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| Logo AGES | |
| Arizonosis | |
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| 15.01.2025 12:21 Uhr | |

**Arizonosis**

**Salmonella
arizonae**

Last
change:
26.08.2024

**Profile**

Arizonosis
is
a
poultry
disease
caused
by
*Salmonella
enterica*
subspecies
*arizonae*.
These
salmonellae
show
high
specificity
for
poultry
and
reptiles
with
possible
high
economic
losses
in
turkey
production.
*S.
arizonae*
usually
causes
few
symptoms
in
mammals.

**Occurrence**

Worldwide

**Host
animals**

poultry,
especially
turkeys,
other
bird
species
and
reptiles

**Infection
route**

Wild
turkeys
and,
in
warm
regions,
various
reptile
species
are
considered
reservoirs.
Infections
in
domestic
poultry
are
mainly
associated
with
entry
via
feed
or
via
a
contaminated
production
environment.

**Incubation
period**

It
has
been
experimentally
demonstrated
that
*Salmonella
arizonae*
is
shed
via
the
intestine
within
a
few
hours
of
exposure,
and
thus
chicks
in
the
brooder
can
be
directly
infected
via
infected
eggs.

**Symptomatology**

When
hatching
eggs/chicks
are
infected,
acute
septicemia
with
reduced
hatching
rates,
hatching
of
weak
chicks,
mortality
of
10%
to
50%
in
the
first
weeks
of
life
are
predominant,
or
the
chicks
show
corneal
opacities
or
nonspecific
symptoms
such
as
reduced
feed
intake,
movement
disorders,
diarrhea,
and
convulsions.
Adults,
which
may
be
latently
infected,
show
nonspecific
symptomatology
such
as
decreased
performance,
diarrhea,
and
weakness.

**Therapy**

The
basis
of
control
is
the
detection
and
eradication
of
salmonella
carriers,
rigorous
rodent
control
and
biosecurity
measures.

**Prevention**

Establishment
and
maintenance
of
pathogen-free
stocks

**Situation
in
Austria**

Through
consistent
control,
arizonosis
has
been
suppressed
in
the
EU
and
in
Austria,
and
only
isolated
cases
have
occurred
in
recent
years.
The
occurrence
of
*Salmonella
arizonae*
in
poultry
is
notifiable
in
Austria
according
to
the
Poultry
Hygiene
Ordinance
2007.

**Specialized
information**

Arizonosis
is
caused
by
*Salmonella
enterica*
subspecies
*arizonae*
(mainly
serotype
O18:Z4,Z23
and
O18:Z4,Z32),
gram-negative
motile
rod
bacteria
of
the
*Enterobacteriacae*
family.
Susceptible
are
mainly
young
turkeys,
but
infections
have
also
been
detected
in
other
bird
species
(chickens,
ducks,
canaries,
parakeets
and
wild
birds).
In
arizonosis,
vertical
transmission
from
infected
parents
to
hatching
eggs
results
in
reduced
hatching
rates
(up
to
70%)
and
hatching
of
life-weak
chicks.
Yolk
sac
regression
is
delayed,
and
acute
septicemic
infections
occur
in
turkey
poults
up
to
3
to
5
weeks
of
age.
Mortality
varies
from
10%
to
50%
in
the
first
weeks
of
life;
chicks
may
become
blind
as
a
result
of
corneal
opacity
and
accumulation
of
exudate
in
the
eye.

*Salmonella
arizonae*
infection
can
result
in
permanent
intestinal
colonization
with
intermittent
shedding
in
older
birds,
leading
to
contamination
of
hatching
eggs
and
corresponding
infections
of
hatching
chicks.
Adult
turkeys
show
nonspecific
symptoms
such
as
decreased
laying
performance
and
reduced
feed
intake.
As
infection
progresses,
*Salmonella
arizonae*
can
colonize
ovaries
and
oviduct,
resulting
in
the
production
of
infected
chicks.
Other
avian
species
and
reptiles
are
usually
subclinically
infected.

In
pathology,
persistent
yolk
sacs,
cloudy
cornea,
enlarged
pale
liver
and
spleen
with
pale
foci,
and
fibrinous
serositis
with
a
high
bacterial
load
of
yolk
sac,
meninges,
eyes,
and
ears
are
observed
in
chicks.

**Diagnostic**

For
definitive
clarification,
perform
bacteriological
isolation
according
to
ISO
6579,
Annex
D
with
selective
enrichment
media
from
organ
samples
(liver,
spleen,
yolk
sac,
caecum)
and
environmental
samples.

**Contact**

**Institute
for
Veterinary
Medicine
Mödling**

Institut
für
veterinärmedizinische
Untersuchungen
Mödling

E-Mail:vetmed.moedling@ages.at

Phone:[+43
50
555-38112](tel:+43%2050%20555-38112)

Address:
Robert
Koch-Gasse
17  
2340
Mödling