

# SP-484981\_part3\_strategy\_EDITABLE

by Academic 2025

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## General metrics

**4,243**

characters

**631**

words

**59**

sentences

**2 min 31 sec**

reading  
time

**4 min 51 sec**

speaking  
time

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## Score



This text scores better than 93%  
of all texts checked by Grammarly

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## Writing Issues

**9**

Issues left

**4**

Critical

**5**

Advanced


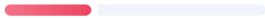



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## Plagiarism

This text hasn't been checked for plagiarism

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## Writing Issues

<b>3</b>	<b>Clarity</b>	
3	Paragraph can be improved	
<b>5</b>	<b>Correctness</b>	
1	Closing punctuation	
3	Determiner use (a/an/the/this, etc.)	
1	Incorrect verb forms	
<b>1</b>	<b>Style guide</b>	
1	Custom suggestions with replacements	

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## Unique Words

**56%**

Measures vocabulary diversity by calculating the percentage of words used only once in your document

unique words

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## Rare Words

**35%**

Measures depth of vocabulary by identifying words that are not among the 5,000 most common English words.

rare words

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## Word Length

**5.5**

Measures average word length

characters per word

## Sentence Length

Measures average sentence length

**10.7**

words per sentence

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## PART 3: KREWE SECURITY BRIEFING

### FIELD NOTES — DISGUISE TACTICS: ANTIGENIC DRIFT vs. ANTIGENIC SHIFT

#### Factor

ANTIGENIC DRIFT — Small Wardrobe Changes

ANTIGENIC SHIFT — Whole New Outfit

#### What it is

Stepwise evolution of viral genes as they replicate - tiny, gradual changes over time - Co-infection:

Two viral strains infect the same cell and alternate large pieces of genetic material - abrupt, substantial reassortment.

#### Scale of change

Small changes in surface antigens (H or N proteins); the immune system partially identifies the virus.

Entirely new antigen combination the immune system has NEVER seen; no existing immunity.

#### Analogy

Minor change of wardrobe - the same person, but with different clothes. The bouncer may still recognize the face.

Whole new outfit —totally unrecognizable. This individual does not even have a file with the bouncer.

#### Speed

Slow and continuous; occurs every flu season without fail

Rare, abrupt event; can produce a brand-new pandemic strain almost overnight

Pandemic risk

Lower — causes seasonal flu outbreaks and requires annual vaccine  
reformulation<sup>2</sup>

VERY HIGH — 1918 Spanish Flu (H1N1) and 2009 Swine Flu arose via antigenic  
shift

Vaccine impact

Flu vaccine updated each year to match newly drifted strains; existing partial  
immunity may still help

Existing vaccines are useless; entire<sup>3</sup> population is vulnerable; emergency  
vaccine development<sup>4</sup> required<sup>5</sup>

Caused by

Random mutations

Genetic reassortment between strains

Result

Slightly changed antigens

Completely new antigen profile

Requires new<sup>6</sup> vaccine?

Yes — annually

Yes — emergency new vaccine needed

Example

Seasonal flu

1918 pandemic, 2009 Swine Flu

FIELD NOTES — PANDEMIC SHIELD: Preventing a Campus Super-Spreader  
Event

## Prevention Method

### Description

#### Annual Vaccination Campaigns

Flu vaccines are developed annually to consider antigenic drift. Vaccination creates immunological memory in the population before the season of outbreaks<sup>7</sup>. Herd immunity helps even those who are not vaccinated when a sufficiently large number of people are vaccinated - the pathogen will not be able to find enough vulnerable people to continue the chains of transmission within the community of the university.

#### Hygiene & Physical Barrier Practices

Washing hands, wearing masks during an outbreak, and respiratory etiquette can interrupt transmission before a pathogen comes into contact with another host. Viruses cannot infect and replicate without a living host. The hygiene of the whole campus is community<sup>8</sup> extension of the hygiene of the individual body - a community perimeter fence that reinforces individual natural immunity.

#### Surveillance & Rapid Response

Genomic sequencing of circulating strains as early as possible enables public health teams to detect antigenic shifts before they become pandemics. Quick index case quarantine and contact tracing are similar to the phagocytic response to the local infection, which<sup>9</sup> has not yet disseminated to other tissues.<sup>9</sup>

#### Zoonosis Monitoring (Animal Reservoir Surveillance)

Zoonosis Monitoring (Animal Reservoir Surveillance) Numerous pandemic strains are zoonotic, i.e., viruses that escape from animal reservoirs (birds, pigs) into people. Surveillance of livestock and wildlife for new influenza strains

provides early warning of potential shifts and enables preemptive vaccine stockpiling and emergency response planning.

#### THE SUMMARY — DIRECTOR'S NOTE

Immunological memory is the single most important tool in the Krewe's security arsenal.

V Although most gatecrashers are repelled at the gate by innate defenses and those that manage to pass through are neutralized by adaptive B and T cells, it is the memory cells, the Intelligence Archive, that make a single experience into a lasting defense. Without immunological memory, each exposure to a pathogen would trigger a slow, expensive initial response; with it, the body instantly recognizes repeat offenders and clears them before they cause symptoms. Herein the biological basis of all vaccines ever produced, and herein the fundamental reason why a new antigenic-shift strain, one in a new entire outfit, never recorded in the Archive, should be the matter of our greatest immunological difficulty, and of the gravest danger to the security of the Krewe.

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1.	<i>Small changes in surface antigens (H or N proteins); the immune system partially identifies the virus.</i>	Paragraph can be improved	Clarity
2.	reformulation.	Closing punctuation	Correctness
3.	the entire	Determiner use (a/an/the/this, etc.)	Correctness
4.	<del>development</del> → Development	Custom suggestions with replacements	Style guide
5.	is required	Incorrect verb forms	Correctness
6.	a new	Determiner use (a/an/the/this, etc.)	Correctness
7.	outbreak season	Paragraph can be improved	Clarity
8.	a community	Determiner use (a/an/the/this, etc.)	Correctness
9.	<i>Quick index case quarantine and contact tracing are similar to the phagocytic response to the local infection, which has not yet disseminated to other tissues.</i>	Paragraph can be improved	Clarity

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