern part of the continent where infections often spill over to small-scale pig farms. It's not yet clear whether ASFV has infected wild boar populations in China or other East Asian countries it has spread to. If it has, the virus will be near-impossible to eradicate there.



THE SCIENTIST STAFF