How to arrange a poultry vaccination plan

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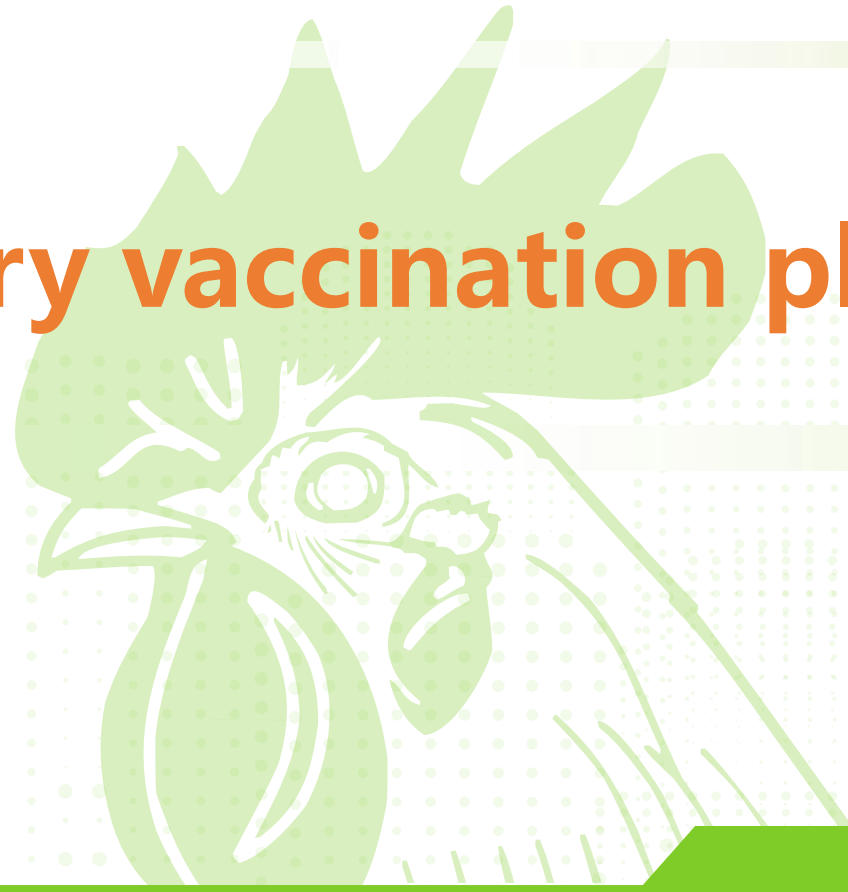

培育家禽行业精英
推广健康养殖技术

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✓ **Production Director of Breeding Company,responsible for production management.including breeder,hatching, feed and disease prevention and control.**

Directory

01 Thoughts on disease prevention and control

Principles of prevention and control

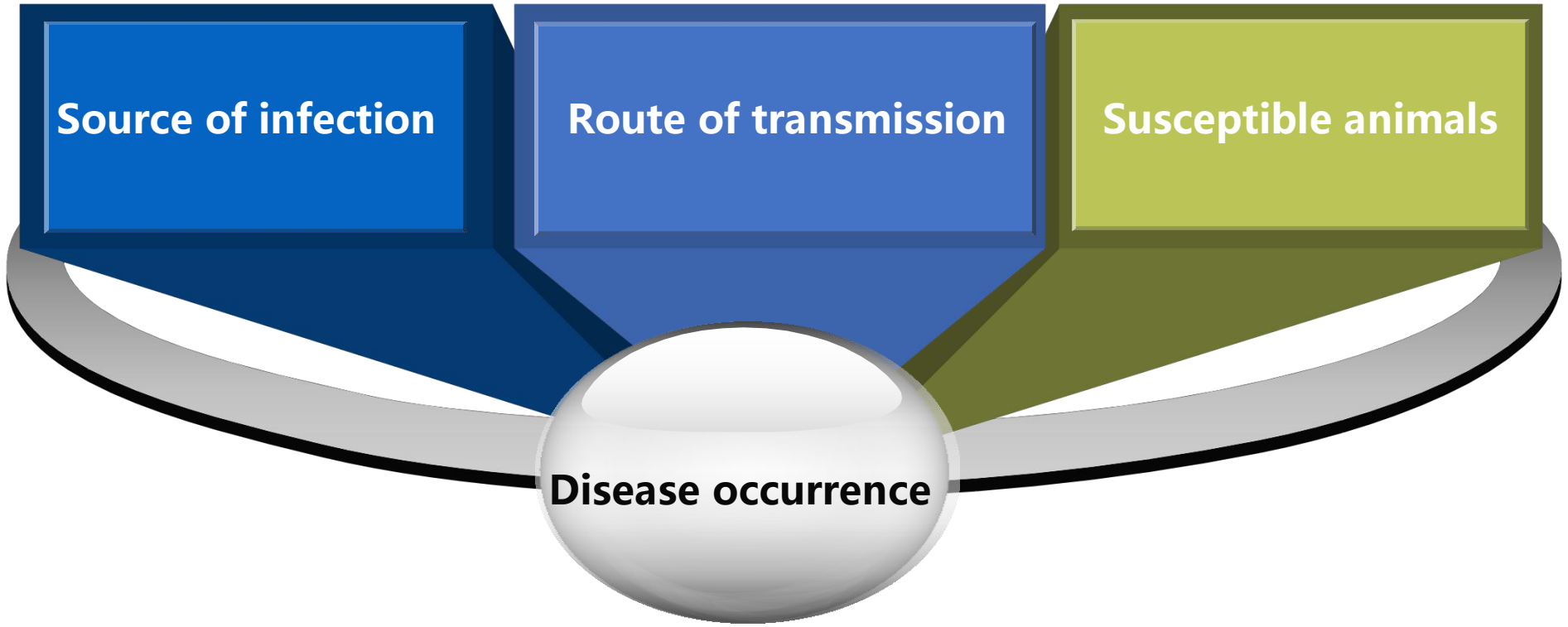
- the occurrence of disease is not often caused by a single factor In the clinical.
- Principles of prevention and control of poultry diseases.
  - Breeding is over prevention.
  - Prevention is over treatment.
  - Combination of breeding and prevention.
  - Comprehensive prevention and control.

Classification of disease

Vertically transmitted diseases	Immune controlled disease	Environmental conditioned diseases
Source purification	Build immunity	Environmental improvement
Avian leukemia Chicken salmonellosis Chicken Mycoplasmosis	AI,IB,ND,IBD,MD,IC,ILT,EDS, AE,POX,etc.	Respiratory diseases Digestive tract disease Reproductive tract disease

Three factors of disease occurrence

Necessary conditions for disease transmission，all three are indispensable



Things we can control

Find the easiest things we can control

1

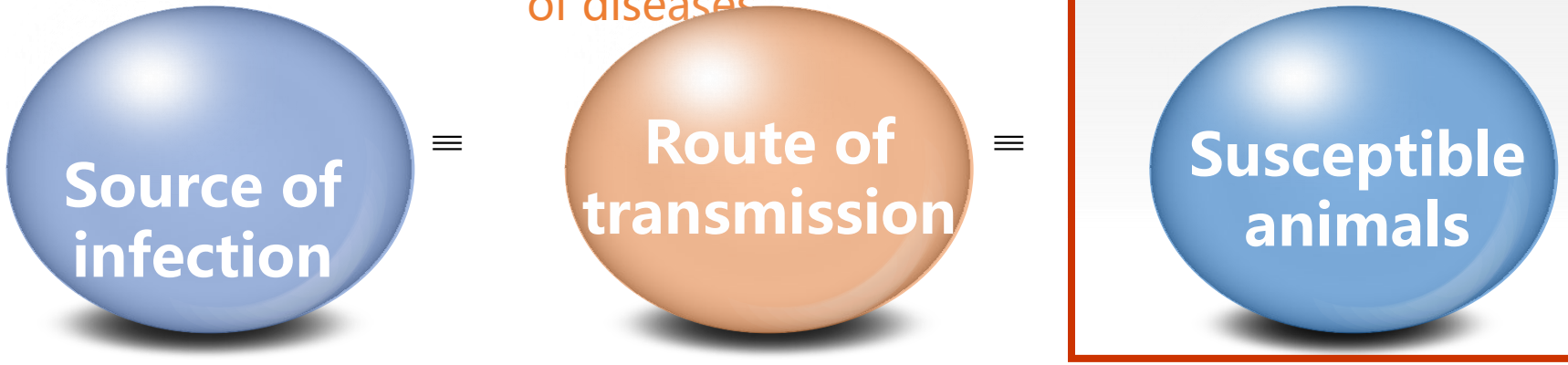
The source of infection cannot be eliminated Only by corporation.

2

Pathogens spread with sales all over the country, it is impossible to strictly cut off the source of infection, only to slow down the occurrence of diseases.

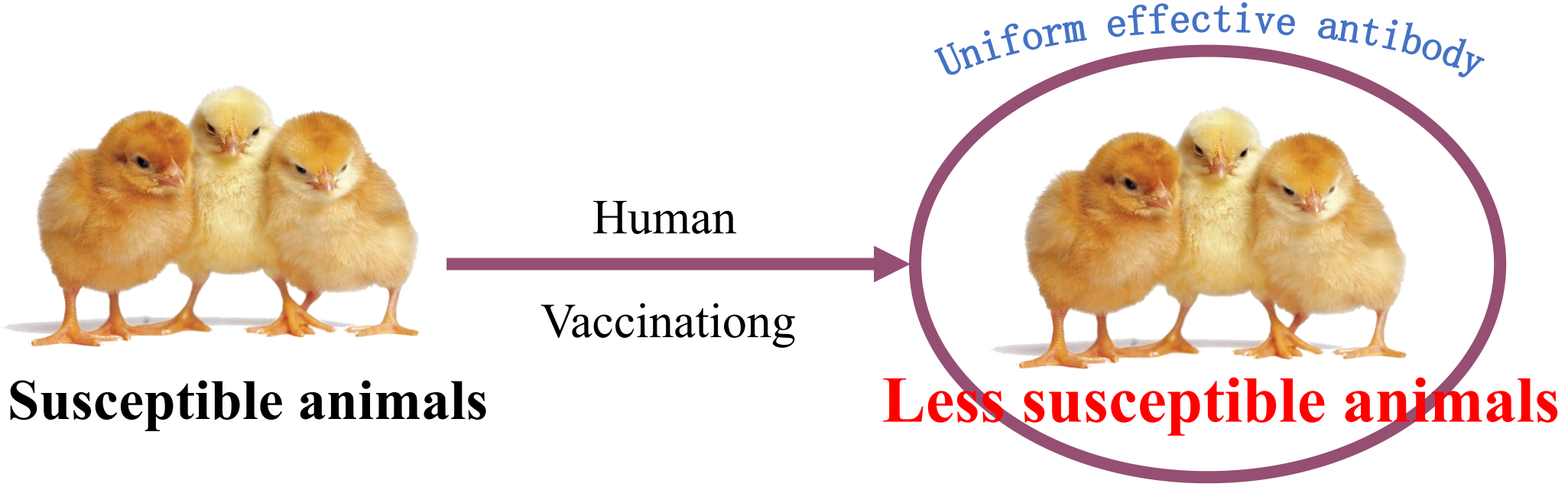
3

Turn susceptible animals into unsusceptible animals through prevention and control measures.



What are unsusceptible animals ?

By combining artificially created conditions with the self-immunity of the chickens,Establish a protective barrier for susceptible animals-uniform and effective antibodies to resist disease infections, making them "not susceptible animals".



The core of disease prevention

The core of disease prevention and control is to make chickens produce uniform and effective antibodies.

Uniform and effective antibodies :

Effective : Strain matching, high protection value

Uniform : The antibodies value are within 4 titers

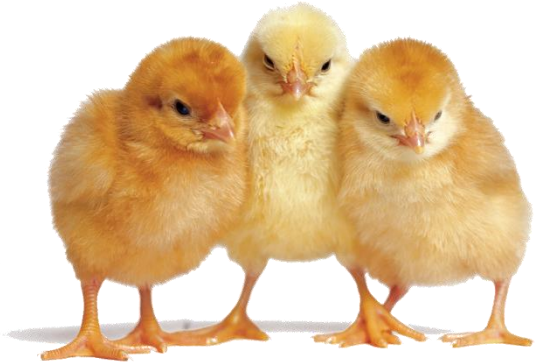
How to produce antibodies?

Four aspects to create chicken uniform effective antibody

Vaccination is the core

Human

Vaccination



Susceptible animals

Uniform and effective antibodies

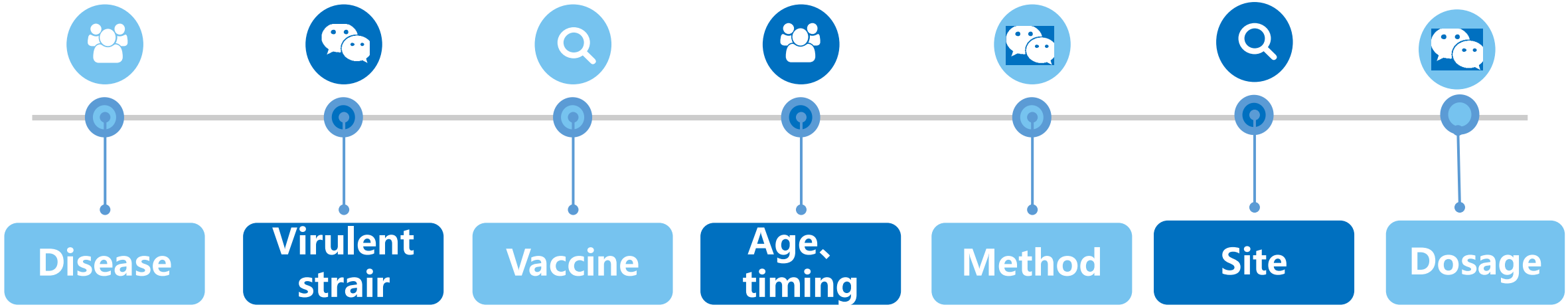
Less susceptible animals

A vaccination plan

Vaccination plan: According to the epidemic situation of infectious diseases and the characteristics of vaccines in certain areas or farms, the type, sequence, frequency, route and interval of vaccination for specific animal groups are defined.

02 Factors considered in vaccination programs

Main factors



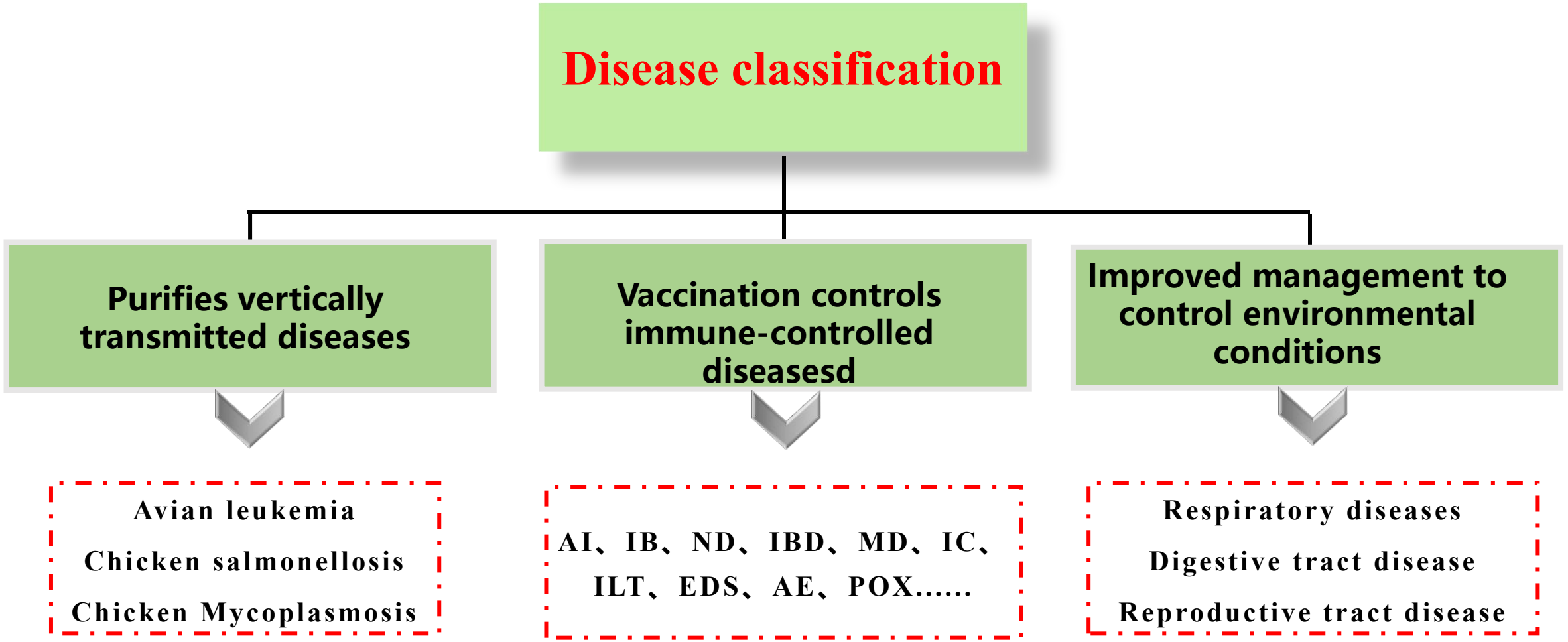
03 How to arrange vaccination plan

第一

Part 01

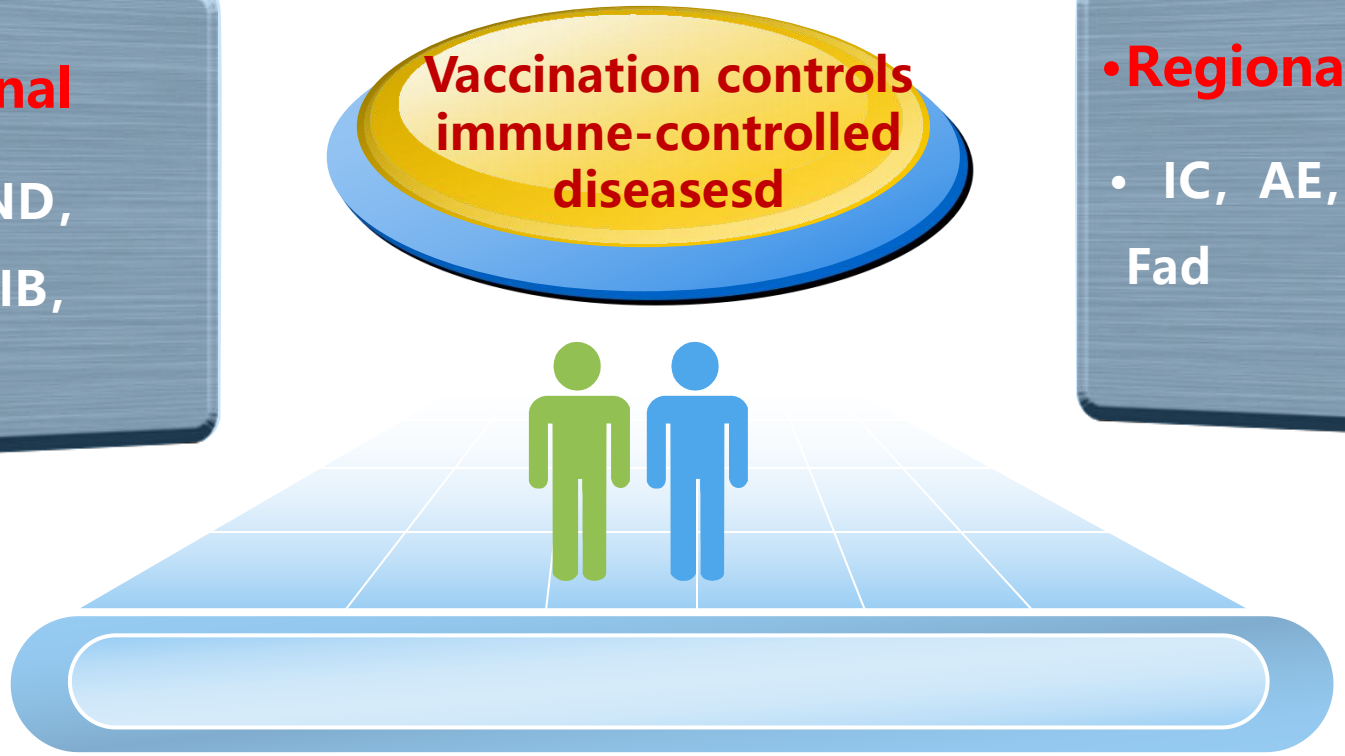
Which diseases need to be vaccinated ?

According to disease prevention and control methods



Need to consider regional epidemics

- **Non-regional**
  - H5，H9，ND，MD、IBD，IB，EDS



- **Regional**
  - IC，AE，ILT，CIA、Fad

Need to consider the farm’s biosafety situation

the risk level of epidemic .(Red, orange, yellow, green)

the farm’s biosafety situation.(All in all out, No disinfection isolation)

Risk level of epidemic	Farm’s biosafety situation		
	All in all out (whole farm)	All in all out (one house)	No disinfection isolation
Red（<50km）	Yes	Yes	Yes
Orange(50-100km)	No	Yes	Yes
Yellow(100-300km)	No	No	Yes
Green(>300km)	No	No	No

第二

Part 02

Which strain needs to be vaccinated?

Consider existing strains

Name	Dominant strain				
ND	VII	Lasota	Clone30	VH	
MD	CVI988	814	HVT		
H5	Re-11	Re-12			
H7	H7N9 Re-3				
IB	LDT3	H120	MA5	QXL87	M41
IC	B	A	C		

Consider epidemic strains

Some diseases have different strains in different periods,We need to inoculate epidemic strains in time.

H5、H7

- H5:Re-11 Re-12
- H7N9:Re-3
- The new strain is about to be updated

IC

- A,B,C strain
- A+B?
- A+C?
- A+B+C?

MD

- Replace the strain in high incidence areas.

IBD

- The general site was inoculated with 1-day-old genetic engineering vaccine
- Multiple sites require live or inactivated vaccine .

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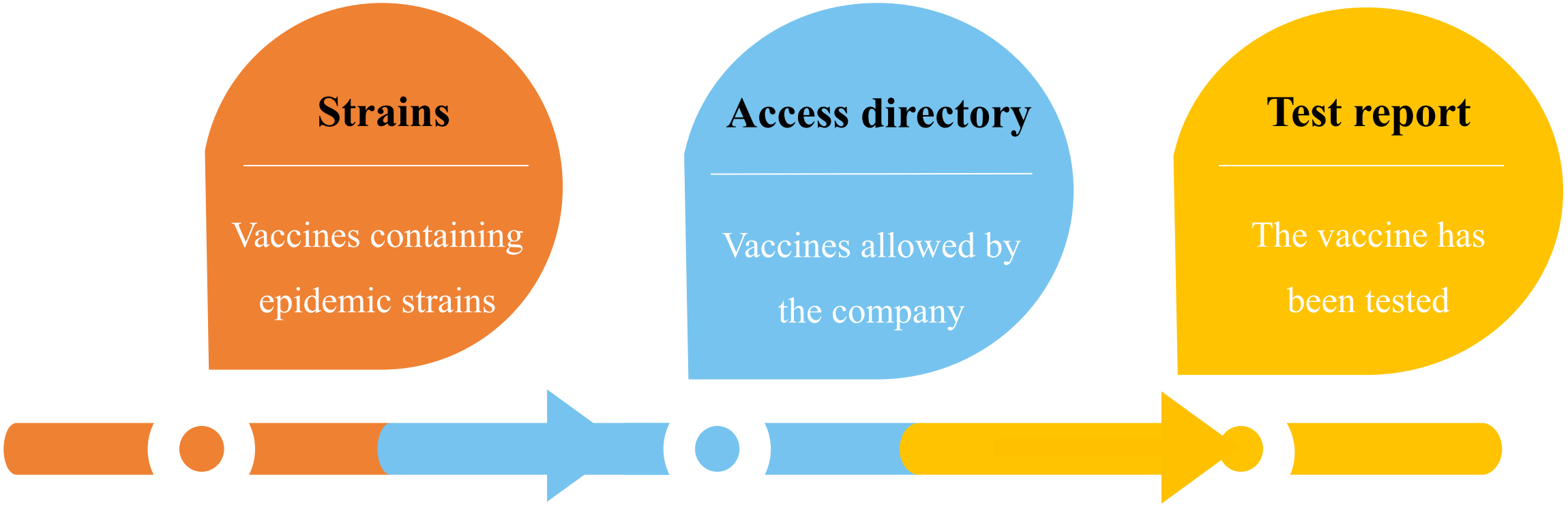
Part 03

Which manufacturer and what vaccine?

Selection of vaccines



Access directory

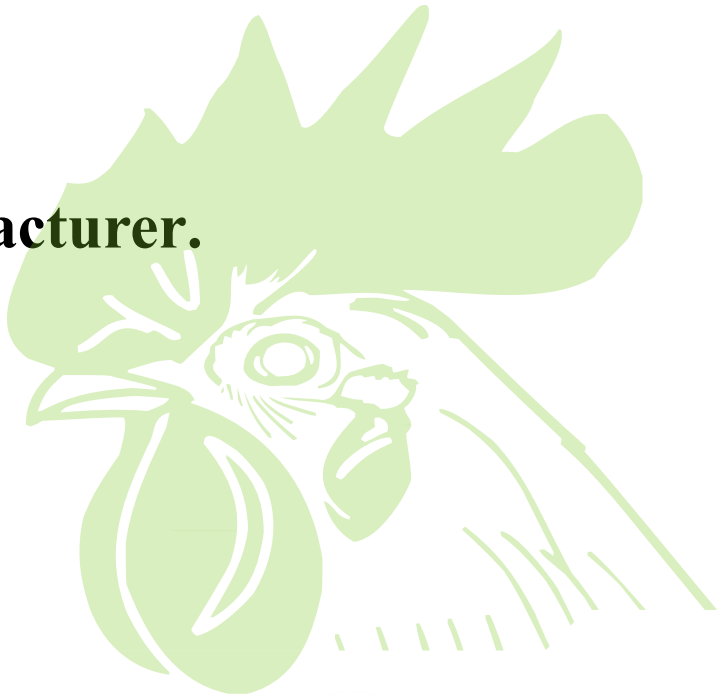
- Each farm should establish its own Veterinary vaccines access catalogue.
- Only those with good verification effect and stable quality can be entered into the catalog and used.
- Strictly control the use of veterinary drugs and vaccines.

Vaccine quality testing

- Strengthening the monitoring of veterinary drugs and vaccines.

  Includ exogenous virus,composition and content,safety,stability,effectiveness

If there is no laboratory, at least choose a reputable manufacturer.

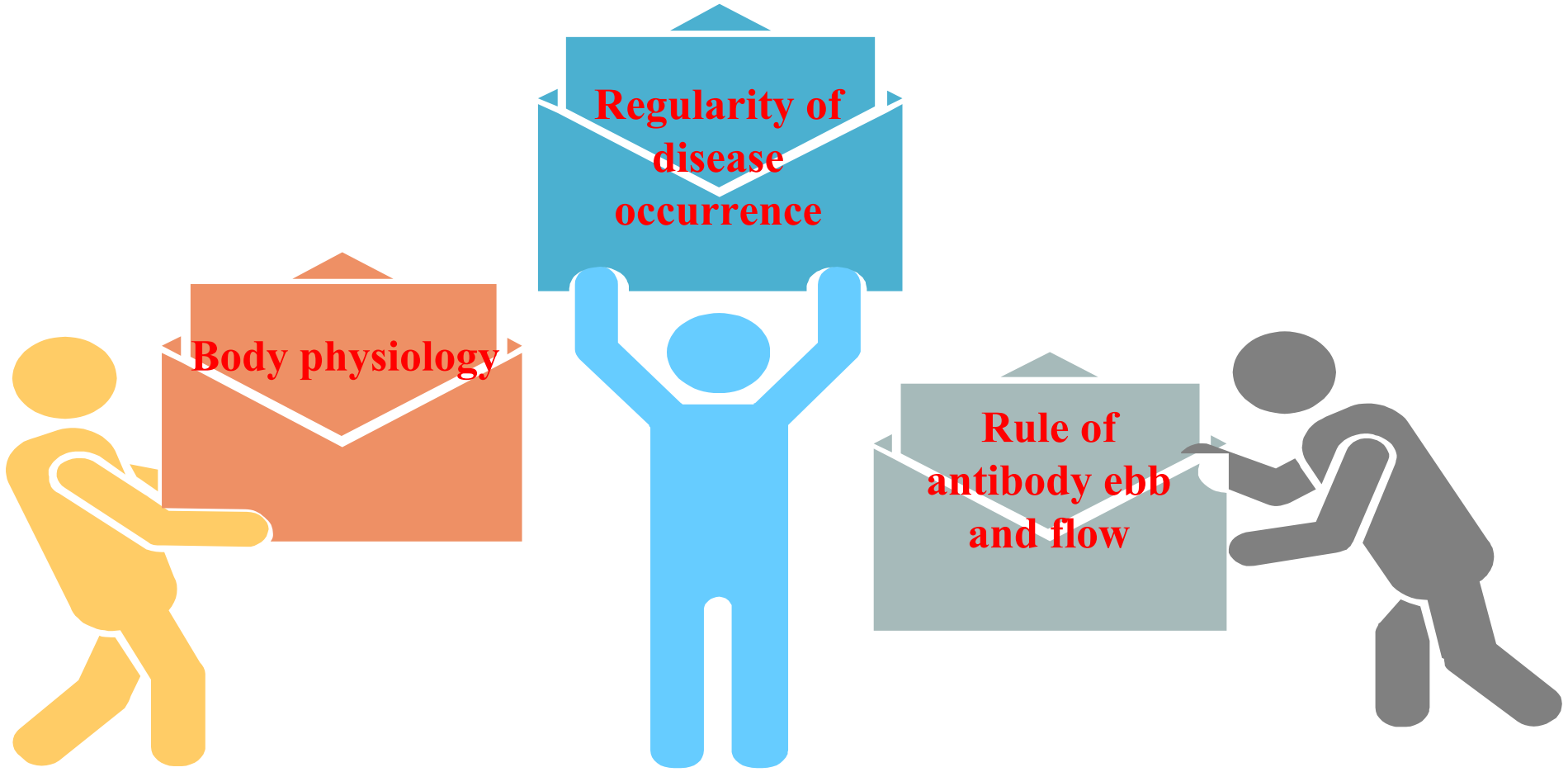


第四

Part 04

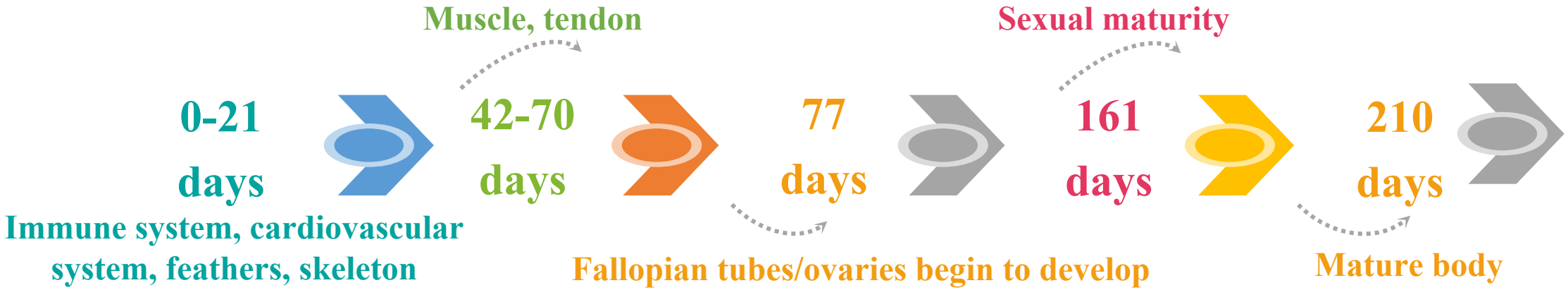
Age and timing of vaccination?

Follow three rules



Body physiology

The developmental characteristics of chicken are different at different growth stages.



① From 0 to 21 days, the immune system develops gradually.

② Underdeveloped, unable to produce a good immune response.

③ Excessive vaccinations damage immune organs.

④ Live vaccines activate the immune system, creating immune memory.

⑤ Early inoculation can effectively occupy the space and avoid the invasion of wild poison.

Regularity of disease occurrence

AI

1.It happens easily in autumn and winter.
2.Peak chicken flocks are prone to occur.
3.Poor constitution is apt to occur.
4.Low antibodies are prone to occur.

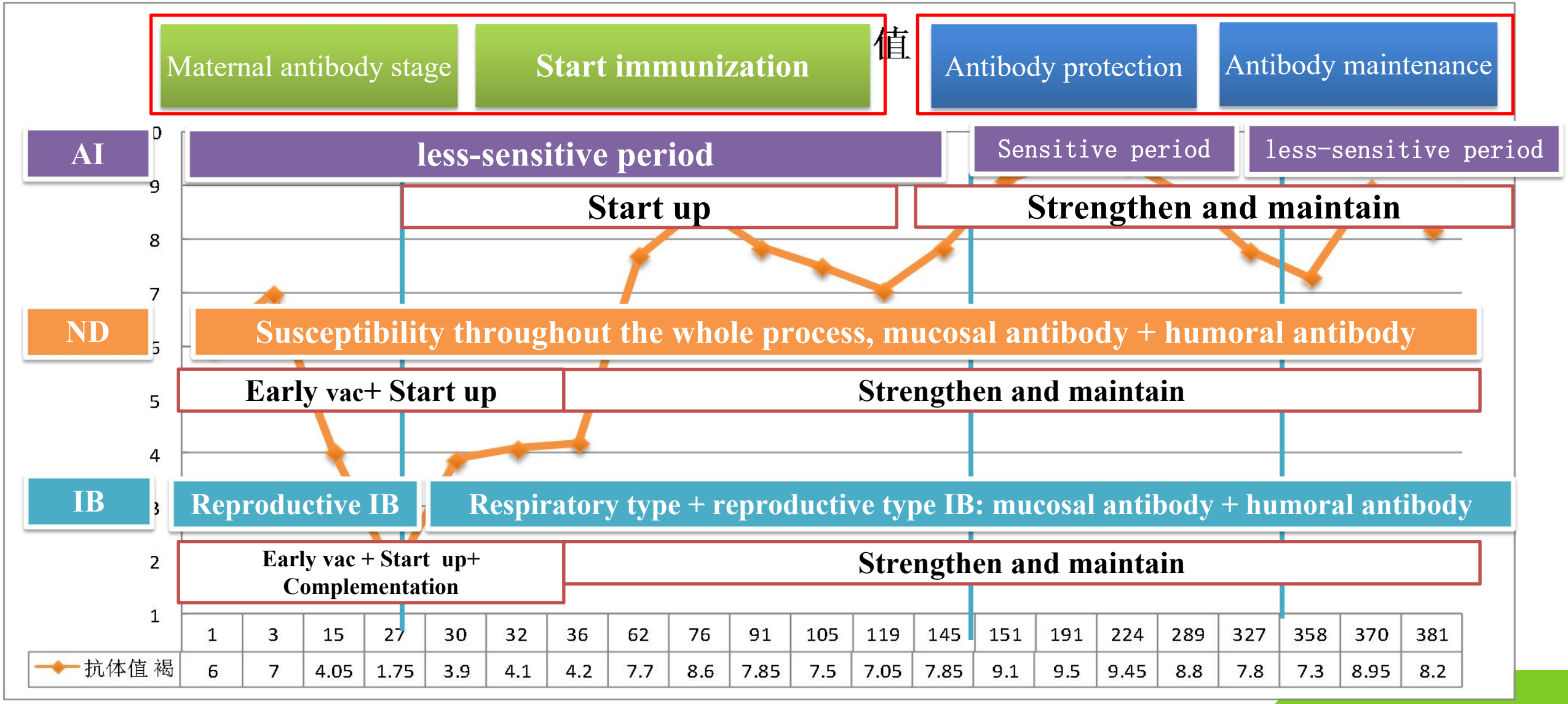
IB

1.Winter and spring chicks are easy to occur.
2.Occurred at 1 to 3W and also at 60 to 98 days of age.
3.Immune-controlled diseases greatly affected by changes in environmental conditions.

ND

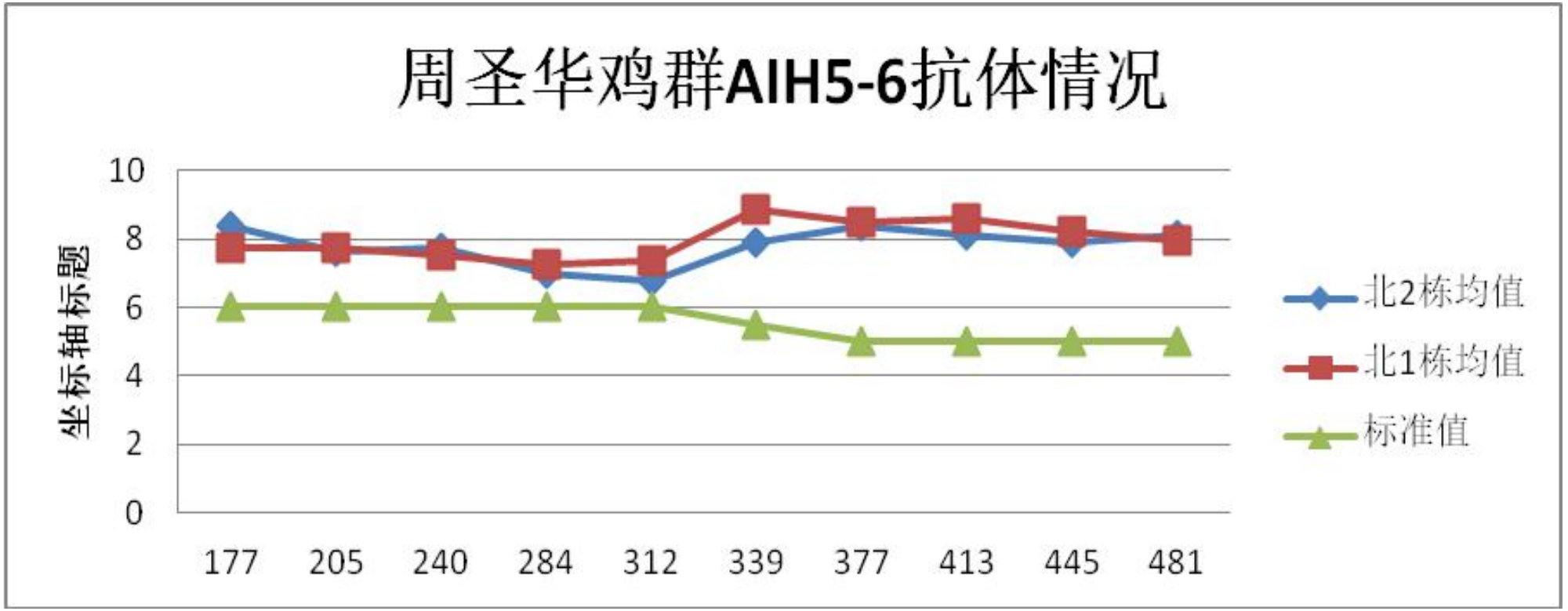
1.Occur all year round.
2.Chickens of all ages were susceptible.
3.There is only one serotype.

Rule of antibody ebb and flow



Age of vaccination

Determination of replenishment interval based on Antibody maintenance



The better the antibody is maintained, the longer the vaccination interval is

Age of vaccination

Based on five difference

Different generations

Chickens boost immunization for maternal antibodies

Different ages

Small age→ short vaccination interval
Large age→ long vaccination interval

Different species

POX jingfen no.1 is sensitive

Different seasons

Less vaccination in summer and more vaccination in autumn and winter

Different poultry farm

Different biosafety, different immune intervals

Different Antibody level

The better the antibody is maintained, the longer the vaccination interval is

第五

Part 05

Which inoculation method to use?

Routes for vaccination

★ Vaccine types + Characteristics→ Routes of vaccination

免疫方法
(Vaccination methods)

Live vaccines and inactivated vaccines use different methods

活苗
(Live vaccine)

- 鼻 点 (Nose-dripping)
- 饮水/滴口 (Drinking water)
- 气 雾 (Aerosol vaccination)
- 刺 种 (Wing-web)

油苗
(Inactivated vaccine)

- 颈部皮下 (Subcutaneous neck)
- 胸部皮下 (Subcutaneous chest)
- 腿部皮下 (Subcutaneous leg)
- 胸部肌肉 (Intramuscular chest)
- 腿部肌肉 (Intramuscular leg)

Injectable vaccination

Common vaccination methods

Different diseases and different vaccines are administered in different ways

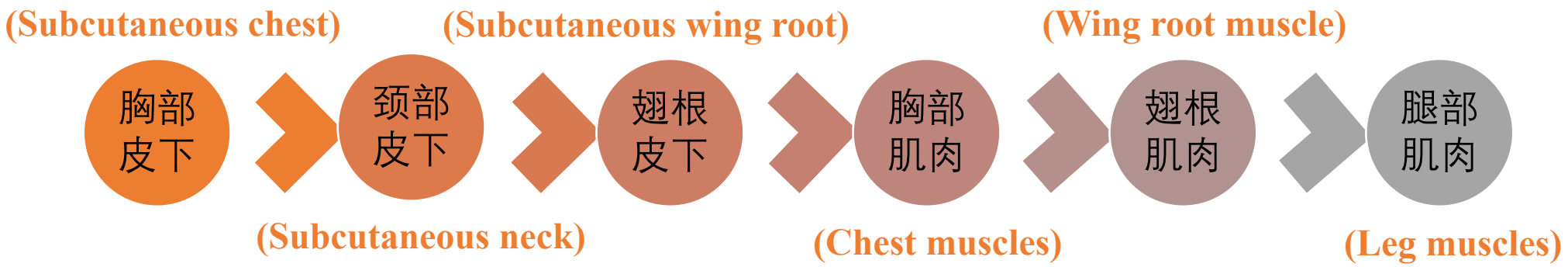
methods	Vaccines of disease						
Nose dropping and eye dropping	IB	ND	ILT	MG			
Aerosol vaccination	IB	ND					
Drinking water	IBD						
Daub the anus	ILT （Great stress response）						
wing-web	POX	AE					
Subcutaneous injection (neck, chest)	IB	ND	AI	IBD	MD	IC	EDS
intramuscular injection (Chest muscles, leg muscles)	IB	ND	EDS				

第六

Part 06

How to determine the inoculation site?

Vaccination site



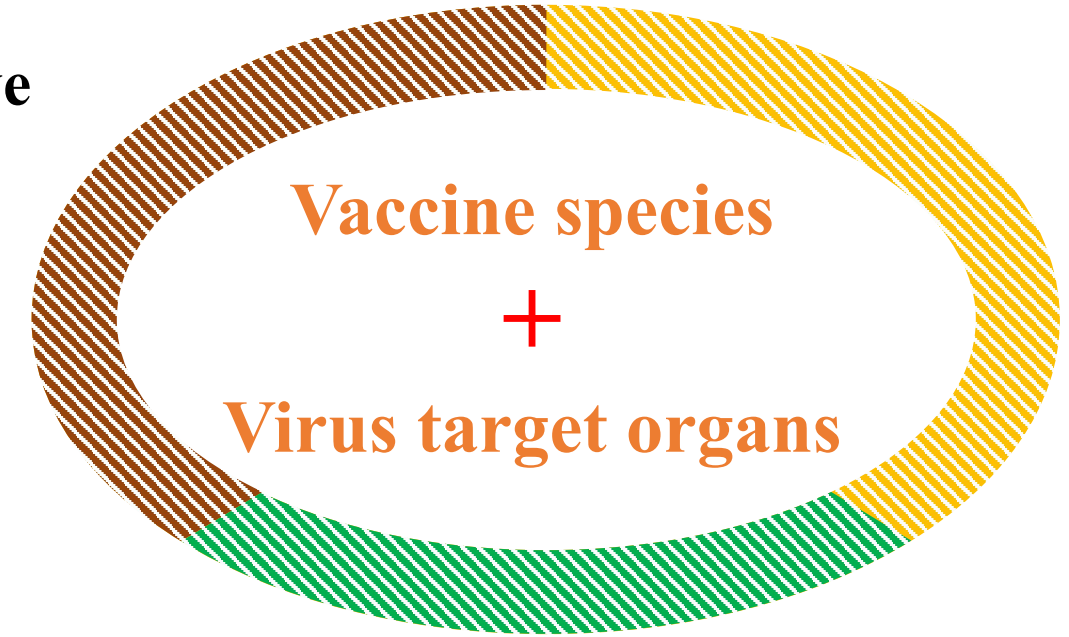
抗体上升与维持、鸡群应激

(The rise and maintenance of antibody、hens stress)

Vaccination site

Selection principles of vaccination sites

Non-repetitive



Easy to absorb

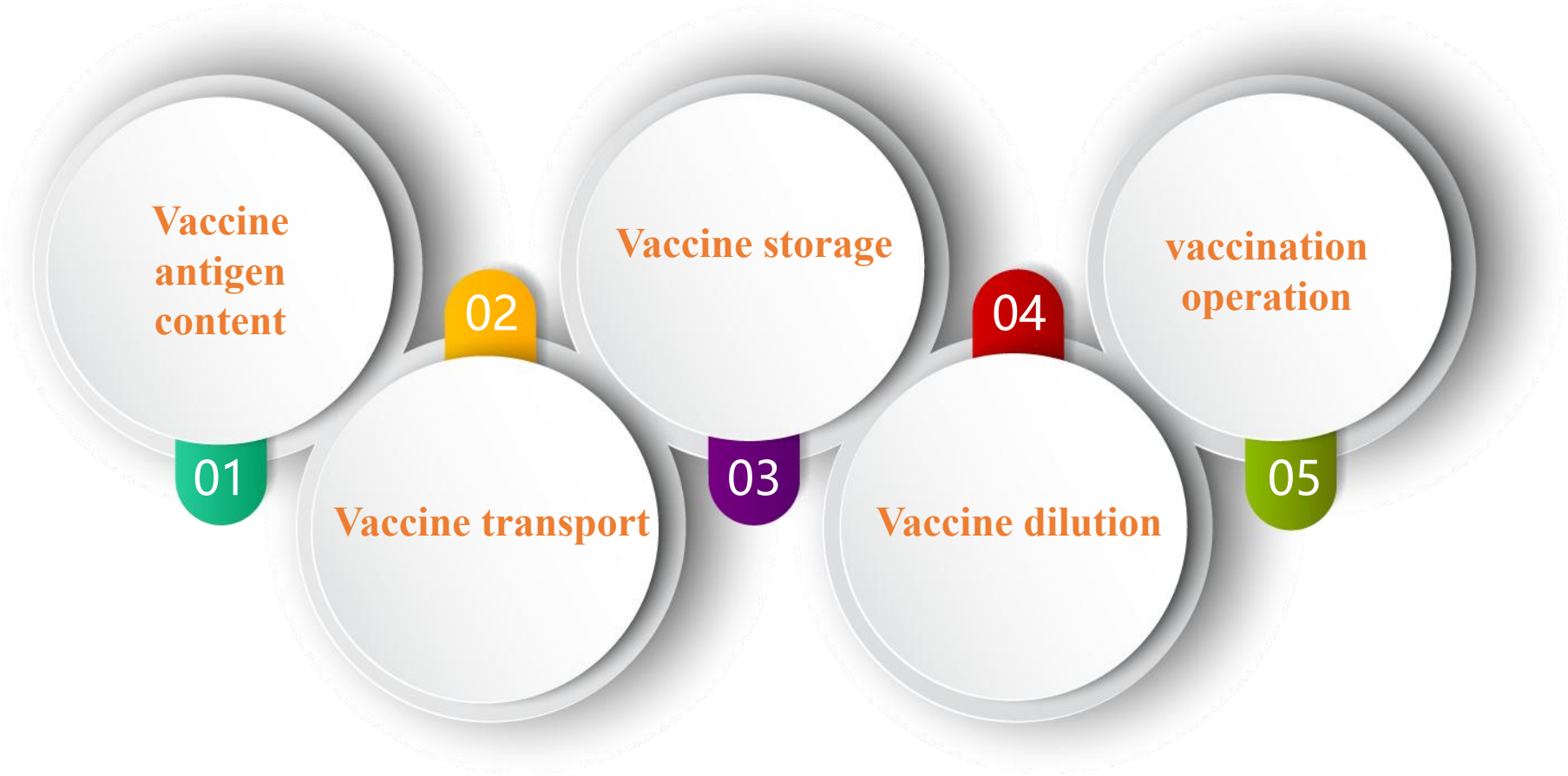
Easy to operate

第六

Part 06

What dose is appropriate?

Standard dose



Don't let other factors affect vaccine potency

Summary

Perfect results

- 准确率100% (Accuracy rate)
  - 时机准确 (Accurate timing)
  - 剂量准确 (Accurate dose)
  - 部位准确 (Accurate site)
  - 数量准确 (Accurate quantity)
- 免疫率100% (Vaccination rate)
  - 程序准确 (Accurate procedure)
- 有效率100% (Effective rate)
  - 毒株准确 (Accurate strain)
  - 方法准确 (Accurate method)

感 谢 聆 听!

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